THE AIR FORCE LAW REVIEW

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INFLUENCE WITH CONFIDENCE: ENABLING LAWFUL COMMAND INFLUENCE BY UNDERSTANDING UNLAWFUL COMMAND INFLUENCE—A GUIDE FOR COMMANDERS, JUDGE ADVOCATES, AND SUBORDINATES

Lieutenant Colonel Erik C. Coyne[*]

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Command influence is the mortal enemy of military justice.
–United States Court of Appeals for the Armed Forces[1]

Know the enemy and know yourself; in a hundred battles you will never be in peril.
–Sun Tzu[2]

I. Introduction

Command influence is as old as command and strikes at its very core: to influence the individuals and activities within one's command for a particular purpose. Yet, when it comes to military justice, there seems to be a presumption that command influence must be unlawful. In fact, courts have used the term "command influence" interchangeably with "unlawful command influence" (UCI).[3] However, it has been long recognized that commanders can play a positive role in the military justice process; as one former Judge Advocate General of the Air Force noted: "The influence of a commander may be, and frequently is, exerted on the side of justice rather than injustice."[4]

Commanders are expected to influence their subordinates to achieve the command's missions and goals. They are expected to act, particularly in times of crisis, and should not be held back by concerns for UCI. Ideally, a commander has the time to think about how to react in any given situation and can consult with their SJA, mentors, and fellow commanders; this is not reality. Reality requires that commanders may need to act quickly, often without the advice and counsel of others. An understanding of UCI gives commanders the confidence to act, while keeping the system free from improper influence.

The distinction between lawful and unlawful command influence is important for not only commanders, but military justice practitioners and others as well. The United States Armed Forces cannot have commanders paralyzed by concern for UCI when there is a responsibility to act.[5] Likewise, advising judge advocates must

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[1] United States v. Thomas, 22 M.J. 388, 407 (C.M.A. 1986). The United States Court of Military Appeals was renamed the United States Court of Appeals for the Armed Forces in 1994. *United States Court of Appeals for the Armed Forces: History*, http://www.armfor.uscourts.gov/Establis.htm (last visited Feb. 2, 2011). For purposes of clarity, this paper will use United States Court of Appeals for the Armed Forces (C.A.A.F.) when referring to all of the court's cases; however the traditional "C.M.A." will be used in citations as appropriate. Unlawful command influence has also been called "evil" and a "carcinoma." United States v. Allen, 31 M.J. 572, 589-90 (N.M.C.M.R. 1990) (citations to other courts omitted); United States v. Gore, 60 M.J. 178, 184 (2004) (citing military judge).

[2] Sun Tzu, The Art of War, 84, (Samuel B. Griffith trans., Oxford University Press) (1971).

[3] *See, e.g., Thomas*, 22 M.J. at 393. ("The exercise of command influence tends to deprive service members of their constitutional rights."); *but see* United States v. Douglas, 68 M.J. 349, 351 (C.A.A.F. 2010) (using term "unlawful command influence" throughout).

[4] *Constitutional Rights of Military Personnel Before the Subcomm. on Constitutional Rights of the Committee on the Judiciary, United States Senate*, 87th Cong., 2d Sess., (1962) (statement of Major General Alfred M. Kuhfeld, Judge Advocate General of the Air Force).

[5] *See also*, Major Franklin D. Rosenblatt, *Non-Deployable: The Court-Martial System in Combat from 2001–2009*, Army Law., Sept. 2010, at 30 (discussing Abu Ghraib) [hereinafter Non-Deployable].

have an in-depth understanding of the "mortal enemy of military justice" to support commanders and leaders appropriately; they must "know the enemy."[6]

Recent situations show the range of command influence in areas outside of the military justice arena and that those individuals in "non-command" positions can carry significant influence as well. For example, the former Air Force Chief of Staff's personal involvement in Thunderbird air show contracts was deemed "improper influence," while his subsequent public admonishment by the Secretary of the Air Force is an example of lawful influence.[7] In another case, a two-star Air Force Reserve general was found to have used his position to influence whether his son could remain at officer training school, despite normally disqualifying performance.[8] Thereafter, the general continued to use his influence to help his son remain in pilot training.[9] The general was subsequently removed from his position and he retired.[10] In a less publicized case, an Air Force master sergeant "intimidated potential witnesses" and would not allow an Airman facing court-martial charges to have any personal communications with co-workers.[11] This UCI resulted in an overturned conviction for, among other things, sodomy with a child and distributing methamphetamine.[12]

Inaction due to UCI concerns can also have strategic consequences. One example of this arises out of the Abu Ghraib detention scandal. In his book, *Paying Tribute to Reason: Judgments on Terror, Lessons for Security, in Four Trials Since 9/11*, Brigadier General (Brig Gen) Mark Martins, who served as General David Petraeus's staff judge advocate in Iraq, found it ironic "that a doctrine whose purpose is to legitimate a criminal justice process resulted in delay that tended to fuel distrust and to de-legitimate an entire war."[13] Brig Gen Martins noted that the Secretary of Defense and the Chairman of the Joint Chiefs of Staff had "concern for not reaching down personally to influence handling of individual misconduct [which] contributed to the delay in alerting Congress that caused such a furor on Capitol Hill in May of 2004."[14]

In an article included in Yale Law School's 2011 Global Military Appellate Seminar's recommended readings, Major Frank Rosenblatt, an Army judge advocate, argued that concerns over UCI are, in part, limiting military combat effectiveness during deployments because commanders are not free to discuss cases with local populations and are limited to generic statements about pending investigations.[15]

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[6] *Thomas*, 22 M.J. at 407.

[7] *Air Force secretary takes action on DOD IG report*, U.S Air Force, (Oct. 8, 2009), *available at* http://www.af.mil/news/story.asp?id=123171885; *See generally*, Report: *Alleged Misconduct: General T. Michael Moseley, Former Chief of Staff, U.S. Air Force*, Inspector General, United States Department of Defense, 10 July 2009.

[8] Scott Fontaine, *2-Star Influence*, Air Force Times, Mar. 7, 2011, at 20.

[9] *Id.*

[10] *Id.*

[11] United States v. Douglas, 68 M.J. 349, 352 (C.A.A.F. 2010).

[12] *Id.* at 357.

[13] Colonel Mark Martins, Paying Tribute to Reason: Judgments on Terror, Lessons for Security, in Four Trials Since 9/11 124 (2nd ed. 2008).

[14] *Id.*

[15] Non-Deployable, *supra* note 5, at 30. *See also, Global Military Appellate Seminar*, Yale Law

Rather than amending the UCI doctrine, Brig Gen Martins would recommend better training and "promoting transparency and openness without compromising either the accused's rights or the interest of military justice."[16]

These cases highlight the need for a better understanding of the kind of influences commanders and leaders at all levels can and, in some instances, should have. Command influence is inherent to every command action, yet by trying to avoid UCI, some commanders may choose inaction. To overcome these concerns, commanders, their advisors, and their subordinates should understand the tenets of UCI and how their actions and comments influence others. Armed with this understanding, commanders will have the confidence that their actions are proper and fall on the side of lawful command influence. To present this overview of UCI, this paper is divided into three sections: the first will provide a historical review of UCI; the second will define how courts view unlawful and lawful command influence; the third will be an analysis of two recent military justice cases; and the fourth will be a discussion of issues and areas where the consequences of command influence should be considered, as well as some practical advice for commanders and military practitioners to avoid unlawful command influence.

II. Historical Review of UCI

A brief historical survey demonstrates the importance of UCI to the drafters of the Uniform Code of Military Justice (UCMJ). Modern UCMJ ancestry dates back to 1621 with Sweden's King Gustavus Aldophus' Articles of War and developed through various British and American Articles of War.[17] Throughout this evolution, discipline has always been recognized as a commander's responsibility and as such, commanders were provided with relatively unchecked latitude over the selection of court members and legal officers, many of whom the commander would instruct on what his expectations were for the outcome of the trial and reprimand them if his wishes were not fulfilled.[18] This remained the case throughout World War II.[19]

Following World War II, the issue of command influence was "of vital concern during the hearings that were held on the [development of the] Uniform Code of Military Justice."[20] To illustrate the post-World War II mood, in which many

School, http://www.law.yale.edu/news/gmas_readings.htm (last visited Mar. 2, 2012).

[16] *Id.* In the military justice system, a criminal defendant is called "the accused."

[17] William B. Aycock & Seymour W. Wurfel, Military Law Under the Uniform Code of Military Justice 3-15 (1955), 3-15. The authors provide an excellent history of military law in general in the first chapter of this book. Of note to military justice practitioners, the authors describe how the term "court-martial" was based on the "Earl Marshal" and "Marshal's Courts" dating back to 1521; and how an American, pre-constitution development that allowed for "trial of offenders 'serving with small detachments'" is the basis for today's general courts-martial requiring only five members vice thirteen. *Id.* at 5-6, 9, n. 45.

[18] *See, e.g.*, Edmund M. Morgan, *The Background of the Uniform Code of Military Justice*, 28 Mil. L. Rev. 17, 19 (1965) (reprinted from *Vanderbilt Law Review*, 6 Vand. L. Rev. 169 (1953)). *See also,* Arthur T. Vanderbilt, *Advisory Committee on Military Justice* 33 (21 Sept. 1946), http://www.loc.gov/rr/frd/Military_Law/pdf/Vanderbilt-A_Summary.pdf.

[19] Morgan, *supra* note 18, at 21.

[20] *Constitutional Rights of Military Personnel Before the Subcomm. on Constitutional Rights of the*

believed commanders wielded too much influence over the justice process, in 1946 the Secretary of War appointed an advisory committee to "study the administration of military justice within the Army."[21] The Vanderbilt Report, named after its chair, Arthur Vanderbilt, a former American Bar Association president, specifically recommended "[t]he checking of command control" after becoming convinced that many commanders had made efforts to influence the outcomes of courts-martial.[22] Tellingly, the report stated:

> The foundation stone of the soldier's morale must be the conviction that if he is charged with an offense, his case will not rest entirely in the hands of his accuser, but that he will be able to present his evidence to an impartial tribunal with the assistance of competent counsel and receive a fair and intelligent review.[23]

To that end, the committee made a number of specific recommendations with regard to UCI, most of which were adopted by Congress in 1951 as Article 37, UCMJ, entitled, "Unlawfully Influencing Action of Court."[24] Importantly, Congress

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Committee on the Judiciary, 87th Cong., 2d Sess., (1962)(statement of Major General Alfred M. Kuhfeld, Judge Advocate General of the Air Force).

[21] Arthur T. Vanderbilt, *Advisory Committee on Military Justice*, (Dec. 13, 1946), *available at* http://www.loc.gov/rr/frd/Military_Law/pdf/report-war-dept-advisory-committee.pdf, 1 [hereafter Vanderbilt Report].

[22] *Id.* at 6-7; John R. Vile, *Great American Lawyers: An Encyclopedia*, myilibrary, 693-700, *available at* http://lib.myilibrary.com?ID=71992 (last visited Feb. 16, 2012).

[23] Vanderbilt Report, *supra* note 21, at 6.

[24] *Cf.* Vanderbilt Report, *supra* note 21, at 6-10;10 U.S.C. § 837 (2010) (largely unchanged since its adoption in 1951). A number of the recommendations were adopted into other sections as well. *See, also e.g.*, 10 U.S.C § 827 (2010) (requiring trial and defense counsel be appointed to general and special courts-martial and that they be members of a state or federal bar and "certified as competent" by their service's respective Judge Advocate General).

10 U.S.C. § 837 (2010), *Unlawfully Influencing Action of Court*:

> (a) No authority convening a general, special, or summary court-martial, nor any other commanding officer, may censure, reprimand, or admonish the court or any member, military judge, or counsel thereof, with respect to the findings or sentence adjudged by the court, or with respect to any other exercise of its or his functions in the conduct of the proceeding. No person subject to this chapter may attempt to coerce or, by any unauthorized means, influence the action of a court-martial or any other military tribunal or any member thereof, in reaching the findings or sentence in any case, or the action of any convening, approving, or reviewing authority with respect to his judicial acts. The foregoing provisions of the subsection shall not apply with respect to (1) general instructional or informational courses in military justice if such courses are designed solely for the purpose of instructing members of a command in the substantive and procedural aspects of courts-martial, or (2) to statements and instructions given in open court by the military judge, president of a special court-martial, or counsel.
>
> (b) In the preparation of an effectiveness, fitness, or efficiency report, or any other report or document used in whole or in part for the purpose of determining whether a member of the armed forces is qualified to be advanced, in grade, or in determining the assignment or transfer of a member of the armed forces or in determining whether a member of the armed forces should be retained on active

also created the civilian-filled Court of Military Appeals "as an overall safeguard" against UCI and other injustices.[25] Further, Rules for Courts Martial (RCM) 306(a) was created to ensure that commanders were not improperly influenced by superior commanders when determining disposition in cases where the superior commander had not withheld that authority.[26]

Article 37 of the UCMJ and RCM 306(a) provide sweeping prohibitions against influencing the entire military justice process, including not only convening authorities and commanders, but also all military personnel.[27] While the text of Article 37 has remained largely unchanged since its inception; what is and is not considered UCI continues to develop.[28] As could be expected with any new legal construct, concern over command influence did not diminish merely because the rules were now codified, rather it gave the Court of Military Appeals, and its successor court, the Court of Appeals for the Armed Forces (CAAF), the opportunity to refine the boundaries of UCI, a practice that continues to this day.[29]

III. Defining Unlawful Command Influence

Understanding the difference between lawful and unlawful command influence is a bit like proving a negative: if it is not unlawful, then it is lawful. Therefore, to best understand lawful command influence, one must first understand unlawful command influence. In the military justice context, Article 37, UCMJ, *Unlawfully Influencing Action of Court*, states, in part:

> duty, no person subject to this chapter may, in preparing any such report (1) consider or evaluate the performance of duty of any such member as a member of a court-martial, or (2) give a less favorable rating or evaluation of any member of the armed forces because of the zeal with which such member, as counsel, represented any accused before a court-martial. 10 U.S.C. § 837 (2010).

[25] *Judicial Checks on Command Influence Under the Uniform Code of Military Justice*, 63 Yale L.J. 880, 880 (1954); *See also*, Morgan, *supra* note 18, at 32-35.

[26] Manual for Courts-Martial, United States, R.C.M. [306(a)] (2008) [hereinafter MCM].

> (a) Who may dispose of offenses
>
> Each commander has discretion to dispose of offenses by members of that command. Ordinarily the immediate commander of a person accused or suspected of committing an offense triable by court-martial initially determines how to dispose of that offense. A superior commander may withhold the authority to dispose of offenses in individual cases, types of cases, or generally. A superior commander may not limit the discretion of a subordinate commander to act on cases over which authority has not been withheld.

Id.

[27] *Id.*

[28] *See* 10 U.S.C. § 837 (2010). In 1956 Congress amended the statute by one word that had no influence on the statute's meaning: "The word 'may' is substituted for the word 'shall.'" *Id.*

[29] *See, e.g.*, 63 Yale L.J. 880 (1954) (arguing for more stringent checks on command influence following review of initial Court of Military Appeals cases). *See also, e.g.,* United States v. Douglas, 68 M.J. 349 (C.A.A.F. 2010) (discussing unlawful command influence 60 years after the adoption of the UCMJ).

> No authority convening a general, special, or summary court-martial, nor any other commanding officer, may censure, reprimand, or admonish the court or any member, military judge, or counsel thereof, with respect to the findings or sentence adjudged by the court, or with respect to any other exercise of its or his functions in the conduct of the proceeding. No person subject to this chapter may attempt to coerce or, by any unauthorized means, influence the action of a court-martial or any other military tribunal or any member thereof, in reaching the findings or sentence in any case, or the action of any convening, approving, or reviewing authority with respect to his judicial acts.[30]

As previously discussed, RCM 306(a) also prohibits senior commanders from improperly influencing the military justice decisions of subordinate commanders.[31] Yet, UCI-like actions can also arise outside of the military justice context or without a commander's involvement, as was the case with the Thunderbirds contract and the master sergeant's actions.

Simply stated, UCI is any action taken in an attempt to influence either an outcome or another into an inappropriate action. In this sense, it is somewhat analogous to the common law crime of solicitation, whereby one individual tries to get another to break the law. Yet, most UCI cases are not nefarious conspiracies intended upon subverting the ends of justice; they tend to arise due to commanders or subordinates who do not foresee the real or perceived consequences of their actions and comments to the fair administration of justice and their duties as a whole.

To remedy this, courts have developed a spectrum of influence, in which unlawful command influence is subdivided as either actual or apparent.[32] Actual UCI is when a commander or others attempt the "actual manipulation of any given trial."[33] Courts ask whether the action by the commander "brings the commander into the deliberation room."[34] In a 2004 Navy case, *United States v. Gore*, the military judge found the convening authority, after having entered into a pretrial agreement for the accused to plead guilty, did not allow a defense character witness questionnaire to be circulated in the accused's unit and had told one witness not to testify for the defense at sentencing.[35] The military judge believed this a "rabid form of [UCI]" and dismissed the entire case; CAAF concurred.[36] Other examples

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[30] 10 U.S.C. § 837(a) (2010).

[31] MCM, *supra* note 26, R.C.M. [306(a)].

[32] United States v. Allen, 31 M.J. 572, 589-90 (N.M.C.M.R. 1990) (summarizing actual and apparent unlawful command influence); *see also*, United States v. Pope, 63 M.J. 68 (C.A.A.F. 2006) (quoting United States v. Grady, 15 M.J. 256, 257 (C.M.A. 1983) (discussing actual unlawful command influence); *see also*, United States v. Ashby, 68 M.J. 108, 28-30 (C.A.A.F. 2009) (discussing actual and apparent unlawful command influence). While this paper discusses unlawful command influence extensively, the spectrum of influence is largely dominated by lawful command influence.

[33] United States v. Ayers, 54 M.J. 85, 94-95 (C.A.A.F. 2000)(quoting *Allen*, 31 M.J. at 212).

[34] United States v. Kirkpatrick, 33 M.J. 132, 133 (C.M.A. 1991).

[35] United States v. Gore, 60 M.J. 178, 188-89 (C.A.A.F. 2004).

[36] *Id.* at 188. The military judge found the convening authority's testimony that he had not ordered anyone not to testify unbelievable in light of pretrial statements made to defense attorneys by a chief

include a convening authority opining on the guilt of the accused and appropriate sentence in a specific case at a meeting with potential court members, drafting a policy letter that recommends appropriate sentences for particular cases, or telling a subordinate commander what action to take in a particular case.[37]

The last example may prove troubling for a subordinate commander when trying to ascertain the difference between actual UCI and simple mentoring from a senior commander. CAAF has found it appropriate when a subordinate commander contacts their chain of command for advice, and the senior commander makes it clear the ultimate decision lies with the subordinate commander.[38] "There is nothing inherently suspect about an officer in [the subordinate commander's] . . . position electing to consult with his chain of command concerning potential investigative and procedural options when faced with allegations of serious misconduct."[39] Subordinate commanders faced with a tough military justice decision should not shy away from seeking out advice, however, it is recommended they contact their legal office to ensure the subordinate and senior commander are clear on the parameters of the discussion. This not only avoids actual UCI, but also can mitigate claims of apparent UCI.

Apparent UCI is different from actual UCI, in that there is not a claim the trial is being directly influenced, instead it asks, " . . . whether a reasonable member of the public, if aware of all the facts, would have a loss of confidence in the military justice system and believe it to be unfair[?]"[40] These instances do not involve specific comments or actions targeted at a particular case; it is the cumulative effect of comments and actions, even unrelated, that have the appearance of influencing a specific trial. For example, statements to the media, opinion pieces in the base paper, commander's calls, and policy memos can all have potential UCI implications.[41]

In one apparent UCI case involving a female Army officer in 2001, the convening authority held officer professional development meetings dealing with officer standards and the convening authority's perception that the outcome in a highly publicized female Air Force officer case was too lenient.[42] These meetings

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petty officer. *Id.* The military judge found the Chief's unbelievable testimony at trial to be a result of "considerable stress" because "[h]e was a man desperate to please his commanding officer." *Id.*

[37] *See, e.g.*, United States v. Stombaugh, 40 M.J. 208, 211 (C.M.A. 1994) (listing a number of UCI examples from the 1950s to the 1990s).

[38] *See, e.g.*, United States v. Drayton, 39 M.J. 871 (A. Ct. Crim. App. 1994) (discussing company commanders guidance from a battalion commander in disposition of a case, which was not UCI). *But see also*, United States v. Drayton, 45 M.J. 180, 183 (C.A.A.F. 1996) (J. Sullivan, dissenting) (discussing United States v. Hawthorne, 22 C.M.R. 83 (C.M.A. 1956), holding that "any circumstance which given even the appearance of improperly influencing the court-martial proceedings against the accused must be condemned."). *See also*, United States v. Stirewalt, 60 M.J. 297 (C.A.A.F. 2004) (allowing disposition discussions between a subordinate commander and a superior commander when initiated by the subordinate).

[39] *Stirewalt*, 60 M.J. 301.

[40] *Allen*, 31 M.J. at 590 (citing United States v. Rosser, 6 M.J. 267 (C.M.A.1979); United States v. Cruz, 20 M.J. 873, 890 (A.C.M.R. 1985)).

[41] *See, e.g.*, United States v. Martinez, 42 M.J. 327, 332 (C.A.A.F. 1995) ("Admittedly, this policy letter suggests to potential court members reading it what their court-martial sentences for a drinking-and-driving offense should be. This is unlawful command influence in violation of Article 37.").

[42] United States v. Baldwin, 54 M.J. 308, 310 (C.A.A.F. 2001).

were held both before and during trial; all court members were required to attend.[43] While not specifically ruling on whether or not this amounted to UCI, CAAF pointed out that "the mere 'confluence' of the timing of such meetings with members during ongoing courts-martials [sic] and their subject matter dealing with court-martial sentences can require a sentence rehearing."[44] Further, depending on what is stated during one of these sessions, a commander can open themselves up to claims of actual UCI as well.

IV. Recent Cases Involving UCI

A. Litigating and Appealing UCI

Whether a court finds actual or apparent UCI is only one step in the UCI process. While commanders and others should be aware of UCI and guard against it, in those situations when it does arise prior to trial, commanders and judge advocates can take remedial measures to right the scales of justice.[45] CAAF synthesized its standards and test regarding UCI from a number of previous UCI cases in *United States v. Biagase*, and outlined the defense's and Government's responsibilities when UCI is raised.[46]

First, the defense must raise UCI in a proceeding, normally at trial or at a pre-trial hearing, but it can also be raised post-trial as it "is not waived by failure to raise it at trial."[47] The court stated the evidentiary requirement is "low, but more than a mere allegation or speculation;" in other words, the defense must present "some evidence" of alleged UCI.[48] Additionally, this evidence must, "if true, constitute [UCI], and that the alleged [UCI] has a logical connection to the court-martial, in terms of its potential to cause unfairness in the proceedings."[49] For example, the defense cannot simply allege UCI merely because a commander signs the performance reports of potential court members, there must be a "logical connection" such as the threat of poor performance reports, otherwise commanders could not fulfill other command responsibilities.

Once the military judge finds the defense has successfully raised the issue, "the Government must prove *beyond a reasonable doubt*: (1) that the predicate facts do not exist; or (2) that the facts do not constitute unlawful command influence; or

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[43] *Id.*

[44] *Id.*

[45] *See, e.g.*, Lieutenant Colonel Mark L. Johnson, *Unlawful Command Influence—Still With Us; Perspectives of the Chair in the Continuing Struggle Against the 'Mortal Enemy' of Military Justice*, Army Law., June 2008, at 104, 108-109 [discussing the unpublished case United States v. Bisson, No. NMCCA 200600997, 2007 WL 2005077 (N-M Ct. Crim. App. July 9, 2007) (unpublished), where UCI was remedied by prompt command response].

[46] United States v. Biagase, 50 M.J. 143, 150-51 (C.A.A.F. 1999).

[47] United States v. Johnston, 39 M.J. 242, 244 (C.M.A. 1994) (reaffirmed in United States v. Douglas, 68 M.J. 349, 356 n.7 (C.A.A.F. 2010)). *See also, Biagase*, 50 M.J. at 150.

[48] *Biagase*, 50 M.J. at 150.

[49] *Id.*

(3) that the unlawful command influence will not prejudice the proceedings or did not affect the findings and sentence."[50]

Assuming a guilty verdict, the UCI issue will likely not be fully resolved until all appeals have been exhausted. While a military judge can find UCI does not exist in a case, the military judge could also find that beyond a reasonable doubt, the alleged UCI did not prejudice the accused's right to a fair trial and the trial can proceed. The beyond a reasonable doubt standard is the most stringent burden of proof used in American courts and is usually applied on matters of constitutional rights.[51] CAAF elevated UCI to such a level in 1986 in *United States v. Thomas*, when it declared that UCI "involves 'a corruption of the truth-seeking function of the trial process'" in much the same way the Supreme Court determined the same for the "knowing use of perjured testimony" in 1985.[52]

Although the military judge has a very important role in ruling on UCI in a case, the military judge is not truly the "last sentinel" on this issue as not only will the appellate courts review the military judge's UCI rulings, but the defense can raise UCI post-trial as well.[53] Appellate courts review UCI cases with two different standards.[54] The first standard concerns the military judge's factual findings. Essentially, the appellate courts review the military judge's factual findings under the "clearly-erroneous" standard, i.e., was the military judge clearly wrong in his or her determination of a factual issue?[55] Historically, military appellate courts have been reluctant to overrule a military judge's factual rulings because these courts must rely on "the record" for their reviews, which is a typed script of the trial. They view the military judge, who is able to view all the evidence and witnesses in person, in the best position to determine the facts.[56] The difference between the perspectives is obvious, much like the difference between reading a military history book and taking part in the battle.

The second standard asks whether the military judge was wrong in applying the law. Appellate courts will review these law-based issues *de novo*, a legal term that simply means the appellate court will reexamine the entire issue to determine if the law was properly applied.[57] "The question is not whether a reviewing court might disagree with the trial court's findings, but whether those findings are 'fairly supported by the record.'"[58] One need not be present at trial to analyze a military judge's findings based solely on law; therefore, appellate courts have historically been less reluctant to overturn military judges' findings using this standard.[59]

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[50] *Id.* (emphasis added).
[51] *See*, United States v. Thomas, 22 M.J. 388, 393 (C.M.A. 1986) (discussing UCI as a constitutional issue).
[52] *Id.* (quoting United States v. Bagley, 473 U.S. 667, 679 (1985)).
[53] *See, e.g.*, United States v. Douglas, 68 M.J. 349, 357-58 (C.A.A.F. 2010) (J. Baker, dissenting).
[54] United States v. Reed, 65 M.J. 487, 488 (C.A.A.F. 2008) (quoting United States v. Wallace, 39 M.J. 284, 286 (C.M.A. 1994)).
[55] *Id.*
[56] *See, e.g.*, United States v. Douglas, No. ACM S31059, 2009 WL 289705, at *2, (A.F. Ct. Crim. App. 2009) (unpublished).
[57] *Id. See also, Black's Law Dictionary*, (9th ed. 2009).
[58] United States v. Gore, 60 M.J. 178, 185 (C.A.A.F. 2004) (citations omitted).
[59] *See, e.g.*, Douglas, 2009 WL 289705, at *2.

The distinction between these two standards is important for practitioners; and the practitioner's perspective on the issue will affect which standard is more beneficial in any given case. If a judge finds as a matter of fact that the testimony of one witness is more believable than another and thus UCI did or did not occur, it will be very difficult to overturn that ruling. However, if the military judge finds UCI occurred, but determines as a matter of law that the UCI will not affect the trial, that ruling is more susceptible to appellate scrutiny. In this situation, the appellate courts will likely rely on the same facts, but they will reanalyze those facts to determine if the military judge applied the law correctly.

B. Remembering the Standards and Crafting Remedies: *United States v. Douglas*

Military judges have significant leeway on whether or not to create their own remedy if they find UCI and believe it can be remedied.[60] Although CAAF encourages military judges to craft remedies when appropriate, it supports those who do not.[61] Likewise, it subjects those who do craft remedies to the same scrutiny as a Government crafted remedy.[62] This is appropriate to keep UCI from even the appearance of creeping behind the bench, but this apparent ambiguity on the one hand encourages military judges to deal with UCI matters effectively during trial, but on the other hand could also put a chill on judicially crafted remedies since they are held to the same scrutiny as Government crafted ones.

In *United States v. Douglas*, which was essentially a remedies and standards case, the court also discussed one of a commander's most difficult leadership challenges in regards to UCI: the "rogue" subordinate. As the Air Force Court of Criminal Appeals (AFCCA) pointed out in their unpublished lower court ruling affirming the trial court, "[UCI] is not solely the product of illicit action by a formal commander, but can also be exercised by those cloaked with the 'mantle of command authority.'"[63]

In this case, Senior Airman Adam Douglas, an Air Force recruiter, was charged with a number of offenses, to include distribution of methamphetamines and carnal knowledge and sodomy of a child under the age of 16 years.[64] Prior to trial, Douglas' defense team alleged UCI on the part of Douglas' first-line supervisor, Master Sergeant (MSgt) William Bialcak.[65] Specifically, a number of potential defense witnesses, both in Douglas' squadron and those who shared the same office facility, refused to help with Douglas' case because Bialcak had "spread so many rumors about [Douglas'] alleged conduct and had been so outwardly hostile to [Douglas] that [the witnesses] were afraid to come forward."[66] The list of those

[60] *See Gore*, 60 M.J. at 185-89 (military judge dismissed case after finding UCI); United States v. Douglas, 68 M.J. 349, 351 (C.A.A.F. 2010) (military judge developed UCI remedy).
[61] *Cf.* Gore, 60 M.J. at 185-89 *with* Douglas, 68 M.J. at 351.
[62] *Cf.* Gore, 60 M.J. at 185-89 *with* Douglas, 68 M.J. at 351.
[63] United States v. Douglas, ACM S31059,2009 WL 289705, at *2 (A.F. Ct. Crim. App. 2009) (unpublished) (citing United States v. Ayala, 43 M.J. 296 (C.A.A.F. 1995) further citations omitted).
[64] *Douglas*, 2009 WL 289705 at *1.
[65] United States v. Douglas, 68 M.J. 349, 351 (C.A.A.F. 2010).
[66] *Id.*

thwarted included noncommissioned officers, federal marshalls, the unit's secretary, and even the building's janitor.[67] Furthermore, Bialcak issued to Douglas a no-contact order, essentially creating a wall between Douglas and others who might assist with his case.[68]

The military judge concurred with the defense motion and "found that MSgt B[ialcak]'s actions created a hostile atmosphere that effectively discouraged witnesses from providing character statements" for Douglas.[69] Rather than dismiss the case, the military judge developed a remedy to cure the UCI.[70] The military judge's order included:

> (1) providing a continuance to enable trial and defense counsel to co-author a memorandum from [Douglas'] commanding officer;
>
> (2) making the memorandum available to the defense;
>
> (3) allowing the defense to decide on the memorandum's use and to pursue such witnesses as it chose; and
>
> (4) "strong[ly] recommend[ing]" that
>
> > (a) [Douglas] be removed from MSgt Bialcak's supervision and assigned to another office selected by [Douglas]'s commander,
> >
> > (b) MSgt Bialcak be issued an order from his commander
> >
> > (c) to immediately cease and desist communications regarding [Douglas] and the investigations, charges, and court-martial, and
> >
> > (d) the Government immediately rescind both the cease and desist order and the order prohibiting [Douglas] from contacting members of his unit.[71]

Following a 75-day continuance, the court reconvened and the military judge questioned the defense on whether her previous instructions had been carried out and if the defense received the commander's memorandum.[72] The defense counsel stated, "We did, Your Honor" and when asked whether there were any additional concerns or new developments, the defense counsel replied, "Nothing at this time,

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[67] *Douglas*, 2009 WL 289705 at *4.
[68] *Id.* at *3.
[69] *Douglas*, 2009 WL 289705 at *1.
[70] United States v. Douglas, 68 M.J. 349, at 351
[71] *Id.* at 353 (citations omitted, formatting added for clarity).
[72] *Id.* at 353.

Your Honor," while the Government trial counsel was silent.[73] With no other pre-trial issues to address, the court continued, judge alone, and Douglas was eventually convicted of the various charges and sentenced to a bad conduct discharge, 1-year confinement and a reduction to E-1.[74]

On appeal, AFCCA affirmed the findings and sentence.[75] Although AFCCA disagreed with the military judge's finding that the pre-remedy UCI would not have impacted a "good soldier" defense in the findings phase, it nonetheless found the error harmless.[76] This was due in large part to the military judge's pre-trial remedies and AFCCA's belief that the defense's acquiescence to the remedy, without further investigation by the military judge or the prosecution, was sufficient to meet the beyond a reasonable doubt standard for both findings and sentencing.[77] AFCCA argued, "the defense was obligated to say so if [the remedy] had not been implemented or if they had still encountered problems, which the Government would then be obligated to address. The defense's failure to raise any such problems at that point is instructive."[78] CAAF, while recognizing the logic of AFCCA's ruling, did not concur.

In a 3-2 ruling, CAAF specifically found that while the military judge's remedy was "well within the bounds of her discretion," it was troubled with the inquiry into whether the remedy was fully implemented.[79] Relying on the *Biagase* test, CAAF set out to determine whether the remedy had, *beyond a reasonable doubt*, removed any prejudice to Douglas.[80]

Despite the military judge developing a "reasonable remedy," which she must have believed was complied with, CAAF could not, based upon the record, determine whether the UCI had been removed beyond a reasonable doubt.[81] Although the trial defense counsel seemed to be completely satisfied with the military judge's handling of the UCI matter, CAAF was not; pointing out that the burden of proof lies with the prosecution, not defense acquiescence.[82] Specifically, CAAF could not determine whether Bialcak had been ordered to stop talking about Douglas and the case, and whether the no contact orders had been rescinded.[83]

Secondarily, CAAF articulated another strategy that would have ensured that the effects of the UCI were negated.[84] A three-part test, it deals specifically with the defense's ability to obtain character witnesses in spite of UCI and requires the Government to show:

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[73] *Id.*
[74] *Id.* at 351.
[75] *Douglas*, 2009 WL 289705 at *1.
[76] *Id.* at *3-*6.
[77] *Id.* at *6.
[78] *Id.*
[79] United States v. Douglas, 68 M.J. at 355.
[80] *Id.* (emphasis added).
[81] *Id.* at 352-55.
[82] *Id.* at 356.
[83] *Id.*
[84] *Id.*

(1) the appellant in fact offered character evidence at trial;

(2) there either was no evidence of good character available or that readily available rebuttal evidence of bad character made raising good character tactically implausible; or

(3) the prosecution evidence at trial was so overwhelming that character evidence could not have had an effect.[85]

CAAF found none of the three parts of this test satisfied in the Government's favor.[86]

CAAF reversed the AFCCA ruling despite the trial being held by a military judge sitting alone and in absence of trial defense objections.[87] It ordered the "convening authority to determine if a rehearing is practicable," if not, then the convening authority should dismiss the case.[88] Ultimately, the convening authority dismissed the case, largely due to the challenges of prosecuting a more than six-year old case: witnesses could not be located and victims moved on with their lives.[89]

Two spirited dissenting opinions accompanied this case. In the first, Judge Baker argued that the military judge, particularly when sitting alone, is in the best position to determine if her remedies were fully implemented.[90] Judge Baker summed up his argument succinctly stating, the UCI "was identified, reasonable remedial steps were taken, and both the military judge and defense counsel were satisfied with those steps before the military judge alone trial proceeded further."[91] Judge Baker would have affirmed the conviction.[92]

In the second dissenting opinion, Judge Stucky placed emphasis on the defense's responsibility to object if not satisfied with the remedy.[93] He argued that the reason there is no further evidence to prove the UCI was not remedied was that "the defense failed to complain at trial."[94] Judge Stucky found it difficult to see how the same defense counsel who previously raised the UCI issue "suddenly lost their

[85] *Id.* (citations omitted, formatting added for clarity).
[86] *Id.*
[87] *Id.*
[88] *Id.*
[89] *Id.* Author telephone interview with Deputy Staff Judge Advocate, Ogden Air Logistics Center, Utah, 9 February 2011. The investigation in this case began in December 2003 and the trial was held at various times during the fall of 2005, with CAAF's ruling on 23 February 2010. United States v. Douglas, 68 M.J. at 352, 355. The charges the accused was found guilty of at trial by military judge alone were: "failing to go to his appointed place of duty at the time prescribed, violating a lawful general regulation, dereliction of duty, making a false official statement, distribution of methamphetamine, carnal knowledge, and sodomy of a child under the age of sixteen years." *Id.* at 351. He was sentenced to "a bad conduct discharge, confinement for twelve months, and a reduction to the grade of E-1." *Id. See also, supra* note 11-12.
[90] *Id.* at 358.
[91] *Id.*
[92] *Id.*
[93] *Id.* at 359.
[94] *Id.*

courage and were afraid to notify the military judge that the remedy had not been fully implemented or had not worked."[95] He too would have affirmed the conviction.[96]

The obvious lesson from this case is that Government counsel must ensure any remedies taken to overcome UCI are explained fully on the record, regardless of defense acquiescence. CAAF implied that in the absence of defense objection, the court is not necessarily looking for overwhelming evidence that the remedy has been implemented, simply "evidence that the key components of the remedy were implemented."[97]

Another lesson from this case is that if a military judge finds UCI, then crafts or allows a remedy to be crafted, a strong signal is being sent to the Government that the military judge believes the UCI can be overcome if the remedy is fully implemented. If the military judge did not believe this, then the case would simply be dismissed. Government trial counsel would then be wise to make every effort to ensure it fully implemented the remedy and the record reflected the full implementation of the military judge's remedy, if appropriate. Defense counsels are similarly wise to fully investigate the implementation of the remedies and, when appropriate, argue against the effectiveness of the remedial measures and continue to insist UCI is prejudicing their clients. The military judge's findings of fact as to whether the remedy was implemented can very likely prove to be dispositive of the UCI issue as it makes its way through the appellate courts.

Additionally, the timing of the remedy is a lesson in and of itself. In *Douglas,* the defense raised the issue of the no contact orders with the Government about a month prior to trial and it does not appear the Government attempted to craft a remedy of its own.[98] Had the Government done so, the outcome may have been different because defense counsel would have viewed the Government-crafted remedy as naturally suspect. The inevitable arguments regarding the Government-crafted UCI remedy would have at least been preserved on the record, as would have the military judge's subsequent ruling on the effectiveness of the Government's remedy.

The starting point for any Government cure of UCI should be adequate training up front to ensure it does not happen in the first place. Nonetheless, should UCI occur, the *Douglas* remedy is a useful starting point of sorts for the Government. While all cases are different, the remedy from *Douglas* serves as a useful template, largely because both CAAF and AFCCA found it reasonable.[99] Further, it is not a particularly difficult remedy for the Government to implement: rescind no-contact orders, issue a letter from a commander, and move some people around. Should the Government begin with the *Douglas* remedy and expand or contract as needed, they are likely to land upon a reasonable remedy.[100] Nevertheless, *Douglas* shows

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[95] *Id.*
[96] *Id.*
[97] *Id.* at 357.
[98] *Id.*
[99] *See id.* at 356. *See also, Douglas*, 2009 WL 289705 at *5.
[100] The author does not argue UCI cures are "simple fixes," rather, when it happens, the cure will likely be less painful than allowing the UCI to continue, and a military judge to craft a remedy.

CAAF will go far in its mandated quest to rid the military justice system of UCI. If they were not before, all participants should now be on notice of this.

C. High Interest Cases—Balancing the Need for Information with the Demands of Justice: *United States v. Ashby*

Another difficult UCI issue for commanders stems from high interest cases. While the vast majority of military justice cases are conducted with no media or other outside interest, some cases will generate public interest. These cases will undoubtedly cause commanders and their legal staff much consternation in the process of balancing the need to provide information and take remedial command actions with the rights of an accused. It is likely no matter how carefully a commander balances these interests, the commander's actions and statements will become the focus of judicial scrutiny at trial. Such was the case in *United States v. Ashby*.[101]

On February 3, 1998, a U.S. Marine Corps EA-6 jet flying low level in the Italian Alps clipped the cables to a ski-lift gondola, causing the gondola to fall, killing 20 passengers.[102] The aircrew survived, but created a significant international incident.[103] The procedural history of this case is noteworthy because it demonstrates CAAF's willingness to discuss UCI issues and provide practitioners with guidance in this area even when, arguably, the issue may not exist or is moot.

The convening authority in the case, a Marine 3-star general, first convened an administrative command investigation board (CIB), similar to an accident investigation board in the Air Force.[104] This investigation is a tool available to commanders and it is mandated in certain circumstances, such as when there is a fatality.[105] These investigations are merely fact-finding in nature and have no authority to discipline individuals.[106] However, the boards can make recommendations on any subject, to include recommending commanders take disciplinary action. In this case the board recommended discipline against the aircrew.[107] The convening authority endorsed the board's report and stated he intended to hold an Article 32, UCMJ, investigation to "'consider whether charges such as involuntary manslaughter or negligent homicide, damage to government property, and dereliction of duty should be referred to a general court-martial' against the mishap aircrew."[108]

One crewmember facing an Article 32 investigation was the pilot of the jet, Captain (Capt) Richard Ashby.[109] Following the Article 32 investigation, the convening authority referred all of the charges he had discussed in his endorsement to a general court-martial against Ashby.[110] The convening authority would later

[101] United States v. Ashby, 68 M.J. 108 (C.A.A.F. 2009).
[102] *Id.* at 112.
[103] *Id.*
[104] *Id.* at 114.
[105] *Id.* at 114, n.6.
[106] *Id.* at 125
[107] *Id.*
[108] *Id.* at 125-27 (quoting the convening authority's endorsement to the investigation board).
[109] *Id.* at 127.
[110] *Id.*

refer a second charge; that charge would become the focus of a second court-martial.[111] The Rules for Courts-Martial require that once the general court-martial convening authority refers charges to a general court-martial and the accused has been arraigned, additional charges must be consented to by the accused if they are to be part of the same trial.[112]

In *Ashby*, evidence arose, after the original charges were referred, that Ashby had caused the videotape of the flight in question to be destroyed.[113] He was charged with this additional crime, but he had already been arraigned on the original charges and did not consent to that particular charge being added to his original trial.[114] As the rules required his consent to add this additional charge to his original trial, there was no evidence of the tape presented at his first trial, in which he was ultimately found not guilty of all charges.[115] In his second trial, however, he was convicted of conduct unbecoming an officer for causing the tapes to be destroyed.[116]

Ashby argued that the CIB that followed the accident was improperly influenced by military leaders and that leadership created a "chilling environment" by "public[ly] condem[ing]" Ashby to the same individuals from which he would need to procure witnesses.[117] Key to the UCI issue was the limited statements of the convening authority and the actions of his staff judge advocate (SJA).[118] Here, the SJA kept watch over the conversations between the convening authority and the CIB president.[119] The convening authority kept the conversations inquisitorial; although he did recommend other areas to investigate, he did not direct any particular finding.[120] As Lieutenant Colonel (Lt Col) Mark Johnson, former Professor and Chair of the Criminal Law Department at the Army Judge Advocate General's School noted, "[the convening authority] made it clear on many occasions that the findings and recommendations must be those of the [command investigation board]."[121]

CAAF found that Ashby, "failed to show facts that, if true, would demonstrate the CIB members were wrongfully influenced."[122] The court further declared that "[m]ere speculation that [UCI] occurred because of a specific set of circumstances is not sufficient."[123] The court cautioned on drawing too large of a conclusion from its ruling, noting that while it found no UCI in this particular case, it was not

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[111] *Id.* at 112-113.
[112] MCM, *supra* note 26, R.C.M. 601(c)(2).
[113] *Ashby*, 68 M.J. at 112. He provided another crewmember the tape, believing it would be destroyed, which it was. *Id.* at 114.
[114] *Id.*
[115] *Id.* at 112,127.
[116] *Id.* at 113.
[117] *Id.* at 127.
[118] *Id.* at 125. The convening authority was Lieutenant General Peter Pace, who at the time was dual-hatted as both the Commander, United States Marine Corps Forces Atlantic and Commander, United States Marine Corps Forces Europe. *Id.* He would eventually become the Chairman, Joint Chiefs of Staff.
[119] *Id.* at 126.
[120] *Id.* at 126, 128.
[121] Johnson, *supra* note 45, at 105.
[122] *Ashby*, 68 M.J. at 128.
[123] *Id.*

creating a "blanket rule that [UCI] can never exist in the context of an administrative proceeding," such as a CIB.[124]

The second issue, that leadership created a "chilling environment" by "public[ly] condem[ing]" Capt Ashby, invokes actual and apparent UCI and the *Biagase* test discussed above.[125] Here, CAAF found first that there was no evidence of any actual manipulation or "taint[ing]" of the trial despite the "highly publicized international nature of the incident"; and second, that commanders are expected to make statements and investigate an incident, thus, their actions did not rise to that of apparent UCI.[126] Importantly, CAAF found that the commanders were acting in their official capacities, they did not have a personal interest in the case apart from their professional one, and they made no comments prior to either trial specifically regarding Ashby's guilt or innocence.[127]

CAAF points out as well that the CIB issue was moot because Ashby was acquitted of the events that the CIB investigated.[128] Had the CIB been the recipient of UCI from every level of command, it still would not have mattered with regard to Capt Ashby's second trial because the CIB did not know about the destruction of the tape and therefore could not have investigated or made recommendations regarding it.[129] This is instructive, because CAAF could have easily dismissed the issue. Nonetheless, it provided commanders and justice practitioners with guidance for the handling of high-profile cases.

Without the benefit of CAAF's ruling in *Ashby*, Lt Col Johnson reviewed the lower court Navy-Marine Corps Court of Criminal Appeals' (NMCCCA) holding in *Ashby* and argued there are "several practical lessons for practitioners in this case."[130] Among them, that commanders need to "be careful not to comment inappropriately on pending cases in their command," that convening authorities "will be thoroughly scrutinized" in high-profile cases, and that judge advocates play a "central role" in keeping commanders within the bounds of lawful command influence.[131]

CAAF's opinion offers some expansion to these lessons. First, although not explicitly stated, it is clear that the SJA in *Ashby* could foresee the likely defense argument of UCI. In apparent anticipation of this, the SJA "monitored" the convening authority's conversations with the CIB president and very likely took detailed notes because the convening authority was able to recall a number of these details at the trial.[132] Additionally, the absence of comment by all participants in the military

[124] *Id.* at 129.
[125] *Id.* at 127.
[126] *Id.* at 129.
[127] *Id.* "After Ashby's acquittal in his first court-martial, The United States Ambassador to Italy stated that he was surprised at the verdict. In a press conference, President Clinton declined to comment on the acquittal, but Italian Prime Minister D'Alema expressed his disappointment in the verdict." *Id.* at 127.
[128] *Id.* at 129.
[129] *Id.*
[130] Johnson, *supra* note 45, at 107. LTC Johnson also discusses the "type two" and "type three" accuser issue that arose in this case and is related, but tangential, to the UCI discussion that is central to this paper.
[131] *Id.*
[132] *Ashby*, 68 M.J. at 126.

justice system, to include the President of the United States, at the conclusion of Ashby's first trial is also noteworthy. In light of the "intense international media coverage" and the impact this event had with regards to U.S. and Italian relations, the restraint shown by these individuals likely also demonstrates the preemptive advice they received from their legal advisors.[133]

Further, although the accident in this case occurred on February 3, 1998, it was not decided by CAAF until August 31, 2009. This highlights the importance of commanders working closely with their staffs to ensure their comments are not only appropriate, but also preserved. Although the conviction was ultimately upheld, if the thoroughness of the SJA in documenting the convening authority's action is any indicator, the Government would likely have been in a position to retry the case if needed. This case, particularly when viewed in light of *Douglas*, serves as a useful reminder of the requirements in defending charges of UCI.

Finally, preserving the record and ensuring rulings are based on the appropriate standards and accurately reflected on the record is paramount. Both CAAF and NMCCCA, "noted the extensive findings of fact and conclusions of law entered by the military judge, and the great care taken to complete the record in these matters."[134] Johnson states, "These findings rightly played an essential role in the court's ultimate holding—an important reminder that trial judges must be mindful of the importance of completing thorough findings of fact and conclusions of law for the benefit of all parties."[135] When viewed through the *Douglas* lens, Johnson's warning seems prophetic.

V. Considerations for Commanders

General Michael Loh, former Air Force Vice Chief of Staff, stated in *The Responsibility of Leadership in Command*, that "[t]hose who recognize the interdependence of leadership and command are the most effective commanders . . . ."[136] While supplying the reader with general guidance on the expectations of commanders, he framed command as a "sacred trust."[137] Protecting the military justice system from UCI is the "sacred trust" placed not just on judges and judge advocates, but also on commanders and all other participants in the system.[138]

While in theory every command action can be categorized as either lawful or unlawful, as the above examples demonstrate, it is not that simple. Commanders must have the confidence to act when they need to act and not be fearful of potential UCI claims. The above situations, while illustrative of how varied command influence issues can be, only scratch the surface. To highlight the diversity of

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[133] *Id.* Additionally, at this point in time there were additional charges pending against Ashby for the destruction of the videotape, so any comments would more than likely have become an issue during the upcoming second trial.

[134] Johnson, *supra* note 45, at 107. *See also, Ashby*, 68 M.J. at 127-28.

[135] Johnson, *supra* note 45, at 107.

[136] John Michael Loh, *The Responsibility of Leadership in Command*, in Concepts for Air Force Leadership, ed. Richard I. Lester (Maxwell AFB, AL: Air University Press, 2008), 103.

[137] *Id.*

[138] *Id.*

command influence, the below list of topics are provided as a guide; they should be viewed as trigger points for commanders, judge advocates, and other participants in the military justice system to recognize where improper and unlawful command influence issues could be lurking as they fulfill their "sacred trust."[139]

A. Mental Health

Mental health is always a complicated area for commanders as they balance the needs of the organization with the needs of the individual. Most commanders will not recommend a mental health examination or opine on an individual's mental state without recognizing something "out of sorts" with the individual. Most commanders are also not psychologists, therapists, or lawyers. They do not know clinical symptoms or legal standards. Thus, both commanders and other unit leaders must be mindful of their comments so as not to wrongfully influence the opinion of others with regard to the individual in question.[140]

For example, in one article on pretrial advice to defense attorneys, the authors recommend defense counsel interview commanders early in a case where sanity may be an issue so as to "commit command leaders later to their early opinions and behavior assessments."[141] Should the commander's opinion later change, the authors argue it may be UCI at work.[142] In reality, it may simply be a lack of understanding of the legal standard for mental responsibility, which once explained to the commander, caused the commander to shift. Regardless, commanders should understand the impact of their opinions in such cases and restrict their opinions to areas that they are knowledgeable in.[143]

Another area where commanders and unit leadership must be careful is "recommending" an individual seek mental health treatment. While any service member may seek mental health counseling without retribution, forcing an individual to seek mental health is not allowed.[144] In fact, mental health

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[139] *Id.*

[140] This can happen innocently enough as a commander and first sergeant or supervisor privately discuss a particular service member and the commander opines the individual is "different," "not right," or needs to see mental health. These comments can be passed on to others in the chain of command. This situation can have negative ramifications for both the service member and the commander should the individual be court-martialed or receive other discipline. Additionally, these comments can create a chilling effect on others in the unit to come forward and seek treatment if they need it.

[141] Thomas Barnard & James Ewing, *Pretrial Advice for Representing Mentally Ill Criminal Defendants in the Military Justice System,* Army Law., May 2010, at 49.

[142] *Id.*

[143] This does not imply commanders should not cooperate with defense counsel, quite the contrary. Commanders and others should always provide candid answers to any investigatory questions. However, commanders should reserve opining on the mental state of their personnel unless they fully understand what they are opining about.

[144] *See, e.g.*, U.S. Dep't of Air Force, Instr. 44-109, Mental Health, Confidentiality and Military Law para. 4.1 (1 Mar. 2000). "Supervisory personnel, including commanders, may encourage Air Force members to voluntarily seek mental health care. The Air Force recognizes that members who receive help from mental health professionals can improve their job performance as well as their overall well being, and consciously endorses caring involvement by supervisors. Supervisors and commanders may not, however, under any circumstances attempt to coerce members to voluntarily

professionals are required in some cases to report involuntary referrals to the Inspector General for investigation.[145]

Command influence can weigh heavily on a young service member who may view the senior noncommissioned officer(s) and commander(s) recommending the mental health visit as almost parent-like figures. Commanders should not shy away from this responsibility; rather they need to understand the proper process and possible ramifications. For example, a commander may not refer a service member for a mental health evaluation as a form of reprisal for the service member lawfully writing to their congressman.[146] Doing so could subject the commander to criminal liability under the UCMJ.[147] Yet, referral for mental health services may be entirely justified based on the circumstances and not reprisal. Consulting with the mental health and legal offices, as well as following the process outlined in Department of Defense Instruction 6490.4, *Requirements for Mental Health Evaluations of Members of the Armed Forces*, will ensure the commander's rationale for referral was appropriately documented and can help protect the commander in the event of future scrutiny.[148]

Thus, absent an emergency, commanders and others should seek out legal and medical advice prior to discussing the mental health of (or with) any of their subordinates, and must do so prior to directing a mental health examination.[149]

B. Social Media

Social media has spawned a whole new world of opportunity for command influence. Not only can units have Facebook pages, which provide quasi-official information about unit happenings and history, but individual service members are entering this domain in their private capacity as well. These types of interactions allow for commanders' and other leaders' personal pages to become pseudo-commander's calls/policy discussions. If a commander comments, even generally, on cases, outcomes, frustrations, or personnel in these forums, then the UCI flag could, and should, be raised. Of further concern, if a commander allows individuals to post on the commander's page, that commander may very well be responsible for those comments if the commander does not remove them within a reasonable period.[150]

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seek a mental health evaluation." *Id.*

[145] *See id.* at para. 4.9.3.

[146] U.S. Dep't of Def., Dir. 6490, 1 Mental Health Evaluations of the Armed Forces para. 4.3.2 (24 Nov. 2003) [hereinafter DODD 6490.1].

[147] *Id.* at para. 4.3.4

[148] U.S. Dep't of Def., Instr. 6490.4, Requirements for Mental Health Evaluations of Members of the Armed Forces para. 6.1.1.4 (28 Aug. 1997).

[149] *See, e.g.,* DODD 6490.1, *supra* note 146.

[150] This may happen in Facebook for example, where, depending on a user's security settings, other individuals can post on the user's "wall" for all those with access to see. *See, e.g.*, Finkbeiner, Major Courtney, *Commanders & Cyber Chat: Should More Guidance Be Provided For Social Networking Sites?* On file with author. To be presented at the North Atlantic Treaty Organization, Research and Technology Organization, Human Factors and Medicine Panel, 16-18 April 2012. The author thanks Major Courtney Finkbeiner for her insights on commanders and social media.

Aside from being an obvious security threat, these pages are also ripe for fraternization and other unprofessional relationships.[151] Commanders can apply lawful command influence by reminding their personnel of the risks of keeping their social media sites open to the public and accepting "friend requests" from subordinates. Additionally, commanders may be able to influence their personnel to report misconduct or other inappropriate actions that they discover on these various sites.[152]

C. Actions of Subordinates

The *Douglas* case serves as a harsh reminder to commanders that their subordinates can engage in UCI on the commander's behalf. Courts have repeatedly stated "[UCI] is not solely the product of illicit action by a formal commander, but can also be exercised by those cloaked with the 'mantle of command authority.'"[153] To a young service member, virtually everyone senior in rank that provides instruction and direction will likely be viewed as lesser versions of the commander.

Even the most micromanaging of commanders cannot be everywhere, all the time. Thus, they must rely on their ability to influence up front. That is, commanders set the tone of their units and can address issues of fairness and justice from the beginning.[154] They can reiterate the message throughout their tenure as commanders. Similarly, when a commander becomes aware of an allegation against a specific person, the commander can specifically remind that chain of command what their responsibilities are.

Although every case is unique and commanders are advised to consult their legal offices in advance, when an allegation of misconduct occurs in a unit, the commander should act to ensure the behavior does not spread, but also to ensure the rights of the accused are preserved. For example, the commander could remind an accused's chain of command that the accused should be given access to defense counsel; the chain should be alert to not make comments that could be perceived as telling others to deny the accused character statements or if they hear others doing so, to stop it immediately and tell the commander.

D. Actions of Legal Staffs (Attorneys and Paralegals)

Military justice casebooks are filled with examples of judge advocates, primarily SJAs accused of UCI.[155] This is in part to be expected, because "[a] staff

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[151] *See, e.g.*, United States v. Bruhn, No. ACM 37291, 2010 WL 4025796, (A.F. Ct. Crim. App. 2010) (unpublished). (Air Force Captain (O-3), among a number of other salacious things, relied on 'MySpace' to carry out a sexual relationship with an Airman First Class (E-3)).

[152] For some reason people enjoy posting pictures of themselves engaging in inappropriate, and even illegal, conduct.

[153] United States v. Douglas, 2009 WL 289705 at 2 (A.F. Ct. Crim. App. 2009) (citing United States v. Ayala, 43 M.J. 296 (C.A.A.F. 1995) further citations omitted).

[154] Loh, *supra* note 136, at 103.

[155] *See, e.g.*, United States v. Lewis, 63 M.J. 405 (C.A.A.F. 2006)(allegation that the SJA and trial counsel conspired to have military judge recuse herself was UCI and the remedy was dismissal);

judge advocate generally acts with the mantle of command authority."[156] Fortunately for SJAs, the courts do not look simply at the fact an SJA had conversations with convening authorities, court members, investigating officers, or witnesses. Instead, courts look into the context and content as well as the effect of those conversations, asking whether the recipients were improperly influenced or whether the conversations were innocent.[157]

Judge advocates and paralegals should be aware of their unique position in the military justice system. While it is a commander's program, by crowning SJAs with the "mantle of command" the courts have left little doubt that SJAs carry significant weight in military justice matters.[158] SJAs, like commanders, must be cognizant of this at all times when discussing military justice issues. This holds equally true for judge advocates and paralegals of all ranks within the legal office. Commanders will seek out advice on a wide range of topics. When it comes to military justice matters in particular, it is incumbent upon the judge advocates and paralegals to ensure they are not only giving proper advice, but they are authorized to do so. Further, it is essential for all participants, including the commander, to understand that ultimately the decision is the commander's to make.[159]

E. Official Communications

Commanders at all levels rely on mass communication to some degree or another. These communications can take a variety of forms to include policy letters, e-mails, newspaper articles, and staff meetings. One of the most common forms of providing guidance directly to the members of one's organization is the commander's call. Commander's calls tend to be held in large rooms or auditoriums and begin with all subordinates rising to their feet and standing at attention when the commander enters. They are official events and usually mandatory for all personnel. A number of administrative tasks such as awarding decorations and providing training may take place, but the focal point of a commander's call, as the name implies is the commander addressing the unit directly. Occasionally, a commander will hold a

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United States v. Argo, 46 M.J. 454 (C.A.A.F. 1997)(SJA discussed issues with subordinates who were witnesses in Article 32 hearing but only regarding matters of law and not matters of fact not UCI); United States v. McKinney, 61 M.J. 767 (A.F. Ct. Crim. App. 2005) (allegation of court stacking because SJA advised convening authority to exclude certain members not UCI); United States v. McMurray, No. ACM 37291, 2002 WL 1822325, (A.F. Ct. Crim. App. 2002) (unpublished) (SJA's commander and first sergeant legal training two weeks prior to trial which discussed command action on similar cases not UCI); United States v. Pinson, 54 M.J. 692 (A.F. Ct. Crim. App. 2001) (not UCI for SJA to ask Article 32 investigating officer to look into certain matters when goal was a complete report). For a much more thorough review of judge advocates committing UCI, *see* Lieutenant Colonel Daniel G. Brookhart, *Physician Heal Thyself: How Judge Advocates Can Commit Unlawful Command Influence,* Army Law., Mar. 2010, at 56.

[156] United States v. Kitts, 23 M.J. 105, 108 (C.M.A. 1986).

[157] *See, supra* notes 128-29 and accompanying text.

[158] *Kitts*, 23 M.J. at 108.

[159] *See, e.g.,* United States v. Brocks, 55 M.J. 614 (A.F. Ct. Crim. App. 2001) (selection of court members was convening authority's decision to make, regardless that convening authority's selections matched SJA's recommendation).

commander's call to discuss one specific issue that the commander believes warrants special attention. However, it is necessary for the commander to ensure that his commander's call does not become an UCI issue.

In *United States v. Dugan*, a convening authority held a commander's call to discuss drug abuse and its incompatibility with military service, in response to high drug abuse in the local area.[160] The commander's call took place several weeks prior to Dugan's court-martial for drug use and three of the six jurors attended.[161] Following Dugan's conviction and sentencing, one of the jurors who did not attend the commander's call submitted a letter to the defense that alleged other jurors brought up the prior commander's call and were concerned to "make sure [their] sentence was sending a consistent message" otherwise the convening authority would look unfavorably upon the jurors.[162] CAAF found that UCI may have occurred with regard to the sentence and ordered a hearing to determine if this was the case.[163]

Although the timing of the commander's call in this case was not during trial, like the officer's professional development case previously discussed, CAAF was nonetheless concerned about the timing.[164] This then becomes the commander's UCI dilemma: how to discuss an important issue but at the same time not unlawfully influence prospective witnesses and jurors and the military justice process. Commanders have a responsibility to identify and eradicate problems in their commands. Common issues such as drug abuse, underage drinking, sexual assault, and driving while intoxicated should be addressed promptly, lest they become pervasive. CAAF recognizes this, but also recognizes the responsibility to combat UCI cannot be subordinate to trying to address a tough command problem.[165] Close coordination between the commander and his SJA is a must in these situations.

Alternatively, commanders have the right (and responsibility) to set out command expectations to their subordinates. They may simply want to discuss the importance of discipline and that they have a zero-tolerance policy. Such was the case in *United States v. Stoneman*, an Army case where the brigade commander laid out his command philosophy in an e-mail directed to all those above the grade of E-4. The commander clearly did not coordinate the e-mail with his SJA, who also did not initially receive the e-mail.[166] Among other things, the e-mail stated:

> The leadership in the Brigade needs to reminded of something very fundamental—"Discipline is the soul of an Army (George Washington)." If leaders don't lead by example, and practice self-

[160] United States v. Dugan, 58 M.J. 253, 255 (C.A.A.F. 2003) (during voir dire the jurors stated the commander's call would not influence their independence). The term juror was used for simplicity's sake. In the military justice system the term "panel member" is the proper term when referring to a juror. *See also*, United States v. McMurray, No. ACM 345132002 WL 1822325, (A.F. Ct. Crim. App. 2002 (unpublished) (commander's calls two days prior to drug abuse trial which discussed drug ring and "starred" one of the witnesses was not UCI).
[161] *Dugan*, 58 M.J. at 255.
[162] *Id.*
[163] *Id.* at 260.
[164] *Id.* at 258.
[165] *See, e.g., Id.*
[166] United States v. Stoneman, 54 M.J. 664, 666 (A. Ct. Crim. App. 2000).

> discipline, then the very soul of our Army is at risk. No more PSGs getting DUIs, no more NCOs raping female soldiers, no more E7s coming up "hot" for coke, no more stolen equipment, no more "lost" equipment, no more approved personnel actions for leaders with less than 260 APFT, no more leader APFT failures at DA schools,—all of this is BULLSHIT, and I'm going to CRUSH leaders who fail to lead by example, both on and off duty.[167]

At some point, the SJA must have become aware of the e-mail because two weeks later the brigade commander issued a clarifying e-mail which stated:

> Let me make something else perfectly clear. Nothing in what I have said in this or the earlier email, or what I said at the Leader Training, has anything to do with what any soldier does as a member of a court-martial panel or as a witness before a court-martial. The sworn duty of any court-martial panel member is to follow the instructions of the military judge, apply law to admissible facts, and decide a sentence based solely on the evidence presented in court. Nothing said outside a court-martial by anybody, TO INCLUDE ME, may have any bearing on the outcome of any given case or sentence. Just as important, our system of justice—the best system in the world—demands that soldiers called as witnesses (be it by the Government or by the Defense) testify truthfully. Truthful testimony includes testifying on behalf of soldiers (including NCOs and officers) who may have committed or alleged to have committed misconduct. For example, if a soldier has performed well in his MOS, but is accused of some offense. I expect all Brigade soldiers asked to testify during a court-martial with favorable information about the soldier to do so willingly.[168]

The *Biagase* test was announced by CAAF after Stoneman's original trial, but while his appeal was pending. Thus, the military judge in Stoneman could not have known of the new standard and therefore had not made thorough findings of fact or law on the record.[169] As a result, CAAF sent this case back to the base for a rehearing at the trial level so the military judge could make findings of fact and law on the record.[170] At the rehearing, the court members all testified they were not influenced by the brigade commander's initial e-mail, and the military judge found that the Government met its burden under the *Biagase* test; the Army Court of Criminal Appeals agreed with the trial judge.[171] Had the brigade commander

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[167] *Id.* at 675, Appendix 1, first e-mail from brigade commander (emphasis in original).
[168] *Id.* at 678, Appendix 1, second e-mail from brigade commander (emphasis in original).
[169] *See generally, Stoneman,* 54 M.J. 664
[170] United States v. Stoneman, 57 M.J. 35, 43 (C.A.A.F. 2002).
[171] United States v. Stoneman, ARMY 9800137, 2004 WL 5863067, *3-*5 (A. Ct. Crim. App. 2004) (unpublished).

in Stoneman simply contacted his SJA in advance of discussing his "crushing" disciplinary philosophy, he would have been able to get his message across while making it clear he was not in any way attempting to unlawfully influence his subordinates.

Although the name implies only a commander can commit UCI, as the cases and scenarios in this paper demonstrate, any service member could conceivably engage in UCI, within the military justice context and outside of it as well. It is important all service members, especially those in leadership positions, understand that their actions could have unintended consequences. Most situations involving UCI, particularly "subordinate-UCI," could be avoided with proper training and command attention. These cases may arise out of the desire by a subordinate to "do the right thing," which, with advice and guidance from a commander and SJA, could actually be handled appropriately. Commanders also need to pay particular attention to subordinate organizations when a potential military justice case develops within that organization and remind those leaders of their responsibilities under the UCMJ.

By historical and congressional design, commanders play an incredibly important role in the military justice system. From carrying out the responsibility of discipline, to ensuring their subordinates understand the system, and keeping the system free from unlawful influence, much is expected of military commanders. It is the rare commander that does not take this responsibility seriously. By "knowing the enemy," commanders can identify UCI when it occurs and diligently work to eradicate the "mortal enemy of military justice" from their commands.[172] Just as important, this same knowledge enables commanders to fulfill their "sacred trust" and act when needed to lawfully influence their commands.

[172] United States v. Thomas, 22 M.J. 388, 407 (C.M.A. 1986).

AT WAR AND PEACE WITH THE NATIONAL ENVIRONMENTAL POLICY ACT: WHEN POLITICAL QUESTIONS AND THE ENVIRONMENT COLLIDE

Major Charles J. Gartland[*]

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I. Introduction

Providing for the national defense is one of the most important functions of the federal government. Without a national defense, the nation risks not being a nation at all—and without a nation to speak of, all other disputes of law and policy are rendered moot. It is perhaps for this reason that national defense is one of the few expressly enumerated responsibilities of the legislative branch mentioned in the Constitution.[1]

There is obviously more to a nation than national defense. Environmental advocates also make a case for the fundamental nature of environmental protection: without an environment in which humans can actually breathe air and drink water, all other disputes of law and policy are also rendered moot. Unlike national defense, the environment does not enjoy constitutional safeguards per se, but it eventually came to enjoy protection under federal law. In 1969, Congress passed the *Magna Carta*[2] of environmental law, the National Environmental Policy Act (NEPA).[3]

This article examines the collision between national defense and NEPA in the judicial system. It concludes that the judiciary is not capable of reconciling the two in any manageable way. National defense activities rooted in the Constitution and ordered by the legislative or executive branches are upended out of deference to a procedural statute. Even in those cases where the courts side with national defense, they often do so by making a policy judgment, which is not the constitutional province of the judiciary. This article therefore contends that the most efficient and legally plausible way of resolving the NEPA-national defense conflict is by removing the courts from NEPA enforcement altogether, and exempting national defense activities from NEPA.

Because NEPA is a procedural statute[4] that carries no penalty provisions or fines and can only be enforced by a court issuing an injunction, this article will concentrate on cases where courts took up the question of whether a national defense activity should be enjoined for ostensibly[5] violating NEPA. The courts' analysis of that question necessarily entails the application of injunction law, but in the context of national defense, raises two other concepts: the political question doctrine, and an interrelated notion that this article will refer to as "national defense exceptionalism." The thematic triad of political question doctrine, national defense

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[1] U.S. Const. art. I, § 8, cl. 1, 12, 13.

[2] Montrose Parkway Alternatives Coal. v. U.S. Army Corps of Eng'rs, 405 F. Supp. 2d 587, 593 (D. Md. 2005); Citizens Against Burlington, Inc. v. Busey, 938 F.2d 190, 193 (D.C. Cir. 1991). *See* Arthur W. Murphy, *The National Environmental Policy Act and the Licensing Process: Environmentalist Magna Carta or Agency Coup de Grace?*, 72 Colum. L. Rev. 963 (1972) (where title of the article itself uses the Latin phrase "Magna Carta" in the context of describing NEPA).

[3] National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 Stat 852 (1970) (codified as amended at 42 U.S.C. §§ 4321-4370h (2010)).

[4] Nat'l Parks & Conservation Ass'n v. Bureau of Land Mgmt., 606 F.3d 1058, 1087 (9th Cir. 2010) (citing Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc., 435 U.S. 519, 558 (1978).

[5] "Ostensibly," because as this article will show, whether the EIS process has been fulfilled is a very subjective question.

exceptionalism, and injunction law will be the prism through which the case law in this article is viewed.

Having a Federal court issue an injunction for NEPA violations against a Federal agency carrying out national defense activities arguably runs afoul of the political question doctrine. That doctrine bars courts from hearing cases dealing with matters that are committed by the Constitution or statute to another branch of government.[6] To enjoin a national defense operation or activity because of a NEPA violation not only elevates a procedural statute above national defense priorities, but also opens a path to elevating the judicial branch over the executive and legislative.

This article provides a background of NEPA's underlying history and policy, and discusses the seminal Federal court cases where injunctions were sought by plaintiffs against national defense activities. In many of those cases courts ignored or dramatically understated the agency's interests and the public interest in national defense when issuing a NEPA injunction. In the process of issuing injunctions, courts necessarily made policy judgments that are statutorily and constitutionally reserved to other branches of government, thereby violating the political question doctrine.

Section II provides a brief background and basic statutory explanation of NEPA. Section III reviews three of the core concepts seen in the cases: the political question doctrine, the related notion of national defense exceptionalism, and the law relating to injunctions. Section IV then provides three sets of cases illustrating, respectively, situations where (1) courts ultimately declined to issue a NEPA injunction against a national defense activity, oftentimes owing to political question doctrine concerns; (2) a second set of cases where the courts issued a NEPA injunction, typically by ignoring or reasoning against application of the political question doctrine; and (3) the most recent NEPA case to arrive at the Supreme Court, *Winter v. NRDC*, which serves as a microcosm of when the thematic triad not protecting national defense interests from the abuses outlined in the previous sections. Section V then concludes by discussing the remedy to the problems identified above, a national defense exemption to NEPA, along with justifications for the exemption.

II. Overview of NEPA

A. Background and History

Compared to other pieces of environmental legislation, NEPA[7] is remarkably concise, filling just over a dozen pages of text.[8] Its language paints broad brush strokes of policy instead of detailed technical prescriptions.[9] There is no limit or

[6] Baker v. Carr, 369 U.S. 186, 217 (U.S. 1962).
[7] 42 U.S.C. §§ 4321-4370h (2010).
[8] Federal Environmental Laws 2011, 1030-49 (Thomson Reuters 2011). This is a commonly used statutory compilation. By contrast, in the same book, the Clean Water Act consumes 254 pages, and the Clean Air Act 335 pages.
[9] *See* Dennis W. Johnson, The Laws that Shaped America 369 (Routledge 2009). *See generally* 42 U.S.C. §§ 4321-4370h (2010).

requirement to curtail specific pollution or activities of any kind—no micrograms per liter, parts per million, or other such limitations found in environmental statutes such as the Clean Air Act or Clean Water Act.[10] Instead, prohibitions under NEPA relate only to the process required under NEPA itself: the preparation of an Environmental Impact Statement (EIS).[11] Spelled out in Section 102 of the Act, the EIS requirements are seemingly simple: major Federal actions significantly affecting the environment require an evaluation of environmental impacts, alternatives thereto, and the resource commitments of carrying the project forward.[12]

When NEPA was enacted, few lawmakers or the public had a concrete idea of how Section 102 would play out in practice.[13] A letter from the Northwest Mining Association quoting one of the principal proponents of NEPA, Senator Henry "Scoop" Jackson, estimated the average length of an EIS at five to six pages.[14] With such innocuous estimates, NEPA offered politicians a seemingly harmless way to surf the tide of environmentalism sweeping the nation in the late 1960s.[15] NEPA was but one of over 140 bills relating to the environment that were introduced in the 1968-69 session.[16] Historian Richard Liroff opined, "For many legislators, undoubtedly, a vote for NEPA was symbolic—akin to a vote for motherhood and apple pie."[17] NEPA passed the U.S. House of Representatives with hardly any opposition (372-15),[18] and passed the Senate on an unrecorded, unanimous voice-vote.[19]

Senator Jackson, however, had more in mind than "motherhood and apple pie." He intended for NEPA to be "the most important and far-reaching environmental and conservation measure ever enacted by Congress."[20] The statute's broad language gave it room to be that ambitious. What exactly constituted "a major Federal action" that "significantly" affected the "environment?"[21] What range of and how many "alternatives" to "a major Federal action" would have to be considered?[22] Questions such as those would be answered over the years, although not by Congress, but

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[10] *See generally* Clean Air Act, 42 U.S.C. §§ 7401-7671q (2010); Federal Water Pollution Control Act, 33 U.S.C. §§ 1251-1387 (2010).

[11] 42 U.S.C. § 4332(C) (2010). The phrase "environmental impact statement" does not actually appear in the statute, but rather is found in the corresponding C.F.R. provisions. *See* 40 C.F.R. § 1502.1 (2011).

[12] 42 U.S.C. § 4332(C) (2010).

[13] *See* Johnson, *supra* note 9, at 369. *See also* Lynton Caldwell, The National Environmental Policy Act: An Agenda for the Future 38 (Indiana University Press 1999). The New York Times misconstrued the Act as an anti-pollution effort, and even legal commentators continue to misunderstand its policy as opposed to substantive orientation. *Id.*

[14] Johnson, *supra* note 9, at 389.

[15] *Id.* at 374. Caldwell, *supra* note 13, at 28.

[16] Johnson, *supra* note 9, at 374.

[17] *Id.* at 378.

[18] Frederick Anderson, NEPA in the Courts: A Legal Analysis of the National Environmental Policy Act 7 (Johns Hopkins University Press 1973).

[19] *See* Daniel R. Mandelker, NEPA Law and Litigation § 2:2 (2d ed. Thomson Reuters 2011); Johnson, *supra* note 9, at 378.

[20] Johnson, *supra* note 9, at 379.

[21] 42 U.S.C. § 4332(C) (2010).

[22] 42 U.S.C. § 4332(C)(iii) (2010).

by the courts. As another commentator put it, "[l]ittle did they realize . . . that in voting to enact NEPA, they were placing a potent weapon in the hands of citizen activists."[23] The average length of an EIS is now over 580 pages, takes up to 18 months to prepare, and costs between $10,000 and $200,000.[24]

B. Statutory Framework of NEPA & the EIS

NEPA has three main components: policy (Sections 2 and 101),[25] procedure (Sections 102-105)[26] and the Council of Environmental Quality (CEQ) (Sections 201-209).[27] The three components work together in the following manner: the EIS and Federal agencies' efforts in preparing the EIS are how the policy goals outlined in Sections 2 and 101 are achieved;[28] CEQ's role is to monitor and regulate that process from the vantage point of the executive office of the president-level.[29]

1. Policy

The policy component in Sections 2 and 101 contains ambitious, yet hardly disagreeable objectives for NEPA. Section 2 states NEPA's purpose is to:

> [D]eclare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation . . . .[30]

Section 101 then elaborates that the Act's policy imparts certain responsibilities to the Federal Government, so that it can:

> [F]ulfill the responsibilities of each generation as trustee of the environment for succeeding generations; (2) assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings; (3) attain the widest range of beneficial uses of

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[23] Johnson, *supra* note 9, at 378.
[24] Johnson, *supra* note 9, at 389.
[25] 42 U.S.C. §§ 4321, 4331 (2010).
[26] 42 U.S.C. §§ 4332 (2010).
[27] 42 U.S.C. §§ 4321-4347 (2010). Sections 4372 through 4375, giving CEQ additional responsibility and funding, were added after NEPA's passage and then later amended twice. These sections are known as "The Environmental Quality Improvement Act," but are commonly considered a part of NEPA. Pub. L. No. 91-224 (1970); Pub. L. No. 97-258 (1982); Pub. L. No. 98-581 (1984).
[28] James Rubin & Nicholas Yost, *Administrative Implementation and Judicial Review Under the National Environmental Policy Act,* in Law of Environmental Protection § 10:4 (Sheldon Novick ed., Vol. II, Thomson Reuters 2010).
[29] *See* 42 U.S.C. § 4372 (2010); 40 C.F.R. §§ 1504.1-1504.3 (2011).
[30] 42 U.S.C. § 4321 (entitled "Congressional Declaration of Purpose").

> the environment without degradation, risk to health or safety, or other undesirable and unintended consequences; (4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever possible, an environment which supports diversity and variety of individual choice; (5) achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and (6) enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.[31]

2. Procedure

The heart of NEPA's procedural mandate—or NEPA's "action forcing" mechanism, as the courts refer to it—is contained in Section 102.[32] Federal agencies must prepare a "detailed statement" on "proposals for legislation and other major Federal actions significantly affecting the quality of the human environment."[33] The "detailed statement" is today known as an EIS.[34] It consists of five elements which examine:

> (1) the environmental impact of the proposed action; (2) any adverse effects which cannot be avoided should the [proposed action] be implemented; (3) alternatives to the proposed action; (4) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and (5) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.[35]

Notwithstanding the aspirational policy in Sections 2 and 101, and the analysis requirements of 102, the nation's "national charter"[36] of environmental protection has a limited reach compared to many other statutes. Only Federal activity is regulated by NEPA.[37] NEPA does not apply directly to state governments, local governments, or private parties,[38] although their projects can be affected by NEPA

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[31] 42 U.S.C. § 4331(a)-(b) (2010) (entitled "Congressional Declaration of National Environmental Policy").

[32] *See, e.g.*, Sierra Club v. U.S. Army Corps of Eng'rs, 446 F.3d 808, 815 (8th Cir. 2006); Lee v. U.S. Air Force, 354 F.3d 1229, 1237 (10th Cir. 2004) (citation omitted); Metcalf v. Daley, 214 F.3d 1135, 1142 (9th Cir. 2000); Valley Citizens for Safe Env't v. Aldridge, 886 F.2d 458, 459-60 (1st Cir. 1989); Envntl Def. Fund, Inc. v. Corps of Eng'rs of U.S. Army, 470 F.2d 289, 297-98 (8th Cir. 1972), cert. denied, 412 U.S. 931 (1973) (2010).

[33] 42 U.S.C. § 4332(C) (2010).

[34] 42 U.S.C. § 4332(C) (2010); 40 C.F.R. § 1502.10 (2011). *See* MANDELKER, *supra* note 19, § 1:1.

[35] 42 U.S.C. § 4332(C) (2010).

[36] Cal. ex rel. Lockyer v. U.S. Dept. of Agric., 575 F.3d 999, 1012 (9th Cir. 2009) (citations omitted).

[37] 42 U.S.C. § 4332 (2010) (directing "all agencies of the Federal Government" to comply with NEPA).

[38] 42 U.S.C. § 4332 (2010). This section speaks only of "all agencies of the Federal Government."

applying to related Federal agencies issuing permits and funding for state, local and private parties.[39] NEPA's reach is further limited because, as mentioned above, it is a purely "procedural statute," an expression now axiomatic with the courts.[40] In other words, NEPA does not theoretically restrict the range of agency action, it merely affects how the agency thinks about and goes about its activities.[41]

As long as the EIS is adequately prepared, an agency has satisfied its NEPA obligations even though the proposed action analyzed by the EIS may have extremely adverse environmental consequences.[42] Early NEPA litigation left some question as to whether agency actions that were backed by a thorough and accurate EIS, yet nonetheless disregarded the substantive goals of Sections 2 and 101 (i.e., environmentally damaging actions), would constitute a violation of NEPA.[43] In other words, could an agency run afoul of NEPA by committing "informed" environmental degredation? As a way of distinguishing the policy goals of Sections 2 and 101 from the procedural qualities of the EIS process in Section 102, courts have come to refer to the former as NEPA's "substantive" provisions, and the latter as its "procedural" provisions.[44] Aside from a few early cases, within a decade of NEPA's passage, courts ultimately declined to accept the "substantive" NEPA violation theory.[45] Instead, NEPA litigation now revolves almost entirely around various "procedural" aspects of the EIS itself.[46]

While lacking substantive provisions in the legal sense, NEPA nonetheless drives agencies to think twice about their activities.[47] Performing an EIS may lead an agency to discover a proposed project's potentially adverse environmental effects, and therefore spur it to explore less damaging alternatives.[48] Studies examining whether NEPA has been effective in altering an agency's intended course of action in favor of less environmentally damaging alternatives have been undertaken, and, thus far, the results have not been conclusive.[49] Far more certain, however, is that EIS

Id. The one possible exception to NEPA's exclusive relationship to the Federal government is private party action that requires government action (e.g., granting a Federal permit). In that case, the private party would not be subject to NEPA, but the action undertaken by the Federal government in fulfilling its legal responsibilities vis-à-vis the private party is subject to NEPA. Many states also have NEPA-equivalent statutes.

[39] *See* Mandelker, *supra* note 19, § 8:18-22.

[40] *See, e.g.*, S.D. Warren Co. v. Me. Bd. of Envtl. Prot., 547 U.S. 370, 384 (2006) (citing Dep't of Transp. v. Public Citizen, 541 U.S. 752, 756-757 (2004)); Ohio Forestry Ass'n v. Sierra Club, 523 U.S. 726, 737 (1998); Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 350 (1989). That is to say, unlike the CWA, CAA, and many other environmental statutes, it does not specify maximum pollutant levels or quantitative standards of any kind; and unlike the ESA, it does not prohibit any particular kind of activity, e.g., adversely modifying the habitat of an endangered species.

[41] *Methow Valley Citizens Council*, 490 U.S. at 350.

[42] Rubin & Yost, *supra* note 28, § 10:51 (citing Vermont Yankee Nuclear Power Corp. v. Natural Res. Def. Council, Inc., 435 U.S. 519, 558 (1978)).

[43] *See* Caldwell, *supra* note 13, at 32-33 (citing Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n, 449 F.2d 1109 (D.C. Cir. 1971)).

[44] Rubin & Yost, *supra* note 1, § 10:51.

[45] *Id.* at § 10:51.

[46] *Id.* at §§ 10:35-36.

[47] *Id.* at §§ 10:3-4.

[48] *Id.*

[49] H. Welles, *The CEQ NEPA Effectiveness Study: Learning from Our Past and Shaping Our Future,*

preparation takes time and money.[50] From a policy standpoint, one of the principal criticisms of NEPA is that its benefits to the environment are far outweighed by the resource costs of its implementation.[51] That policy critique is beyond the scope of this paper, although it looms in the background of any discussion on injunctions, which by definition, impose delay and attendant additional costs (and can alter the direction and feasibility of an agency project).

C. The Environmental Planning Process

One of NEPA's primary goals is to ensure that federal agencies think through the environmental consequences of their actions and plan them accordingly before the shovels hit the dirt.[52] An EIS is not required for every proposal for legislation or undertaking from a Federal agency, but only for "major" ones having a "significant" impact.[53] If an agency is unsure whether its proposed action is major and significant, an "environmental assessment" (EA) can be performed instead of an EIS, which is technically less burdensome than a full-fledged EIS.[54] If the outcome of the EA is that the action is not major or significant, then a "finding of no significant impact" (FONSI) is issued and the agency proceeds with its project.[55] If the action is major or significant then an EIS must be prepared.[56] The third possibility is a "categorical exclusion" (CATEX), which consists of categories of agency activity that the agency in consultation with CEQ has determined are repetitive, routine functions of agency activity for which neither an EA nor EIS are required.[57]

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in Environmental Policy and NEPA: Past, Present, and Future 193-214 (Larry Canter & Ray Clark eds., 1997). Overall, CEQ analysis has concluded that NEPA has: improved public involvement in environmental decision making; created a standard framework for decision making; fostered better coordination of Federal projects; improved understanding of ecosystems; and created more environmentally sound Federal actions. *Id.* at 195. NEPA has been less successful at getting Federal agencies to: integrate their environmental and socioeconomic analysis; start their environmental analysis at the early planning stages; monitor their NEPA programs; obtain necessary baseline data; analyze data; and communicate among the various stakeholders. *Id. See also* Mandelker, *supra* note 19, § 11:5-7.

[50] *See* Stephen Dycus, National Defense and the Environment 17 (University Press of New England 1996).

[51] *Id.*

[52] 40 C.F.R. §§ 1501.1, 1501.2 (2011).

[53] 42 U.S.C. § 4332(C) (2010). Eventually the question of whether the qualifiers "major" and "significant" had independent meaning was settled by a string of cases that ended in CEQ action. Rubin & Yost, *supra* note 28, § 10:15 n.5, 6 (citing 40 C.F.R. § 1508.18 (2011)).

[54] 40 C.F.R. §§ 1501.3-.4, 1508.9 (2011).

[55] 40 C.F.R. § 1508.13 (2011).

[56] 40 C.F.R. §§ 1501.4, 1508.11 (2011).

[57] 40 C.F.R. §§ 1501.4(a)(2), 1508.4 (2011). The argument has been raised that agencies manipulate CATEXs to evade performing EAs and EISs. Their use has been suggested as one reason why the total number of EISs dropped by more than fivefold between NEPA's inception and 1980. Johnson, *supra* note 9, at 388. A counter argument is that CEQ approval of each CATEX proposed by each agency arguably offers an additional safeguard against CATEX abuse.

If the decision to prepare an EIS is made, a vigorous cycle of investigation, public comment, document drafting, and revision occurs.[58] The first step, known as "scoping" involves gathering information from a wide range of sources. The public, experts, interested parties, and governmental oversight agencies are asked to provide input about the nature of the short and long term environmental impacts of the project. Possible alternatives to the proposed action are considered based on stakeholder inputs, as is the range of laws (whether local, state, or Federal) bearing on the project.[59]

The information gathered during scoping forms the foundation from which to build an EIS.[60] Drafting the EIS generally does not begin, however, until scoping leads to a sufficient understanding of all the relevant stakeholders, laws, and issues.[61] Once a draft EIS (DEIS) is prepared, it is published in the Federal Register and opened to public comment.[62] If comments, written or public, reveal important new information or raises substantial questions about agency rationale for the project, additional studies may be triggered, additional alterations to the project may be considered, and alternatives may be reconsidered.[63] In any case, the comments to the DEIS must be responded to and included in the final EIS (FEIS).[64] The point of final agency action that is subject to court challenge is reached with the agency's "Record of Decision" or ROD.[65] The ROD announces the agency's choice of action and explains how it arrived at its decision from among the alternatives presented in the FEIS.[66]

III. Judicial Review of National Defense and NEPA

The bulk of Federal law is directed at private parties and/or state and local entities.[67] NEPA, on the other hand, is an example of the Federal government regulating itself. As mentioned above, NEPA only applies to Federal actions.[68] Thus, when a Federal court hears a case testing a Federal agency's compliance with NEPA, the judicial branch of the Federal government is evaluating the acts of another

[58] *See generally*, 40 C.F.R. §§ 1502, 1503, 1505 (2011).
[59] 40 C.F.R. §§ 1501.7, 1508.25 (2011).
[60] 40 C.F.R. §§ 1501.7, 1508.22 (2011).
[61] 40 C.F.R. § 1501.7 (2011). *See* Rubin & Yost, *supra* note 28, § 10:19.
[62] 40 C.F.R. § 1503.1 (2011).
[63] 40 C.F.R. § 1503.4 (2011).
[64] *Id*.
[65] Mandelker, *supra* note 19, § 4:28. An agency FONSI would also constitute "final action" and therefore make a case ripe for suit. *Id*.
[66] 40 C.F.R. § 1505.2 (2011). CEQ regulations require the ROD to state whether the agency has done all it could, within reason, to minimize or avoid environmental impacts, and if it has not done so, why. 40 C.F.R. § 1505.2(c) (2011).
[67] *See generally*, The United States Code.
[68] 42 U.S.C. § 4332 (2010). Unlike many other environmental statutes, NEPA itself contains no provision expressly accounting for judicial review of NEPA compliance. *See* Robert Glicksman, *Chapter 3: Judicial Review Under NEPA*, *in* NEPA Law and Litigation § 3:1 (Thomson Reuters 2d ed. 2011). Courts have concluded, however, that the Administrative Procedure Act (APA) provides an avenue for suit. *Id.*

branch of the Federal government. NEPA litigation in the national defense context thus inherently involves review of executive branch actions by the judicial branch.[69]

Judicial review of the executive branch exercise of its constitutional power over national defense actions is not unlimited.[70] NEPA issues can arise involving these circumstances.[71] Therefore, when NEPA issues arise involving national defense, these limits should be considered. Unlike other executive agencies which were created by Congress, the Army and the Navy, for example, were constitutionally created[72] and have as their function the carrying out of missions directed by the President pursuant to his—also constitutional—role as Commander in Chief.[73]

A separation of powers dilemma is thus raised if a court enjoins certain kinds of national defense activities. While it is one thing for a court to remand an agency's EIS back to the agency because of its defects (e.g., inadequate alternatives analysis)[74] to consider either more or different alternatives, it is another to issue an injunction that affirmatively stops or changes the agency's activity.[75] To enjoin a military operation or project that was approved by the President and funded by Congress because of a NEPA violation not only elevates a "procedural" statute above national defense priorities, but also opens a path to judicial usurpation of actions by other coordinate branches of government. The implications call into question whether judicial review of national defense activities in NEPA cases is reconcilable with separation of powers principles that are essential to the traditional check-and-balance nature of American constitutional government.

The legal dimensions surrounding judicial enforcement of NEPA in a national defense context involve the political question doctrine, the related concept of national defense exceptionalism, and the legal elements of preliminary and permanent injunctions.

A. Political Question Doctrine

The political question doctrine holds that if an issue is constitutionally committed to either the executive or legislative branches, the judiciary is legally incapable of addressing it.[76] In *Baker v. Carr* the U.S. Supreme Court explained the concept in the following manner, employing six disjunctive factors:

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[69] *See* 10 U.S.C. § 111(a) (2010) (stating that "the Department of Defense is an executive department of the United States.").

[70] *See* Gilligan v. Morgan, 413 U.S. 1 (1973) (holding that the organization and training of the armed forces is a political question beyond judicial scrutiny).

[71] *See* Winter v. Natural Res. Def. Council, 555 U.S. 7 (2008); Weinberger v. Catholic Action, 454 U.S. 139 (1981); Comm. for Nuclear Responsibility, Inc. v. Schlesinger, 404 U.S. 917 (1971).

[72] U.S. Const. art. I, § 8, cl. 12, 13.

[73] U.S. Const. art. II, § 2, cl. 1.

[74] *See* Nat'l Audubon Soc'y v. Dep't of the Navy, 422 F.3d 174 (4th Cir. 2005); Concerned About Trident v. Rumsfeld, 555 F.2d 817 (D.C. Cir. 1976).

[75] Rachel E. Barkow, *The Rise and Fall of the Political Question Doctrine*, in The Political Question Doctrine and the Supreme Court of the United States 24 (Nada Mourtada-Sabbah & Bruce E. Cain eds., Lexington Books 2007).

[76] *See generally*, Baker v. Carr, 369 U.S. 186 (1962); Jesse Choper, *Introduction*, in The Political Question Doctrine and the Supreme Court of the United States 1 (Nada Mourtada-Sabbah &

> Prominent on the surface of any case held to involve a political question is found a textually demonstrable constitutional commitment of the issue to a coordinate political department; or a lack of judicially discoverable and manageable standards for resolving it; or the impossibility of deciding without an initial policy determination of a kind clearly for nonjudicial discretion; or the impossibility of a court's undertaking independent resolution without expressing lack of the respect due coordinate branches of government; or an unusual need for unquestioning adherence to a political decision already made; or the potentiality of embarrassment from multifarious pronouncements by various departments on one question. Unless one of these formulations is inextricable from the case at bar, there should be no dismissal for non-justiciability on the ground of a political question's presence.[77]

The doctrine can be traced back to *Marbury v. Madison*, where Chief Justice Marshall posited that the discretionary actions of the legislative and executive branch were entirely outside the scope of judicial review.[78] The Constitution left the President accountable "only to his country . . . and to his own conscience" in exercising the political powers vested in him by the Constitution.[79] The doctrine appeared regularly in Supreme Court cases throughout the nation's history, particularly during periods when Presidents asserted their war powers in the Civil War, World War II, and the Vietnam conflict.[80] Not all of the war powers cases were settled on political question grounds, but it was vigorously employed in cases during those periods.[81] In cases not relating to war or foreign affairs, though, courts issued conflicting opinions on applying the political question doctrine.[82]

From an expanded perspective—not just the war powers and national defense cases—academic commentators differ on the strength of the doctrine throughout U.S. jurisprudential history and its relevance today.[83] Even the express invocation of the political question doctrine in *Baker v. Carr*, which would appear to be a ringing affirmation of the doctrine's existence, is not universally seen as a sign of the doctrine's relevance.[84] Indeed, in *Baker v. Carr* the Supreme Court

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Bruce Cain eds., Lexington Books 2007).

[77] Baker v. Carr, 369 U.S. 186, 217 (U.S. 1962).

[78] *See* Mourtada-Sabbah & Fox, *Two Centuries of Changing Political Questions in Cultural Context, supra* note 76, at 89-90. Legal scholar Rachel Barkow points to origins even preceding the judiciary, in *The Federalist Papers*. Barkow, *supra* note 76, at 24 (citing The Federalist No. 78 at 467 (Alexander Hamilton) (Clinton Rossiter ed., 1961)).

[79] Mourtada-Sabbah & Fox, *supra* note 76, at 91 (citing Marbury v. Madison, 5 U.S. (1 Cranch) 137, 164 (1803)).

[80] *Id.* at 121.

[81] *See generally* Mourtada-Sabbah & Fox, *supra* note 76, at 107-25; Christopher N. May, In the Name of War: Judicial Review and the War Powers Since 1918 264-68 (Harvard Univ. Press 1989).

[82] Harold H. Bruff, Balance of Forces: Separation of Powers Law in the Administrative State 203 (Carolina Academic Press 2006).

[83] *See generally* Mourtada-Sabbah & Cain eds., *supra* note 76.

[84] Barkow, *supra* note 76, at 36. Cf. Gilligan v. Morgan, 413 U.S. 1, 11 (1973) (discussing the

held that the case itself presented justiciable questions—the Court allowed the plaintiff's argument to go forward by remanding to the District Court.[85] Many cases ostensibly decided on political question grounds were arguably decided on the merits;[86] invoking the doctrine merely was merely a handy way for the court to slap an easily understood name tag to a complicated case or provide a superficial rationale for an uncomfortable decision.[87] Those instances led one commentator to argue that the doctrine is something of a semantic fiction and does not exist as an actual legal doctrine.[88] In comparison, the consensus appears to be that the doctrine is on the wane, and has been for some time.[89] From a purely empirical standpoint, its express use across the board of NEPA cases has decreased in recent decades.[90] Nevertheless, the themes underlying the doctrine—such as presidential prerogative, the distinction between policy as opposed to law, and agency independence—continue to surface in NEPA cases, even if the phrase is not expressly invoked.[91] Oftentimes the concept standing in for the political question doctrine is the idea that national defense is simply meant to viewed through a different judicial lens, or what this article will refer to as "national defense exceptionalism."[92]

B. National Defense Exceptionalism

The courts highlight that there is "no national defense exception" to NEPA,[93] yet also recognize that agencies executing national defense missions are engaged in a unique line of work having a different relationship to the environment than the mission of other Federal agencies.[94]

The first published NEPA case involving a military defendant, *McQueary v. Laird*, questioned the feasibility of submitting national defense matters to the judicial machinery.[95] Plaintiffs in that case sought to enjoin the Army's storage of

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viability of the doctrine notwithstanding its reported demise).

[85] Baker v. Carr, 369 U.S. 186, 187, 266 (1962).

[86] Bruff, *supra* note 82, at 206 (citing Symposium, *Comments* on Powell v. McCormack, 17 U.C.L.A. L. Rev. 1, 172-73 (1969)).

[87] *See* Harold Hongju Koh, The National Security Constitution: Sharing Power After the Iran-Contra Affair (Yale University Press 1990) (calling the political question doctrine "a tempting refuge from the adjudication of difficult constitutional claims [whose] shifting contours and uncertain underpinnings make it susceptible to indiscriminate and overbroad application to claims properly before Federal courts.") (quoting Ramirez de Arellano v. Weinberger, 745 F.2d 1500, 1514 (D.C. Cir. 1984) (en banc), *vacated on other grounds*, 471 U.S. 1113 (1985)) (alteration in original).

[88] Bruff, *supra* note 83 (citing Louis Henkin, *Is There a "Political Question" Doctrine?,* 85 Yale L.J. 597 (1976).

[89] Choper, *Introduction, supra* note 77 at 1; Barkow, *supra* note 76 at 33.

[90] *Id.*

[91] *See infra* Section III.B.

[92] *Id.*

[93] *See* Romer v. Carlucci, 847 F.2d 445, 465 n. 1 (8th Cir. 1988) (citing Jackson County, Missouri v. Jones, 571 F.2d 1004 (8th Cir. 1978)); No GWEN Alliance of Lane Cnty., Inc. v. Aldridge, 855 F.2d 1380, 1384 (9th Cir. 1988); Concerned About Trident v. Rumsfeld, 555 F.2d 817, 823 (D.C. Cir. 1976).

[94] McQueary v. Laird, 449 F.2d 608, 612 (10th Cir. 1971); *see* Barcelo v. Brown, 478 F. Supp. 646 (D.P.R. 1979).

[95] McQueary v. Laird, 449 F.2d 608 (10th Cir. 1971).

chemical and biological weapons at the Rocky Mountain Arsenal in Colorado. The Tenth Circuit refused to enjoin the Army, saying:

> In its proprietary military capacity, the Federal Government has traditionally exercised unfettered control with respect to internal management and operation of Federal military establishments (citations omitted) . . . . The challenges raised by the appellants in this case fall within that narrow band of matters wholly committed to official discretion which, in recognition of the needs involved in national security, do not blend with tests in an evidentiary hearing.[96]

In a case one year later, a Utah Federal District Court followed a similar rationale in declining to enjoin a nuclear test detonation carried out by the Atomic Energy Commission. In *Nielson v. Seaborg*, the court quoted the *McQueary v. Laird* decision and found that the nuclear tests fell "within that narrow band of matters wholly committed to official discretion."[97] The court's reasoning was the "result of the delicate questions of national security raised and the constitutional placement of those concerns with the political departments of government."[98]

Three years after *Nielson*, national defense exceptionalism reached its apex in Federal District Court.[99] In *Concerned About Trident v. Schlesinger*, a complex assortment of geopolitical and national security variables were reviewed and adduced by the court to underscore the unique statutory and constitutional drivers of military activity and distinguish it from other governmental functions.[100] While partially overruled on appeal to the D.C. Circuit,[101] the lower court proceeding is nonetheless showcased here as a superb example of national defense exceptionalism and the political question doctrine being forcefully and correctly applied.

Trident involved the Cold War arms race in the specific weapons platform of nuclear submarines.[102] The Defense Department elevated the Trident nuclear submarine program to its most urgent category of desired acquisitions in 1972.[103] Foreign policy was argued to partially hinge on Trident's timely completion, as President Ford was in the process of negotiating nuclear arms reductions with the Soviets.[104] Substantial delays to Trident would have partially diminished his

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[96] *Id.* at 612. By "disclosures," the Tenth Circuit meant the type of information that would be present in an EIS. Plaintiffs were not arguing that the Army failed to produce an EIS, as NEPA was relatively untested in the early 1970s—but the court seems to be saying that even if the Army had released an EIS, the question of its sufficiency would be non-justiciable. Plaintiffs' approach appears to be a "substantive" NEPA challenge, an approach that failed to gain favor with the courts. *See supra*, notes 45-46.

[97] Nielson v. Seaborg, 348 F. Supp. 1369, 1372 (D. Utah 1972) (citing McQueary v. Laird, 449 F.2d 608 (10th Cir. 1971)).

[98] *Id.* at 1369, 1372 (citing Pauling v. McNamara, 331 F.2d 796 (D.D.C. 1964)).

[99] Concerned About Trident v. Schlesinger, 400 F. Supp. 454 (D.D.C. 1975).

[100] *Id.* at 458-77.

[101] Concerned About Trident v. Rumsfeld, 555 F.2d 817 (D.C. Cir. 1976).

[102] *Schlesinger*, 400 F. Supp. at 464-66.

[103] *Id.* at 464-66.

[104] *Id.* at 466.

bargaining posture because Trident represented a giant leap in the nation's submarine warfare capabilities; without it, the Soviets had less incentive to negotiate.[105]

After an extensive, multi-round vetting process, Bangor, Washington, a quasi-rural location in the Olympic Peninsula, was selected as Trident's home in 1974.[106] Plaintiffs challenged that site selection, as well as the development of the Trident system at large and the decision to proceed with it on an accelerated basis.[107] Plaintiffs further requested an injunction under NEPA.[108] The District Court rejected all of the plaintiffs' contentions,[109] and set forth an opinion on all four's with the political question doctrine. The court viewed the Trident program as committed to other branches of government, drawing directly from the Navy's statutory charge at Title 10 in the U.S. Code, which authorizes the Secretary of the Navy to construct, arm, and employ Naval vessels.[110] Citing *McQueary v. Laird* and *Nielson v. Seaborg* as precedent, the court linked the *Trident* situation to *Baker v. Carr* element by element:

> [S]ubstantive decisions relating to the national defense and national security lie within that narrow band of matters wholly committed to official discretion both because of the delicate security issues they raise and the constitutional delegation of those concerns to the political departments of our government. These are the political questions the Supreme Court described in *Baker v. Carr* . . . . The substantive decision to proceed with Trident as a top priority national defense measure meets all the requirements spelled out in the Baker decision. There is a "textually demonstrable constitutional commitment" of the conduct of national defense to the Congress in Article I, § 8, and the President in Article II, § 2. Secondly, the courts are not the proper forum for debate on national security and defense issues. Third, the policy determination to proceed with a particular approach toward national defense is not within the ambit of the court's expertise or discretion, and, if so undertaken, would be a usurpation of the powers of the Congress and the President who have the duty under the Constitution to develop such policies. Fourth, in light of ongoing international arms limitation negotiations and the large amounts of money already invested in this particular national defense program, there exists an unusual need for adherence to the Trident choice. Indeed, a judicially imposed variance from this decision would very likely have negative international repercussions.[111]

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[105] *Id*.
[106] *Id.* at 470.
[107] *Id.* at 480.
[108] *Schlesinger*, 400 F. Supp. At 464-66.
[109] *Id.* at 493.
[110] *Id.* at 482 (citing 10 U.S.C. § 5031 (1970)).
[111] *Id.* at 482.

The court then boldly asserted:

> [I]t is important to bear in mind that there are peculiar aspects of national defense decisions which distinguish in some measure the nature of compliance with NEPA . . . [A]gency decisions dealing with the national defense and survival will, of necessity, be made with a different view toward environmental considerations and, indeed, most other considerations, than will non-defense related agency decisions. This is not to say that the Defense Department may ignore the environment. Rather, this is a recognition that national defense is a unique area . . . . It is also a realization that some changes, even major changes, in the environment may be required for the survival of the Republic.[112]

On appeal to the D.C. Circuit, the District Court's language implying a national defense exemption was not endorsed.[113] While affirming the injunction denial, the D.C. Circuit reversed the District Court and remanded on two issues regarding EIS sufficiency.[114] Explaining the decision, the D.C. Circuit flatly stated: "There is no support in either the statute or the cases for implying a 'national defense' exemption from NEPA."[115] It then scolded the Navy for arguing in its appellate brief that NEPA did not apply to strategic decisions made by the Department of Defense-Navy, qualifying such reasoning as "a flagrant attempt to exempt from the mandates of NEPA all such military actions under the overused rubric of 'national defense.[116] Only a brief segment of the concurring opinion noted the national defense element to the case, echoing the exceptionalism theme of the lower court:

> In an overall assessment . . . it is not irrelevant that in this case further delay might injure our nation's defense posture . . . [w]hile the situation here is not as urgent as that which led to a prudential withdrawal by the courts on the eve of the Amchitka detonation, see *Committee For Nuclear Responsibility v. Schlesinger*, (internal citation omitted) the possibility of some damage to strategic interests brings this case out of a category like river and harbor projects of the Corps of Engineers.[117]

Although the D.C. Circuit referred to the "national defense" argument as "overused," in *Trident* it nonetheless drew the line on the injunction question,

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[112] *Id.* at 484 (citing Nielson v. Seaborg, 348 F. Supp. 1369, 1372 (D. Utah 1972) (notes omitted)).
[113] *See generally*, Concerned About Trident v. Rumsfeld, 555 F.2d 817, 823 (D.C. Cir. 1976).
[114] *Id.* at 830.
[115] *Id.* at 823 (citations omitted).
[116] *Id.* at 823. No elaboration was provided on how or in what cases the "rubric of national defense" had been "overused." Clearly, though, the court was referring to the general legal precedent of according the military distinct treatment in the application of numerous laws over the years.
[117] *Id.* at 831 (Leventhal, C.J., concurring).

apparently deciding that the Navy's NEPA compliance was adequate enough to avoid bringing the Trident program to a standstill.[118]

Many cases post-*Trident* would unhesitatingly impose injunctions on national defense activities no less important than the Trident project.[119] While some cases explored later in this article did acknowledge aspects of the *Trident* District Court decision, none of them would engage the political question doctrine as outlined in *Baker v. Carr*—and its implications for national defense exceptionalism—with the thoroughness or gusto seen in Trident.[120]

C. Injunctions

Few actions of a court better illustrate judicial power than the issuance of an injunction. The Supreme Court—in the most recent NEPA case to reach the high court—has referred to injunctions as a "drastic" and "extraordinary remedy."[121] The subset of injunctions referred to as preliminary injunctions are even more extraordinary in that they are issued prior to a trial on the merits, thereby disturbing a party's course of action before it is determined that the party is actually at fault.[122]

Courts have developed a four-part formula to measure whether a preliminary injunction should issue.[123] A party seeking a preliminary injunction must show that: (1) it is likely to succeed on the merits; (2) it will suffer irreparable harm in the absence of relief; (3) the balance of equities tips in its favor; and 4) an injunction is in the public interest.[124] The standard for a preliminary injunction versus a regular injunction is the same except that with the former the plaintiff must show a likelihood of success (because "success" on the merits at trial has not yet happened) as opposed to actual success.[125]

An injunction does not necessarily issue even if a court concludes that the defendant violated the law.[126] Some district and appellate courts have held that there is a rebuttable presumption in favor of issuing an injunction when environmental laws in general, and NEPA in particular, are violated.[127] However, there is countervailing authority from the Supreme Court to indicate that the emerging trend favors a balancing of all the equities per the four-part test above and eschews the idea of rebuttable presumptions.[128]

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[118] *Id.* at 830.
[119] *See infra* Section IV.B.
[120] *See infra* Section IV.A.
[121] 42 Am. Jur. 2d *Injunctions* § 17 (2011) (citing Monsanto Co. v. Geertson Seed Farms, 130 S. Ct. 2743, 2761 (2010).
[122] *See* Winter v. Natural Res. Def. Council, Inc., 555 U.S. 7, 32 (U.S. 2008) (citing Amoco Production Co., 480 U.S., at 546 n. 12). *See* 42 Am. Jur. 2d Injunctions § 9 (2011).
[123] *Monsanto*, 130 S. Ct. at 2756. *See* Rubin & Yost, *supra* note 28, at § 10:41.
[124] Winter v. Natural Res. Def. Council, Inc., 555 U.S. 7, 19-20, 32 (2008).
[125] *Id.* at 32 (citing Amoco Production Co., 480 U.S. at 546 n. 12).
[126] 42 Am. Jur. 2d *Injunctions* § 14 (2011). A violation of law is of course a necessary condition to issuing an injunction.
[127] Wisconsin v. Weinberger, 745 F.2d 412, 426 (7th Cir. 1984). *See* Rubin & Yost, *supra* note 28, at § 10:42.
[128] Rubin & Yost, *supra* note 28, at § 10:42 (citing Weinberger v. Romero-Barcelo, 456 U.S. 305

In the context of national defense, the third and fourth elements of the injunction test are critical, because political questions naturally arise when, respectively, the national defense interest is balanced with the environment, and when the public's interest is attributed to either side of that balance. Issuing an injunction against an agency engaged in national defense activity because of a NEPA violation can amount to a judicial prioritization of NEPA's environmental process over national defense. Therefore, an injunction essentially amounts to a declaration from the court as to the relative importance of the particular national defense activity at hand.

The third prong of the injunction test involves balancing the relative equities of the parties.[129] While the first two prongs deal exclusively with the plaintiff, the third prong squarely considers the defendant's interests. A court's final prong in the injunction analysis concerns neither the plaintiff nor defendant, directly speaking, but rather the public at large.[130] One way to handle this prong is by reference to the policies underlying the statute in play.[131] NEPA contains numerous policy goals that are expressly outlined in the introductory portions of the statute.[132] In the case of a government agency defendant, however, the public ostensibly has an interest in seeing the agency's mission accomplished; insofar as the activity subject to the injunction furthers that mission, courts strive to balance the public interests posed by NEPA with the interests of the agency, that, by extension, are the public's as well.[133] Which public interest should weigh more? The NEPA policy imperative of taking environmental considerations into account to assure informed agency deliberations, or in the case of the military, the goal of national security? The tension between the two, and the danger of courts sacrificing the latter for the former, is the subject of the section that follows.

IV. The National Defense NEPA Cases

The following cases are split into three categories: cases where injunctions were ultimately denied by the court of final appeal, cases where injunctions or partial injunctions were imposed by the court of final appeal (with one exception), and finally, *NRDC v. Winter*, the most recent national defense NEPA case to arrive at the Supreme Court.[134] The basic facts of each case as pertains to national defense are recited to highlight the importance of the activity in question, the adverse impact to national security, and the policy implications of judicial intervention in the case—whether that intervention is justified or not.

(1982)); Amoco Prod. Co. v. Village of Gambell, 480 U.S. 531 (1987).

[129] 42 Am Jur 2d *Injunctions* § 38 (2011).

[130] 42 Am Jur 2d *Injunctions* § 38 (2011).

[131] 42 Am Jur 2d *Injunctions* § 156 (2011).

[132] *See* 42 U.S.C. § 4331 (2010).

[133] *See* 42 Am. Jur. 2d *Injunctions* § 166 (2011).

[134] *See generally*, Winter v. Natural Res. Def. Council, Inc., 555 U.S. 7 (2008).

All of the cases can be seen as culminating in *NRDC v. Winter*. The holding in that case ignored the political question doctrine[135] and side-stepped military exceptionalism;[136] the injunction analysis was a marginal improvement, but also failed to account for the policy conundrum that plagues injunction law in the national defense context.[137] *Winter's* shortcomings on the thematic triad of the political question doctrine, military exceptionalism, and injunction law—magnified as it were at the highest court in the land—furnish the highest possible argument for why a national defense exemption to NEPA is necessary.

A. Injunction Denial Cases

The following section examines the political question doctrine serving to limit judicial intervention in national defense NEPA cases, with the end result being the denial of a plaintiff's request that the court issue an injunction. In some instances the doctrine was not invoked by name, but its core principles of judicial restraint and deference to the coordinate branches of government were clearly employed. The third and fourth prongs of the injunction test relating to the agency's equities and the public interest received were paid especially close attention in these cases.

1. Political Questions Go Nuclear: *Committee for Nuclear Responsibility, Inc. v. Seaborg*

In *Committee for Nuclear Responsibility, Inc. v. Seaborg*, the D.C. Circuit declined to enjoin a nuclear detonation test in the Aleutian Chain off of Alaska, even though it expressly recognized that the Atomic Energy Commission (AEC), the defendant, likely violated NEPA.[138] The test involved a planned detonation during the late fall of 1971 of a "Spartan" warhead to prepare for its introduction into the Safeguard/ABM weapons system.[139] By the time the case was appealed to the D.C. Circuit after the District Court's denial of plaintiffs' request for a preliminary injunction,[140] the government had already spent $118 million (in 1970s dollars) making preparations for the test.[141] If the test were delayed further, it would have to be suspended altogether because Aleutian weather conditions were deteriorating rapidly; renewed preparations the following spring would have to commence from scratch, costing another $70 to $120 million.[142]

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[135] *See generally,* Winter, 555 U.S. 7 (omitting any express reference to the "political question doctrine" as such).
[136] *Id.* While the decision noted the lower courts' failure to grant proper deference to military officials' judgments, the decision did not claim that the military was entitled to greater deference than other federal agencies. *Id.* at 28-9.
[137] *Id.* at 20-31.
[138] Comm. for Nuclear Responsibility, Inc. v. Seaborg, 463 F.2d 796 (D.C. Cir. 1971).
[139] *Id.* at 798.
[140] *Id.* at 797. The district court proceeding was not published.
[141] *Id.* at 798.
[142] *Id*.

As with the *Trident* case, the implications of a delay extended to strategic and political issues as well.[143] Because the Safeguard/ABM missile system was already set for deployment, only two options remained regarding the integration of Spartan into that system: either delay deployment of Safeguard, or, deploy Safeguard as scheduled with lingering uncertainties about Spartan's effectiveness.[144] Either of those options would necessarily impact the President's ongoing Strategic Arms Limitation Talk negotiations.[145]

The lower District Court stated "that the courts lack jurisdiction to enjoin this 'presidential decision.'"[146] On appeal the D.C. Circuit affirmed,[147] stating that enjoining the detonation would present "potential harm to national security and foreign policy."[148] The D.C. Circuit specified that the government's claims were "assertions which we *obviously* cannot appraise" (emphasis added) and as a result the court was "constrained" to deny the injunctive relief requested. The court's statement that it "obviously" could "not appraise" the government's contention was essentially a declaration that the matter was outside of its purview, i.e., the business of another political branch, which "constrained" the judicial branch's options.[149]

Plaintiffs appealed the D.C. Circuit's injunction denial to the Supreme Court.[150] Without opinion, the majority affirmed,[151] but only after hearing oral argument on the case during an extraordinary Saturday morning session by order of the Chief Justice just hours before the scheduled nuclear blast.[152] Three justices dissented from the majority.[153] Justice Douglas' dissent cited as authority for his decision a seminal D.C. Circuit case decided earlier that year, *Calvert Cliffs' Coordinating Committee v. Atomic Energy Commission.*[154] That case had been decided by a completely different panel of D.C. Circuit judges from the panel that decided the instant *Committee for Nuclear Responsibility* case, although the two cases involved the same defendant, the AEC.[155]

In *Calvert Cliffs',* the D.C. Circuit held that certain AEC procedures were not compliant with NEPA and therefore required revision.[156] Dicta from that case further stated that if a given agency decision "was reached procedurally without

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[143] *Id*.
[144] Comm. for Nuclear Responsibility, Inc. v. Seaborg, 463 F.2d 796, 798 (D.C. Cir. 1971).
[145] *Id.* at 798.
[146] *Id.* at 797.
[147] *Id*. at 797-98. While affirming the lower court's decision, the D.C. Circuit nonetheless disagreed with the lower court's rationale, broadly stating that "we do not accept the propositions upon which it relied . . . ." *Id.*
[148] *Id.* at 798.
[149] *Id.* at 798-99.
[150] Comm. for Nuclear Responsibility, Inc. v. Schlesinger, 404 U.S. 917 (1971).
[151] *Id.* at 917.
[152] *See* Anderson, *supra* note 18, at 137 (citing Comment, *Project Cannikin and the National Environmental Policy Act,* 1 ELR 10161, 10162 (October 1971)).
[153] Comm. For Nuclear Responsibility, 404 U.S. at 917, 930.
[154] *Id*. at 918 (citing Calvert Cliffs' Coordinating Comm. v. Atomic Energy Comm'n, 449 F.2d 1109, 1115 (D.C. Cir. 1971)).
[155] *Id*. at 918-19.
[156] *Id*. at 1112.

individualized consideration and balancing of environmental factors—conducted fully and in good faith—it is the responsibility of the courts to reverse."[157] Justice Douglas adopted that line of reasoning in the instant case and therefore concluded that an injunction had to issue because AEC's EIS was inadequate.[158] Two other justices filed a joint one paragraph opinion agreeing with Douglas that an injunction should be granted so that the Court could consider whether the planned detonation was illegal in light of AEC's possible NEPA violation (because of the inadequate EIS).[159]

While arguably a victory for national defense advocates, *Committee for Nuclear Responsibility* sowed seeds that would reap a harvest of NEPA injunctions in national defense cases.[160] That the Supreme Court was willing to convene an extraordinary Saturday session to hear oral argument on a moment's notice is telling.[161] If nothing else, it reveals that from NEPA's infancy, and even in the face of pressing national security concerns, NEPA would not be sidelined as an ineffectual procedural formality.[162]

2. National Defense as a Vital State Interest: *Barcelo v. Brown*

The Puerto Rican District Court in *Barcelo v. Brown* also denied plaintiffs' request for an injunction, but with comparably less hesitation, and with a fuller discussion of the defendant's equities, than the D.C. Circuit in *Committee for Nuclear Responsibility.* In *Barcelo*, plaintiffs alleged violations of 18 separate legal provisions, ranging from state and Federal environmental laws, to Executive orders, to the First and Fifth Amendments to the Federal constitution, and to NEPA.[163] The trial heard testimony from 63 witnesses, received into evidence hundreds of exhibits, and took two field trips.[164] The trial lasted three months—a "legal marathon," as the trial judge described it. The trial was the culmination of plaintiffs' struggle to halt the artillery, ship, and aircraft ordnance that targeted the Vieques bombing range in Puerto Rico.[165] Vieques offered a unique multidimensional training experience to the Navy, in that it was the Atlantic Fleet's sole range featuring air-to-surface, surface-to-air, surface-to-surface, ship-to-surface, amphibious assault, anti-submarine warfare, electronic warfare, and close-support bombardment in one location.[166]

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[157] *Id*. at 918 (citing Calvert Cliffs' Coordinating Comm., Inc. v. United States Atomic Energy Comm'n, 449 F.2d 1109, 1115 (D.C. Cir. 1971)).
[158] *Id*. at 921.
[159] Committee for Nuclear Responsibility, 404 U.S. at 930.
[160] *See infra* Part IV.C.
[161] *See* Anderson, *supra* note 18, at 137 (citing Comment, Project Cannikin and the National Environmental Policy Act, 1 ELR 10161, 10162 (October 1971)).
[162] *Id.*
[163] Barcelo v. Brown, 478 F. Supp. 646, 651-52 (D.P.R. 1979).
[164] *See generally* Barcelo v. Brown, 478 F. Supp. 646. Weighing in at 62 pages, it is one of the longest published opinions on record involving the military and NEPA. The judge must have thought he had to do justice to the proceedings; his opinion chronicled Vieques' history going back to 850 A.D., even pausing to reflect on the cultural practices of the pre-Columbian natives. *Id.* at 654-55.
[165] *Id*. at 652. The case eventually made its way to the Supreme Court in 1982, Weinberger v. Romero-Barcelo, 456 U.S. 305 (1982). However, all NEPA issues were resolved by the district court.
[166] *Barcelo*, 478 F. Supp. at 654-661, 707.

While plaintiffs sought and obtained declaratory relief that an EIS was required for the Navy's activities at Vieques, the Court resolutely declined to enjoin the Navy's activity even though the Navy had arguably violated NEPA by not completing an EIS.[167] The trial judge's injunctive analysis focused on the hardship that would result to the Navy.[168] While no court has juxtaposed the procedural concerns of NEPA with the military's national security mandate as forcefully as the *Trident* District Court decision, the decision in *Barcelo v. Brown* had involved a far more intricate analysis to justify its injunction denial.[169] First, unlike the District Court in *Trident*, the court in Barcelo concluded that NEPA was actually violated.[170] Second, the connection between the activity in question and national security was far less apparent than in *Trident*.[171] The facts in *Trident* dealt with themes widely understood in public discourse: high stakes nuclear hide and seek on the high seas at the height of the Cold War.[172] In *Barcelo*, by contrast, the Court was dealing with a military training exercise, the implications of which are not as readily apparent: there were no immediate political implications to halting bombing practice,[173] so the court had to extrapolate to show the relationship between training and national security.[174] It did so by describing the United States as an economic "island" that imports the majority of its oil via sea lanes; a well prepared Navy was crucial to the nation's defense and that of 43 other countries having mutual defense treaties with us.[175] Taking into consideration the immense value which the Navy obtained from Vieques, injunctive relief was simply disproportionate to the violations giving rise to the suit.[176] And the court went even beyond that, declaring that an injunction could cause the Navy irreparable harm, and by extension, imperil the national security of the United States.[177]

3. "Sweeping" Aside Political Questions: *National Audubon Society v. Dep't of the Navy*

In another Navy case involving training, *Washington County v. United States Dep't of the Navy, the Navy* appealed an Eastern District of North Carolina injunction later characterized as "sweeping" by the Fourth Circuit.[178] At issue was a Navy proposal for a new landing field where the Navy could practice simulated carrier landings.[179] Driving the need for the field was the Navy's recent acquisition of F/A-

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[167] *Id*. at 706-08.
[168] *Id*.
[169] *See* Concerned About Trident v. Schlesinger, 400 F.Supp. 454, 484 (D.D.C. 1975).
[170] *Barcelo*, 478 F. Supp. at 703-05, 708.
[171] *Id*. at 707.
[172] *See generally Barcelo*, 400 F.Supp. 454.
[173] The only immediate implication of any kind was that the training would be halted.
[174] *Barcelo*, 400 F. Supp. at 707.
[175] *Id*. at 707.
[176] *Id*. at 707-08.
[177] *Id*. at 707.
[178] Wash. Cnty. v. U.S. Dep't of the Navy, 317 F. Supp. 2d 626 (E.D.N.C. 2004), *rev'd sub nom*. Nat'l Audubon Soc'y v. Dep't of the Navy, 422 F.3d 174 (4th Cir. 2005).
[179] *Nat'l Audubon Soc'y*, 422 F.3d at 181-82.

18 E/F jets that replaced older aircraft.[180] The proposed landing field was located in a semi-rural area of North Carolina five miles from a national wildlife refuge but also within range of the jets' home bases.[181] The Navy contended that existing landing fields were inadequate because of encroaching residential development in addition to inadequate scheduling capacity resulting from commitments with other aircraft.[182]

At the District Court level, the Navy's EIS was found deficient on multiple grounds after challenges from plaintiff environmental groups and the county where the landing field was to be located.[183] The Court ordered the Navy to supplement the EIS, and enjoined any and all activity on the project, to include merely acquiring land in anticipation of the project.[184] An extensive analysis describing the Fourth Circuit's version of the standard four-part preliminary injunction test was laid out by the District Court.[185] Substantial emphasis was placed on the irreparable harm that might result to the plaintiff if the Navy were allowed to proceed with land acquisition and construction while a full trial on the merits was pending.[186] While acknowledging the Navy's claims that an injunction would interrupt its training plans and harm military readiness,[187] the bulk of the District Court's emphasis fell on the harm to plaintiffs from the Navy taking an environmentally uninformed decision.[188]

On appeal by the Navy, the Fourth Circuit ruled that such a "sweeping" injunction represented an unconstitutional interference with Executive branch decisionmaking.[189] Pointing out that the language used by the District Court in its decision clearly evinced the court's disagreement with the Navy not only on the siting of field, but on the actual necessity of a new field, the Fourth Circuit emphasized that NEPA is purely procedural in nature and does not allow the judicial branch to substitute its views for that of an agency.[190] The Circuit Court framed the District Court's intrusion as a "separation of powers" problem, citing Article II, Section two, Clause one of the Constitution, asserting that "District Courts should not substitute their own judgments for those of the Executive Branch in such national security matters as pilot training, squadron readiness, and safety."[191]

While the Fourth Circuit in *Washington County* viewed the terms of the injunction as intruding upon the responsibilities of other political branches, the injunctive remedy was not completely nullified, but instead remanded back to the

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[180] *Id*. at 181.
[181] *Id*. at 182-83.
[182] *Id*. at 181-82.
[183] *See generally*, Wash. Cnty. v. U.S. Dep't of the Navy, 317 F. Supp. 2d 626 (E.D.N.C. 2004).
[184] *Id*. at 637-38.
[185] *Id*. at 631-38.
[186] *Id*. at 633-35. The substantial emphasis paid to the irreparable harm factor was in part the result of the weight accorded to it by Fourth Circuit precedent, although at the time of the instant decision the court noted that the value of that precedent was suspect. *Id*. at 632.
[187] *Id*. at 633-34, 637.
[188] *Id*. at 633-35.
[189] *Nat'l Audubon Soc'y*, 422 F.3d at 203.
[190] *Id*.
[191] *Id*. at 174, 203 (citing U.S. Const. art. II, § 2, cl. 1).

District Court to be more narrowly drawn.[192] The Fourth Circuit curtailed the lower court's discretion by forcing five specific criteria into the injunction. The five criteria essentially allowed the Navy to make reasonable preparatory steps to constructing the field, (such as property surveys, obtaining easements, and negotiating purchase prices), but affirmed the District Court in prohibiting construction activity.[193]

While not a complete victory for the Navy, the Fourth Circuit decision managed to slice through the thicket of data, alternatives, and impacts characterizing judicial review of EISs, and put a spotlight at the central, yet easily overlooked, reason for why the Navy would be willing to litigate the case to begin with: "The readiness of carrier groups so essential to the protection of this nation's vital interests and the safety of pilots who risk their lives in the common defense are matters of the gravest import. It is uncontested that training at a new OLF will be superior to training at the Navy's current facilities—it is for precisely this reason that the Navy has decided to build one."[194]

B. Enjoining National Defense

In comparison with the previous section, on multiple occasions throughout the 42 year stretch of NEPA jurisprudence, courts at the district and appellate levels have discounted the national defense interest when weighing the appropriateness of an injunction.[195] On a few occasions, courts granted an injunction without mention at all of the agency's interest in carrying out its national defense mandate or the political questions in the suppressed action.[196] While judicial lapses of that magnitude are the exception, they have, nevertheless, persisted throughout the 42-year span of NEPA jurisprudence.[197] The cases presented in this section illustrate varying degrees of such lapses, with an injunction marking the end-point of all but one of the following cases.

1. Enjoined from the Beginning: *Enewetak v. Laird*

In the earliest of those cases, *Enewetak v. Laird*, was also the first NEPA case where a military branch defendant received a preliminary and then permanent injunction.[198] The *Enewetak* decision was one of a handful of early NEPA cases involving nuclear test detonations.[199] In *Enewetak*, the Air Force and Nuclear Defense Agency were conducting high-explosive blasts on the atoll of Enewetak,

[192] *Id*. at 181, 200-207.
[193] *Id*. at 207.
[194] *Id*. at 203.
[195] *See infra,* Part IV.B.
[196] *See* People of Enewetak v. Laird, 353 F. Supp. 811 (D. Haw. 1973); Natural Resources Def. Council, Inc. v. Callaway, 524 F.2d 79 (2d Cir. 1975); Wisconsin v. Weinberger, 578 F. Supp. 1327 (W.D. Wis. 1984).
[197] *Id*.
[198] *See supra* Part IV.A.
[199] People of Enewetak v. Laird, 353 F. Supp. 811 (D. Haw. 1973).

the westernmost of the Marshall Islands.[200] The staged blasts were part of a larger project to simulate the seismic effects of nuclear blasts, with the aim of understanding the vulnerability of U.S. defenses to atomic explosions.[201]

The District Court noted the scientific value of the tests but stopped short of asking to whom the scientific value inured, that is, the Air Force.[202] Leaving that question unanswered likely facilitated the court's omission of any equity balancing whatsoever during its injunction analysis.[203] Instead, the court posited that an injunction would have to issue unless the military could prove it suffered irreparable injury.[204]

While a handful of cases in subsequent years would emulate the *Enewetak* court's absence of any equity balancing or public interest review, *Enewetak* remains a rare case in its failure to acknowledge any national security facet whatsoever (given defendant parties such as the Air Force and Nuclear Defense Agency).[205] The decision was, however, an advance look at aggressive application of NEPA injunctions.[206]

2. Literally Ignoring National Defense: *NRDC v. Callaway*

Four NEPA injunctions were handed down by courts in 1975 against national defense activities.[207] Perhaps the case with the most obvious Cold War implications was *Natural Resources Defense Council v. Callaway*.[208] It involved a dredging operation undertaken by the Army Corps of Engineers to deepen a stretch of the Thames River from Long Island Sound to a Navy submarine base in Groton, Connecticut.[209] The dredging was required because the Thames was too shallow to accommodate a new class of submarine scheduled to arrive at the base at some point in mid to late 1976.[210] At the full height of the Cold War, the "Los Angeles Class" fast-attack nuclear powered submarine represented the Defense Department's effort to maintain maritime dominance over the Soviet Union.[211]

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[200] *Id*. at 813.
[201] *Id*. at 813-14.
[202] *Id*. at 814, 820. Unwittingly abetting the court in this approach were the defendants themselves, who acknowledged on the record that the DEIS was deficient. *Id.* at 813. This was an acknowledgment (and litigation strategy mistake) unlikely to be repeated by the government in future NEPA litigation.
[203] *See generally Enewetak*, 353 F. Supp. 811.
[204] *Id*. at 821. In support of that injunction framework the court cited the Calvert Cliffs' "strict standard of compliance" approach to NEPA enforcement. *Id*. (citing Calvert Cliffs' Coordinating Comm., Inc. v. U.S. Atomic Energy Comm'n, 449 F.2d 1109, 1112-16 (D.C. Cir. 1971)).
[205] *See* Anderson, *supra* note 18, at 136.
[206] *See supra* Part IV.C.
[207] The cases are: Society for Animal Rights v. Schlesinger, 512 F.2d 915 (D.C. Cir. 1975); Prince George's County v. Holloway, 404 F. Supp. 1181 (D.D.C. 1975); plus the two cases mentioned in the footnote minus the Sierra Club v. Morton case (that case involved the Dept of the Interior in a coal deposits case having nothing to do with national defense. Natural Resources Def. Council, Inc. v. Callaway, 524 F.2d 79 (2d Cir. 1975); McDowell v. Schlesinger, 404 F. Supp. 221 (W.D. Mo. 1975).
[208] Natural Resources Def. Council, Inc. v. Callaway, 524 F.2d 79 (2d Cir. 1975).
[209] *Id*. at 82.
[210] *Id*. at 82.
[211] *SSN-668 Los Angeles-class,* GlobalSecurity.Org, http://www.globalsecurity.org/military/systems/ship/ssn-688.htm (last visited May 20, 2011).

It was uncontested that the dredged spoil, expected to total 2.8 million cubic yards over the two phases, was highly contaminated.[212] In dispute was whether ocean currents at the New London disposal site would disperse toxic material to nearby fishing nurseries.[213] Plaintiffs alleged multiple NEPA violations regarding the EIS and requested an injunction.[214] Their principal complaint was that the Navy violated NEPA's mandate to consider alternatives, in this case, alternatives to the disposal method chosen by the Navy, ocean dumping, and then more specifically, the disposal location off the shore of New London.[215]

The District Court dismissed the complaint on all grounds raised by the plaintiff and declined to issue an injunction because the court had ruled against the plaintiffs' on all of their claims.[216] The Second Circuit reversed in part on appeal.[217] While the majority's 14 page opinion described how the Navy could have prepared a better EIS, it did not assess the fall-out to the Navy, the public interest, or national security from halting a multimillion dollar project that was vital to a brand new fleet of 23 nuclear submarines.[218] Indeed, the injunction analysis amounted to one conclusory sentence that only contained half of the required elements of a complete injunction analysis: "[I]rreparable damage could be caused by resumption of further dumping at the New London sit[e]."[219]

The dissent remarked that the majority's handling of the injunction issue constituted an abuse of appellate discretion.[220] Because the District Court ruling had denied the injunction, no record had been developed on the economic, human resources, or strategic impact to the Navy.[221] Therefore, the dissent reasoned that there was a judicial obligation "at the very least" to determine if there was any evidence of adverse impact to the Navy.[222] Aside from disrupting the Navy's plans, the dissent further noted that the majority overlooked the obvious national security implications of its injunction,[223] and how those implications compared to the rather speculative notion that a site other than New London would pose a lesser prospect of environmental damage.[224]

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[212] *Callaway,* 524 F.2d at 82; Natural Resources Def. Council, Inc. v. Callaway, 389 F. Supp. 1263, 1268 (D. Conn. 1974).
[213] *Callaway*, 524 F.2d at 82.
[214] A CWA violation was alleged as well which had no bearing on the NEPA claims. *Id*.
[215] *Callaway*, 389 F. Supp. at 1282 (citing 42 U.S.C. § 4332(2)(D) (1970)).
[216] *See generally Callaway*, 389 F. Supp. 1263.
[217] *Callaway*, at 524 F.2d at 82-83.
[218] *See generally Callaway*, 524 F.2d 79; *Callaway*, 389 F. Supp at 1267.
[219] *Callaway*, 524 F.2d at 95.
[220] *Id*. at 97.
[221] *Id*.
[222] *Id*.
[223] *Id*.
[224] *Id*. at 96-97.

3. Presuming a World-Wide Injunction: *Wisconsin v. Weinberger*

Nine years after *Callaway*, the Navy was hit with another program-halting injunction in *Wisconsin v. Weinberger* that similarly contained inadequate analysis of national defense issues or political questions.[225] The injunction was subsequently reversed on appeal, but the two rounds of litigation spent at the District Court powerfully illustrate the extreme decisions that can be reached when political questions and equity balancing are ignored. The case involved a project in Wisconsin and Michigan relating to "extremely low frequency" radio transmissions or "ELF."[226] The project dated back to the late 1960s when the Navy constructed a transmission terminal and 28 miles of above-ground antennae in northern Wisconsin to test ELF radio waves and their capability to send messages to U.S. submarines throughout the world.[227] In 1983 the Navy commenced construction on a scaled-down version approved by President Reagan.[228] Plaintiffs filed suit requesting that the project be enjoined.[229]

As a preliminary matter, the Navy argued that the entire ELF project was beyond the court's reach because it was ordered by the President.[230] The court dispensed with that argument: the Navy, not the President, carried out the ELF project.[231] (The court's rationale ignored the obvious: presidents leave the military to carry out the operations they order, but do not carry out the operations themselves.)

As to the injunction, the Navy argued that the precedent of *Weinberger v. Romero-Barcelo* (the Supreme Court stage of *Barcelo v. Brown,* the *Vieques* bombing range case) precluded the issuance of an injunction under the circumstances.[232] In *Romero-Barcelo* the Supreme Court declined to issue an injunction against the Navy's bombing-range activity notwithstanding its finding that the Navy had violated the Clean Water Act.[233] The instant District Court thought the Navy's reliance on *Romero-Barcelo* was off point, however, because *Romero-Barcelo* involved a statute imposing substantive requirements (the CWA), whereas the instant case involved only procedural requirements (NEPA's EIS requirements).[234] The irony presented by the instant District Court's rationale is that it justified imposing a drastic penalty (injunction) on the Navy at the District Court level for the technical violation of a procedural statute based on a Supreme Court-level case that imposed no penalty whatsoever for a far graver substantive (CWA), as opposed to procedural (NEPA), violation.

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[225] *See generally* Wisconsin v. Weinberger, 578 F. Supp. 1327 (W.D. Wis. 1984).
[226] *Id*. at 1332.
[227] *Id*. at 1334-35.
[228] *Id*. at 1340-41.
[229] *Id*. at 1332-33, 1357.
[230] *Id*. at 1355.
[231] *Id*.
[232] *Id*. at 1365 (citing Weinberger v. Romero-Barcelo, 456 U.S. 305 (1982)). Recall that the NEPA issue had been settled at the district court level in Barcelo v. Brown, 478 F.Supp. 646 (D.P.R. 1979).
[233] *Id*.
[234] *Id*.

The District Court ordered the Navy to supplement its EIS and completely enjoined any construction activity on the proposed ELF infrastructure.[235] Additionally, the judge went beyond the relief requested by plaintiffs and enjoined the Navy from installing any ELF receptors on any U.S. Navy submarines anywhere in the world.[236] Similar to the appellate court decision in *Callaway*,[237] the court offered no discussion whatsoever of the impact to the Navy from an injunction, and cited no legal precedent in military or national security cases involving NEPA injunctions.[238] Indeed, the court's remedy analysis did not even discuss the harm to the *plaintiffs*, as it found no appreciable threat to the public health warranting an injunction.[239] Instead, the court vaguely concluded that "it would not be in the public's interest or in the Navy's to permit the Navy to go forward with Project ELF without requiring it to file a supplemental environmental impact statement."[240] The Navy then filed a motion for reconsideration with the District Court, which was denied.[241] The Navy's chief complaint at this stage was that the District Court had failed to balance the equities of the parties, and that if it had done so, it would have discovered that the harm to the Navy rendered an injunction inequitable.[242] Included in the motion were two affidavits: one from the Secretary of the Navy, and another from the Navy Captain in charge of the ELF project.[243] The former averred that the ELF project was essential to national security because the Soviets had acquired ELF communication capabilities with their submarines that was presently unmatched by the U.S.[244] He stated that delaying the project exposed U.S. submarines to enemy detection because without enhanced ELF capabilities, U.S. submarines were required to ascend to near-surface levels in order to receive transmissions, whereas with ELF capability the submarines could remain submerged at deeper depths, and thus evade detection.[245] The Captain's letter stated that 40 percent of contract funds had already been expended, and that if the injunction were extended for another year, an additional ten to fifteen million dollars would be incurred.[246]

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[235] *Id*.

[236] *Id*. The judge's order technically read: "IT IS ORDERED that plaintiffs' motion for a permanent injunction is GRANTED and defendants are enjoined from taking any further action in respect to construction of the new ELF facility in Marquette County, Michigan, to upgrading the existing ELF facility in Wisconsin, or to supplying submarines with ELF receivers until they have prepared and filed a supplemental environmental impact statement in compliance with the requirements of the National Environmental Policy Act." *Id*.

[237] Natural Resources Def. Council, Inc. v. Callaway, 524 F.2d 79 (2nd Cir. 1975).

[238] *See generally Weinberger,* 578 F. Supp. at 1365.

[239] *Id*.

[240] *Id*.

[241] Wisconsin v. Weinberger, 582 F. Supp. 1489 (W.D. Wis. 1984).

[242] *Id*. at 1491, 1493.

[243] *Id*. at 1492.

[244] *Id*.

[245] *Id*.

[246] *Id*. at 1492-93. In reply plaintiffs presented a six year old unclassified version of a classified GAO report on Navy communications technology which concluded that the Navy should discontinue its ELF research, and 1983 testimony before the Senate Armed Services Committee from the same Secretary of the Navy and an Admiral that somewhat contradicted the Secretary's declarations in his affidavit. *Id*.

Employing parallel reasoning to the *Enewetak* decision, the trial judge reasoned that once it was determined that NEPA had been violated (in this case, failure to file an SEIS), the Navy had the burden of overcoming the presumption that an injunction should issue.[247] Ignoring NEPA injunction precedent from other circuits that balanced the competing equities of the parties, the court here declined any balancing at all because to do so would be tantamount to creating a national defense exception to NEPA.[248]

Although the court acknowledged that balancing equities in an environmental injunction scenario was the "traditional" approach,[249] it reasoned that the traditional approach would be inapplicable if the statute being interpreted had by its terms foreclosed equity balancing.[250] The court analogized to the Endangered Species Act (ESA), which prohibits the destruction of critical habitat; any action that destroys critical habitat is an action that the ESA is meant to prevent, and thus, a court cannot balance equities in a situation where a factual finding was made that critical habitat had been destroyed.[251] To balance equities under those circumstances would undermine the clear intention of the ESA.[252] By extension, the court reasoned that the purpose of NEPA is to infuse the Federal agencies' decisionmaking process with active environmental consideration and inform the public.[253] Therefore, according to the court, accomplishing both of those goals requires Federal agencies to consider environmental impacts prior to selecting a course of action; failing to consider those impacts causes the harm NEPA was intended to prevent.[254] Thus, the court concluded that NEPA mandated injunctive relief under the circumstances, i.e., halting further ELF construction until a supplemental SEIS was issued:

> If I were to engage in traditional balancing of the relative harms to the parties after having found a clear and substantial violation of the Act, I would be treating this case differently from other similar cases, and thus carving out an exemption for national defense interests that Congress was unwilling to provide. To do so would be to disregard a congressionally declared national policy of environmental planning applicable to all federal agencies.[255]

The Seventh Circuit Court of Appeals reversed the injunction.[256] Taking a dramatically different view than the lower court, the Seventh Circuit viewed the Navy's national defense contention to be so pressing that it issued a preliminary

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[247] *Id*. at 1495 (citing People of Enewetak v. Laird, 353 F.Supp. 811, 821 (D. Haw. 1973)).
[248] *Id*. at 1495.
[249] *Id*. at 1493-94.
[250] Weinberger, 582 F. Supp. at, 1492.
[251] *Id*. at 1493-94 (citing 33 U.S.C. § 1319(c), (d) (2010)).
[252] *Id*. at 1493-1494 (citing Tenn. Valley Auth. v. Hill, 437 U.S. 153 (1978)*)*.
[253] *Id*. at 1494-95.
[254] *Id*.
[255] *Id*. at 1495 (internal footnote omitted).
[256] *See generally* Wisconsin v. Weinberger, 736 F.2d 438 (7th Cir. 1984); Wisconsin v. Weinberger, 745 F.2d 412 (7th Cir. 1984).

order lifting the injunction and deferred its written opinion until over two months later "because we do not perceive any reason or justification for further delaying the implementation of this national defense project authorized by Congress and directed by the President."[257] In its full opinion, the Seventh Circuit clarified that the Navy was not seeking a "national defense exemption," and that "NEPA cannot be construed to elevate automatically its procedural requirements above all other national considerations."[258]

4. Ten Years of Injunctions: *Malama Makua v. Rumsfeld*

With the exception of Navy sonar litigation, the Army's live fire exercises on the Hawaiian island of Oahu at issue in *Malama Makua v. Rumsfeld* represent the military's longest-running NEPA case, spanning nearly an entire decade of litigation from 2001 to 2010.[259] This case is also notable in that, contrary to *Enewetak* and *Wisconsin v. Weinberger*, the District Court here conducted considerable injunction analysis—but instead of ignoring national security, the Court essentially found that possible environmental harm trumped national security.[260]

Since the 1940s, the Army had conducted live-fire training exercises at the Makua Military Reservation (MMR) approximately 38 miles northwest of Honolulu.[261] In 1985, the Army produced an EA followed by a FONSI for the construction of a formal live-fire range in which soldiers could realistically maneuver and engage enemy targets using the full panoply of company-level equipment and weapons, to include machine gun fire, mortars, and artillery.[262] The range was augmented with a "company combined arms assault course" in 1988.[263] Normal operations proceeded until 1998 when training at the range was voluntarily halted by the Army to investigate a number of forest fires sparked by the accidental landing of munitions outside of the range impact zone.[264] Plaintiffs filed suit and argued that an EIS should have been written instead of an EA. Litigation ending in settlements led the Army to produce two supplemental EAs and FONSIs, but by 2001 the case went to trial,[265] which meant that the Army had not trained at MMR since 1998.[266]

At the time of the case, Ninth Circuit case precedent required the District Court to conflate the standard four part preliminary injunction test into a two-part disjunctive test that required (1) probable success on the merits *and* irreparable injury; or, (2) sufficiently serious questions going to the merits of the case to make

[257] Wisconsin v. Weinberger, 736 F.2d 438 (7th Cir. 1984).
[258] Wisconsin v. Weinberger, 745 F.2d 412, 425 (7th Cir. 1984).
[259] Makua v. Rumsfeld, 163 F. Supp. 2d 1202 (D. Haw. 2001).
[260] *Id*. at 1222.
[261] *Id*. at 1204-05.
[262] *Makua*, 163 F. Supp. 2d at 1205, 1207. A "company" is an organizational unit consisting of 100-200 soldiers, and is typically led by a captain. Operational Unit Diagrams, U.S. ARMY, http://www.army.mil/info/organization/unitsandcommands/oud/ (last visited 26 July 2011).
[263] *Makua*, 163 F. Supp. at 1205.
[264] *Id*.
[265] *Id*. at 1205-07.
[266] *Id*. at 1221.

the case a fair ground for litigation, with the balance of hardships tipping decidedly in favor of the party requesting relief.[267] The District Court found the first half of the second part was satisfied because the uncertainties surrounding adverse impacts called into question whether an EIS should have been prepared instead of an EA (which was the "merit" to be contested if the case reached trial).[268]

The second half of the second prong was also satisfied in the Court's judgment.[269] It based its analysis on the Supreme Court case of *Amoco Prod. Co. v. Village of Gambell*, which artificially tilts the injunction scales in favor of a plaintiff because "the balance of harms will usually favor the issuance of an injunction to protect the environment[t]" where the injury is sufficiently likely.[270] In response to the Army's contention that continued delay would undermine unit readiness, place soldiers' lives at undue risk, and thus harm national security, the court answered that other training sites—albeit less accessible and involving greater cost—were available.[271]

Arguing the public interest, the Army described its interest in terms of the national interest. The Army argued from *Wisconsin v. Weinberger* that "[a]lthough there is no national defense exception to NEPA . . . the national well-being and security as determined by the Congress and the President demand consideration before an injunction should issue for a NEPA violation."[272] In response, the court saw the public interest at large aligned with the cultural interests and environmental interests of Hawaii, and found that the public had a greater interest in such than uninterrupted military training.[273]

The injunction stood until September 2001, after which point the parties entered into a settlement agreement spurred by the terrorist attacks on the 11th of that month.[274] In the settlement the Army capitulated on the EIS claim that prompted the original litigation.[275] While training resumed, the case continued in the District Court until 2010 with disputes over settlement agreement compliance.[276]

5. Navy Sonar Testing

Navy sonar exercises off the coast of California were the subject of NEPA litigation throughout the 2000s in four separate lines of cases, with the last of them being the Supreme Court case of *NRDC v. Winter.*[277] The sonar cases are notable

[267] *Id*. at 1215-16.
[268] *Id*. at 1216-17.
[269] Makua v. Rumsfeld, 163 F. Supp. 2d 1202 (D. Haw. 2001).
[270] *Id*. (citing Amoco Prod. Co. v. Vill. of Gambell, 480 U.S. 531, 545 (1987)).
[271] *Id*. at 1221.
[272] *Id*. at 1222 (citing Wisconsin v. Weinberger, 745 F. 2d 412, 425 (7th Cir. 1984)).
[273] *Id*. at 1222.
[274] Makua v. Gates, No. 00-00813, 2008 WL 696093, at *1 (D. Haw. Mar. 11, 2008).
[275] *Id*.
[276] *See generally* Makua v. Gates, No. 00-00813, 2008 WL 976919 (D. Haw. Apr. 9, 2008), *order clarified by* Makua v. Gates, No. 08-00327, 2009 WL 196206 (D. Haw. Jan. 23, 2009); Malama Makua v. Gates, No. 09-00369, 41 ELR 20017 (D. Haw. Oct. 27, 2010).
[277] *See generally* Natural Res. Def. Council, Inc. v. U.S. Dep't of the Navy, No. CV-01-07781, 2002

for their complicated, multi-factored tailored injunctions; the cumbersome results emphatically point out the incompatibility of NEPA injunctions in the national defense context.

Unlike earlier injunction cases such as *Enewetak* or *Callaway* that omitted any mention of the national defense interest, the sonar cases assess the competing interests of the parties—and simply conclude that the environmental interest outweighs the national defense interest. To be sure, the courts arrive at that holding in the context of the facts of the case, thus yielding intricately tailored injunctions, as opposed to injunctions that unconditionally halt the activity in question. Nonetheless, the implicit policy preference is clear: even a tailored injunction presupposes that the conditions limiting the activity are justified in light of the opposing equities. Either way, a policy judgment is being made. Policies, of course, are a matter of opinion—a reality made clear a few years later when the Supreme Court, on essentially identical facts, arrived at the opposite conclusion.

In *NDRC v. Evans* the plaintiffs' chief contention was that the Navy's low frequency sonar (LFS) harassed and killed various forms of marine mammal life, to include dolphins, whales, sea turtles, seals, and salmon.[278] Navy training exercises used LFS by sending out high energy pulses of low frequency sound over hundreds of miles to detect enemy submarines.[279] Plaintiffs lodged multiple NEPA claims in addition to other environmental statutes, but with respect to NEPA the District Court only found the "reasonable alternatives" contention to be meritorious (that is, the Navy's EIS did not consider reasonable alternatives to the location, scope, and LFS technique used in their training exercises).[280]

After conducting an extensive injunction analysis, the court found for plaintiffs and issued a preliminary injunction against the Navy's LFS training.[281] On the question of relative hardships, the court described the Navy's hardship as diminished by the fact that the injunction's duration would likely last under a year, and occur during peacetime.[282] By contrast, the court found "an extremely" strong public interest in the "survival and flourishing of marine mammals and endangered species, as well as a healthy marine environment."[283] Additionally, as to the public interest factor in the injunction analysis, the Navy emphasized that LFS training served to ultimately address the proliferating threat of quiet enemy submarines.[284] The Deputy Chief of Naval Operations described that threat as "a clear and present

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U.S. Dist. LEXIS 26360 (C.D. Cal. 2002); Natural Res. Def. Council, Inc. v. Evans, 364 F.Supp.2d 1083 (N.D. Cal. 2003); Natural Res. Def. Council, Inc. v. Gutierrez, 457 F.3d 904 (9th Cir. 2005); Winter v. Natural Res. Def. Council, Inc., 555 U.S. 7 (2008).

[278] Natural Res. Def. Council, Inc. v. Evans, 232 F. Supp. 2d 1003 (N.D. Cal. 2002). This case was followed by a later separate proceeding handling the permanent injunction, which repeated much of the preliminary injunction's reasoning. Natural Res. Def. Council, Inc. v. Evans, 279 F. Supp. 2d (N.D. Cal. 2003).

[279] *Evans*, 232 F. Supp. 2d at 1003.

[280] *Id*. at 1038-42.

[281] *Id*. at 1051-55.

[282] *Id*. at 1053.

[283] *Id*. at 1053.

[284] *Id*. at 1012.

danger in crucial parts of the world . . . ."[285] He stated that LFS capability could only be used to maximum benefit during wartime if personnel were trained in its use during peacetime under conditions comparable to wartime.[286] Based on those facts, the court did find that the public had "a compelling interest in national security . . . ."[287]

The District Court's solution to the competing hardships was a tailored injunction: a measure that sought to balance the environmental interests with the Navy's interest in continued LFS training.[288] However, the parties were left to devise the terms, and that led to further litigation where plaintiffs requested and received a permanent injunction.[289] The case was appealed to the Ninth Circuit on a collateral matter in 2006,[290] and in 2008 plaintiffs sought and received another preliminary injunction concerning similar facts when the Navy issued an SEIS to conduct further exercises.[291]

Throughout the five-year period of revolving-door litigation, two themes stand out with the *Evans*' injunctions: (1) The political question doctrine did not appear explicitly or implicitly in any of the decisions—and was apparently not raised by counsel—and; (2) the District Court was confident it had balanced the equities properly, always by tailoring the injunction to consist of measures curtailing, but not terminating the sonar exercises. Those measures consisted of limitations on where and when the Navy could use LFA sonar so as to avoid areas inhabited by affected species during certain seasons of the year.[292]

C. NEPA and National Defense at the Supreme Court: *Winter v. NRDC*

Winter v. NRDC did not raise the political question doctrine (although it went a step further than the Evans cases with an oblique reference to the President's role in national defense).[293] However, it strongly questioned whether the tailored injunction restrictions common to sonar cases were adequate to protect national defense interests.[294]

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[285] Natural Res. Def. Council, Inc. v. Evans, 232 F. Supp. 2d 1003, 1054 (N.D. Cal. 2002).
[286] *Id*.
[287] *Id*.
[288] *Id*. at 1054-55.
[289] Natural Res. Def. Council, Inc. v. Evans, 279 F. Supp. 2d 1129 (N.D. Cal. 2003), *sub nom.* Natural Res. Def. Council, Inc. v. Gutierrez, 457 F.3d 904 (9th Cir. 2005)
[290] Natural Res. Def. Council, Inc. v. Gutierrez, 457 F.3d 904 (9th Cir. 2006) (plaintiffs' appeal on aspects of National Marine Fisheries Service (NMFS) annual groundfish specifications management plan).
[291] Natural Res. Def. Council, Inc. v. Gutierrez, No. C-07-04771, 2008 U.S. Dist. LEXIS 8744 (N.D. Cal. Feb. 6, 2008).
[292] Natural Res. Def. Council, Inc. v. Evans, 279 F. Supp. 2d 1129, 1139 (N.D. Cal. 2003).
[293] Winter v. Natural Res. Def. Council, Inc., 555 U.S. 7 (2008). Chief Justice Roberts opened his opinion quoting President George Washington's presidential papers: "'To be prepared for war is one of the most effectual means of preserving peace.'" *Id*. (quoting 1 Messages and Papers of Presidents 57 (J. Richardson comp. 1897)).
[294] *Id*. at 31-33.

Winter v. NRDC is the capstone of national defense NEPA cases.[295] In *Winter*, the Supreme Court analyzed similar facts to *NRDC v. Evans*, but reached a different conclusion. First, it is one of the few national defense NEPA cases to reach the Supreme Court.[296] Second, the focus is on the aspect of NEPA that most impacts national defense activities, namely, the injunction.[297] Specifically, the case meticulously scrutinizes the third and fourth prongs of the injunction test, probing, respectively, the true nature of the military's (Navy's) interest in its activity,[298] and the relationship of that interest to the public interest at large.[299] Third, by examining the military's interest in realistic training exercises, the Court reinvigorated the long-dormant theme of military exceptionalism, last raised decades' previous in *Concerned About Trident*[300] (District Court level) and *Wisconsin v. Weinburger*.[301]

Winter involved Navy sonar exercises off the coast of California using "mid-frequency active" sonar (MFA), as opposed to LFS involved in the earlier *Evans* cases.[302] MFA sonar is one of the few means available to the Navy to detect modern near-silent diesel-electric submarines.[303] Because the technology is vital to that end, MFA is a feature of "strike group" exercises, featuring surface ships, submarines, and aircraft, all of which are arrayed around an aircraft carrier or amphibious assault ship.[304] MFA sonar testing is "mission critical" to those exercises because without it, a strike group cannot be certified to be proficient in anti-submarine warfare.[305]

Plaintiffs, a collection of environmental interest groups and filmmaker Jean-Michael Cousteau, contended that MFA sonar harmed marine mammals by causing hearing loss, decompression sickness, and interrupting migration patterns.[306] The Navy's studies arguably supported, in part, those contentions, describing a potential for adverse effects ranging from the temporary (hearing loss and behavioral disruption) to the more severe (destruction of tissue).[307] However, the Navy also

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[295] *Winter*, 555 U.S. 7.
[296] With the exception of Comm. for Nuclear Responsibility v. Schlesinger, 404 U.S. 917 (1971); Weinberger v. Catholic Action of Haw., 454 U.S. 139 (1981).
[297] *See Winter*, 555 U.S. at 19-33.
[298] *Id.*
[299] *Id.* at 22-33.
[300] Concerned About Trident v. Schlesinger, 400 F. Supp. 454, 482-84 (D. D.C. 1975).
[301] Wisconsin v. Weinberger, 745 F.2d 412 (7th Cir. 1984).
[302] *Winter*, 555 U.S. at 13.
[303] *Id*.
[304] *Id*.
[305] *Id*. at 14.
[306] *Id*.
[307] *See also* Natural Res. Def. Council, Inc. v. Winter, 645 F. Supp 2d. 841, 848 (C.D. Cal 2007) (citing considerable evidence of mass-strandings of whales occurring after naval exercises in the Bahamas, the Canary Islands, Hawaii, North Carolina, Japan, Greece, Spain, Taiwan, the Madeira archipelago, and the U.S. Virgin Islands). The International Whaling Commission's Scientific Committee on the matter concluded that evidence of such was "very convincing and appears overwhelming." *Id*. The Navy's own Office of Naval Research similarly concluded in a study that "the evidence of sonar causation is, in our opinion, completely convincing and that therefore there is a serious issue of how best to avoid/minimize future beaching events." *Id*. (internal citations omitted).

pointed out that 40 years of MFA use off of southern California had not yielded one documented sonar-related injury.[308]

The case arose out of events in February 2007, when the Navy issued an EA followed by a FONSI for the 14 exercises involving MFA sonar use scheduled through January 2009.[309] The FONSI was based on computer modeling that indicated the possibility for less than a dozen serious injuries to dolphins, and approximately 274 minor, non-permanent injuries to beaked whales.[310] All of the serious injuries could be avoided in the Navy's judgment through voluntary mitigation measures such as lookouts.[311]

Plaintiffs filed suit under a variety of statutes to include NEPA, and obtained a preliminary injunction against the Navy barring the use of MFA sonar during its exercises.[312] The District Court, after 16 pages of factual discussion, balanced hardships regarding the injunction test, and stated the following: "The Court is also satisfied that the balance of hardships tips in favor of granting an injunction, as the harm to the environment, Plaintiffs, and public interest outweighs the harm that Defendants would incur if prevented from using MFA sonar . . . ."[313]

Unfortunately, the District Court did not express either the plaintiffs' or defendants' interests and the court noted that the preliminary injunction only applied "during a subset of their regular activities in one part of one state for a limited period."[314] Unfortunately for the Navy, the "subset" involved vital training without which a strike group could not be certified, the "one part of the state" just happened to be the one place that the Navy deemed optimal for its training, and the "limited period" consisted of the *entire* training period.[315] The District Court did not mention national security, the relationship between training exercises and military readiness, or the simple practical difficulties resulting to the Navy from missing a critical component of their training.[316]

The Navy appealed to the Ninth Circuit, which affirmed the lower Court, but remanded with instructions to tailor its injunction so as to allow MFA sonar under certain conditions to be determined by the District Court.[317] It pointed out that the District Court's decision to issue a blanket injunction lacked any explanation whatsoever; consequently the injunction was overbroad and constituted an abuse of discretion.[318]

In response, the District Court issued a tailored injunction that contained six conditions: (1) twelve nautical mile exclusion zone from the coastline to be maintained at all times during the exercise; (2) a 2,200 yard sonar shutdown zone

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[308] *Winter*, 555 U.S. at 16.
[309] *Id*.
[310] *Id*.
[311] *Id*.
[312] *Winter*, 645 F.Supp 2d. at 844.
[313] *Id*. at 855.
[314] *Id*.
[315] *Winter*, 555 U.S. at 13-17.
[316] *See generally Winter*, 645 F.Supp. 2d 841.
[317] Natural Res. Def. Council, Inc. v. Winter, 508 F.3d 885, 886 (9th Cir. 2007).
[318] *Winter*, 508 F.3d at 886.

which would require the deactivation of MFA sonar any time a marine mammal was spotted; (3) exercise monitoring to ensure no marine mammals were present in the area prior to commencement of the exercise; (4) helicopter monitoring for marine mammals; (5) performing a 6 dB intensity reduction any time surface ducting conditions are observed; and (6) barring MFA sonar use in the Catalina basin.[319] The Navy appealed only the first two conditions.[320]

While that appeal was in motion, the Navy simultaneously took the atypical approach of petitioning the CEQ for an "emergency exception," which was granted.[321] The exception allowed the Navy to disregard the District Court's injunction terms and to continue MFA sonar use under "alternative arrangements."[322] In CEQ's judgment, the District Court's injunction presented "a significant and unreasonable risk that Strike Groups [would] not be able to train and be certified as mission capable."[323] After the CEQ exception was granted, the Navy petitioned the Ninth Circuit to vacate the District Court's injunction regarding the first two conditions.[324] The Ninth Circuit remanded that question back to the District Court.[325] When the District Court declined to vacate, the Navy sought relief from the Ninth Circuit for the fourth time.[326]

The Ninth Circuit affirmed the District Court and backed the reasoning employed by the lower court to justify its injunction.[327] On the second prong of the injunction test, irreparable harm, the Ninth Circuit held that plaintiffs had met their burden of showing a "possibility" of irreparable harm.[328] While a mere "possibility" was the degree of likelihood necessary to satisfy the first prong under Ninth Circuit

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[319] Natural Res. Def. Council, Inc. v. Winter, 530 F. Supp. 2d 1110, 1118-21 (C.D. Cal 2008). With respect to each of the six conditions, the following elaboration is in order: (1) Plaintiffs had requested at a 25 mile exclusion zone, which even the court acknowledged would "unduly hamper the Navy's training efforts;" (2) the Navy proposed a 100/200 yard zone; (3) on this count the court required, inter alia, at least one aircraft dedicated to marine mammal observation during each exercise; (4) this condition was over and above the dedicated aircraft required to satisfy the aforementioned third condition; (5) the court conceded that surface ducting (a phenomenon in which sound travels further than it otherwise would owing to temperature differentials in contiguous layers of water) is difficult to predict, and (6) it was disputed whether this area is a "choke point," i.e., geographical location where marine life is concentrated in number because it is an ingress/egress point from one body of water to another. *Id*.

[320] Natural Res. Def. Council v. Winter, 518 F.3d 658, 662, 698 (9th Cir. 2008).

[321] *Winter,* 555 U.S. at 17. CEQ's involvement in the case, and the Council's position in the NEPA schema is a thesis unto itself.

[322] NRDC v. Winter, 518 F.3d at 677.

[323] *Id.* at 677 (citing CEQ's Letter to Donald C. Winter at 3).

[324] *Id.* at 678.

[325] *Id*.

[326] *Id*. The district court held that the CEQ "exception" decision was invalid on a number of grounds; ironically, the court also opined in dicta that CEQ's interference with a Federal court injunction "raised 'serious constitutional concerns under the Separation of Powers doctrine.'" *Winter*, 518 F.3d at 678 n. 38 (quoting Natural Res. Def. Council v. Winter, 527 F. Supp. 2d 1216, 1232 (C.D. Cal. 2008)).

[327] *Winter*, 518 F.3d at 663, 703.

[328] *Id* at 696.

precedent,[329] the Supreme Court, when hearing the case on appeal, would later make that aspect of the holding as the cornerstone of its reversal decision.[330]

On the third prong of the injunction test regarding hardships to the parties, the Ninth Circuit cited the Supreme Court case of *Amoco Prod. Co. v. Vill. of Gambell* for the notion that environmental injury is often permanent or of extended duration, which inherently favors injunction issuance.[331] Viewing the relative hardships of an injunction in that light, the Ninth Circuit held that the impact to the Navy was "speculative" because the Navy had no experience operating under the two remaining injunction conditions to which it objected.[332] In support of that view, the Ninth Circuit noted that the Navy had not threatened to cease the exercises altogether instead of bearing with the injunction terms.[333]

However, the Navy had presented declarations during the District Court proceeding from numerous Navy admirals that the injunction terms were "crippling" to realistic training and posed an "unacceptable risk" to the Navy's ability to certify the strike groups.[334] According to those declarations, the consequence to national security was profound.[335] The Ninth Circuit countered those declarations by comparatively applying the two contested injunction terms to data on exercise interruptions available from past exercises, and theorized that had the injunction terms applied to the set of exercises subject to the instant litigation, only two to three additional MFA sonar shut-downs per exercise would have been experienced.[336] Two to three shutdowns per exercise would not have rendered the exercises "ineffective," even though the District Court had noted earlier that its injunction terms constituted a "substantial challenge" to the way it conducted anti-submarine warfare training.[337]

The Ninth Circuit balance of interests thus resulted in imbalance: on the plaintiffs' side was a "near certainty" of irreparable harm, while on Navy's there was nothing more than the mere inconvenience of altering a training exercise.[338] National security did not therefore figure as a theme in the decision; both the *Evans* case and *Malama Makua* were cited for the proposition that "courts have often held" that "precautionary measures to follow the law" can trump assertions of national security.[339]

On appeal to the Supreme Court, the Court conducted analysis of the District Court and Ninth Circuit decisions that is a microcosm of the injunction themes explored in this article. First, from a purely legal standpoint, the Supreme Court held

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[329] *Id*.
[330] *Winter,* 555 U.S. at 21.
[331] *Winter*, 518 F.3d at 697-98.
[332] *Id*. at 698-99.
[333] *Id*. at 699 n. 61.
[334] *Id*. at 676-77.
[335] *Id*. at 677.
[336] *Id*. at 700-01. The Ninth Circuit disputed Naval calculations showing a five-fold increase in the overall number of shutdowns. *Id*.
[337] *Id* at 698, 701.
[338] *Id*. at 696, 702.
[339] *Id*. at 702-03.

that the lower courts erred in their irreparable harm standard.[340] The Ninth Circuit's "possibility" threshold ran counter to the Supreme Court's "frequently reiterated standard" that irreparable harm must be *likely*.[341] The "possibility" standard was "too lenient," and as such, "inconsistent with our characterization of injunctive relief as an extraordinary remedy . . . ."[342]

Second, the lower courts erred in their weighing of the equities because they significantly understated the burden of the injunction to the Navy.[343] That burden was understated because "[t]he lower courts failed properly to defer to senior Navy officers' specific, predictive judgments about how the preliminary injunction would reduce the effectiveness of the Navy's SOCAL training exercises."[344] The District Court's lack of deference to agency judgment was reflected in its fleeting attention to equities balancing, which the Supreme Court calculated to be precisely one sentence in length.[345]

Third, from a public policy standpoint, the lower courts severely understated the public interest in military readiness.[346] "The public interest in conducting training exercises with active sonar under realistic conditions plainly outweighs the interests advanced by the plaintiffs . . . . In this case, however, the proper determination of where the public interest lies does not strike us as a close question."[347]

Based on the foregoing, the Court overruled the Ninth Circuit and vacated the two points of the six-part injunction challenged by the Navy.[348] But even victories come at a cost, and for the Navy ultimate triumph at the Supreme Court was not painless. Similar to *Evans* and *Malama Makua*, the case had ping-ponged back and forth between the District Court and Ninth Circuit multiple times.[349] From the time the injunction was originally entered to the day the Supreme Court issued its decision, a year and a half of bruising litigation unraveled. The alternative was to operate under injunction terms similar to those in *Evans*[350]—or even worse, not operate at all, as was the case in *Malama Makua* for three years.[351]

Victory was also not complete: the *Winter* decision simply remanded the case back to the District Court with instructions to vacate the two conditions the Navy had challenged; the other four conditions remained in place.[352] And by no means was this the last time that Navy sonar training would visit the courtroom.

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[340] *Winter*, 555 U.S. at 19-24.
[341] *Id*. at 20-24.
[342] *Id*.
[343] *Id*. at 22-26.
[344] *Id*. at 27.
[345] *Id*.
[346] *Id* at 26-2.
[347] *Id*.
[348] Original motions filed in June 2007, Natural Res. Def. Council, Inc. v. Winter, 645 F. Supp. 2d 841, 845 (C.D. Cal. 2007), to the Supreme Court ruling in November 2008. *Winter*, 555 U.S. at 7.
[349] *Winter*, 555 U.S. at 16-20 (discussing the case's complicated procedural history).
[350] Natural Res. Def. Council, Inc. v. Evans, 232 F. Supp. 2d 1003, 1054-55 (N.D. Cal 2002).
[351] Makua v. Rumsfeld, 163 F. Supp. 1202, 1221 (D. Haw. 2001).
[352] *Winter*, 555 U.S. at 33, *remanded to* 560 F.3d 1027 (9th Cir. 2009).

On January 26, 2012 environmental plaintiffs filed suit seeking an injunction to halt similar exercises off the coasts of Washington, Oregon, and California.[353]

D. Before and After Winter: NEPA National Defense

Winter is not all that it appears to be for national defense vis-à-vis NEPA, despite its resonant notes on the importance of national defense.[354] At a casual glance, the decision certainly says much to benefit the national defense cause.[355] It thoroughly evaluated the equities, discussed deference to military judgment, and discussed the public interest as it relates to national defense.[356] Contrasted with decisions such as *Enewetak* or *Callaway, Winter* does seem remarkable; it stands as a firm refutation of the casual, almost undisciplined, manner with which lower courts viewed national defense interests, especially in the sonar cases. Some commentators have consequently concluded that *Winter v. NRDC* represents a blow to NEPA,[357] and even that an implied national defense exemption is on the horizon.[358]

Yet, as measured by the three dimensions outlined in Section III of this article—the political question doctrine, national defense exceptionalism, and injunction law—national defense activities have little reason to believe they'll be spared a NEPA injunction in the future. On the political question front, the Supreme Court made no direct mention of the doctrine.[359] The Court's recognition that lower courts failed to grant due deference to the Navy's position on the necessity of MFR sonar training and its impact to national security is better viewed as a statement on proper Administrative Procedure Act practice—not separation of powers talk.[360] The holding in *Winter* was not that courts owe any more deference to the military than any other Federal agency,[361] or that national defense concerns should prevail over NEPA procedural compliance.[362] In that sense, *Winter* is a far cry from the military

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[353] Complaint for Declaratory and Injunctive Relief, Intertribal Sinkyone Wilderness Council, et. al., v. National Marine Fisheries Service, No._____ (N.D. Cal. Jan. 26, 2012). http://earthjustice.org/sites/default/files/NW-Training-Range-Complaint.pdf. This case did not include the Navy as a defendant, but rather the NMFS, which, inter alia, permitted the Navy's MFS sonar activities. *Id*. NEPA was not cited as a basis for suit at this stage; instead, plaintiffs sued under the ESA, APA, and Marine Mammal Protection Act. *Id*. *See also Groups Sue Over Navy Sonar Use Off Northwest Coast,* Fox News.com, http://www.foxnews.com/us/2012/01/26/groups-sue-over-navy-sonar-use-off-northwest-coast/ (last visited Jan. 26, 2012).

[354] *See Winter,* 555 U.S. at 24-25, 33.

[355] *Id*.

[356] *Id*. at 22-35.

[357] *See Emily Donovan, Deferring to the Assertion of National Security: The Creation of a National Security Exemption Under the National Environmental Policy Act of 1969*, 17 Hastings W.-Nw. J. Envtl. L. & Pol'y 3, 11-12 (2011); William Krueger, *In the Navy: The Future Strength of Preliminary Injunctions Under NEPA in Light of NRDC v. Winter*, 10 N.C. J. L. & Tech. 423, 441-44 (2009).

[358] *See Donovan, supra* note 353, at 11-12; Krueger, *supra* note 353, at 441-44.

[359] *See Winter*, 555 U.S. 7.

[360] *Id*. at 28.

[361] *See generally id.* at 24.

[362] *See generally* Winter v. Natural Res. Def. Council, Inc., 555 U.S. 7 (2008).

exceptionalism that thundered at the Trident District Court,[363] and was strongly implied in *McQueary v. Laird*[364] and *Barcelo v. Brown.*[365]

Even with respect to injunction balancing tests under NEPA, *Winter* is but a marginal improvement to national defense interests. The Court's holding was extremely narrow, primarily directed at the Ninth Circuit's application of the irreparable harm prong of the four-part injunction test.[366] The Ninth Circuit held that for an injunction to issue, irreparable harm must be "possible" whereas the Supreme Court mandated that it be "likely."[367] It takes no great stretch of the imagination to see what little difference such word parsing will make in practice, regardless of the significant literal distinction between those two words.[368] Moreover no bright-line rules were laid down on those matters beyond what already was the law.[369]

Most importantly, while affirming the importance of national defense in the context of NEPA compliance, the Court failed to state *why* the public interest aligns with the national defense interest instead of the environmental interest.[370] Why is that alignment not even a "close question," as Justice Roberts posited?[371] The District Court in *Trident* stated its answer: there will be instances when one value is so fundamental to the perpetuation of the Republic that environmental planning falls subordinate to it; a judgment call will have to be made to select one value over another.[372] In *Winter* the Supreme Court effectively selected one value over another, but unlike *Trident*, declined to expressly say so.[373] Without any such express endorsement, national defense is doomed to replay *Enewetak, Malama Makua, Evans*, and the lower stages of *Winter*.[374]

V. Analysis

The preceding cases illustrate, at best, inconsistent application of injunction analyses and the political question doctrine.[375] At worst they illustrate no injunction analysis and total disregard of the political question doctrine.[376] A lasting solution to this problem calls for more than merely advocating that the policy preference

[363] Concerned About Trident, 400 F. Supp. 454, 484 (D.D.C. 1975).
[364] McQueary v. Laird, 449 F.2d 608, 612 (10th Cir. 1971).
[365] Barcelo v. Brown, 478 F. Supp. 646, 707-08 (D.P.R. 1979).
[366] *Winter*, 555 U.S. at 19-24.
[367] *Id*.
[368] Meriam Webster defines "possibility" as "being within the limits of ability, capacity, or realization." Meriam Webster Online, http://www.merriam-webster.com/dictionary/possible (last visited Feb. 10, 2012). By contrast, "likely" is defined as "having a high probability of being true; very probable." Meriam Webster Online, http://www.merriam-webster.com/dictionary/likely (last visited Feb. 10, 2012).
[369] *See generally Winter*, 555 U.S. 7.
[370] *Id*. at 25-33.
[371] *Id*. at 26.
[372] Concerned About Trident v. Schlesinger, 400 F. Supp. 454, 482-84 (D.D.C. 1975).
[373] *Winter*, 555 U.S. at 32-33.
[374] *See supra* Section IV.B.
[375] *See supra* Section IV.
[376] *See supra* Section IV.

that happened to be imposed by five Justices in *Winter* be universally applied. Over forty years of NEPA case law shows that when it collides with national defense, not all judges will agree with how the scales tipped in *Winter*; indeed, many judges will not agree that the factual scenario in *Winter* presents a Constitutional issue at all.[377] Consequently, the most manageable solution is one that removes the grounds for a disagreement over all the foregoing issues: amending NEPA to create a national defense exception. The remainder of this article will further expound on the necessity of this solution, the form this solution might take, and finally show that it is consistent with both the Constitutionally prescribed role for national defense and the statutorily prescribed role for NEPA.

A. The Basis for a National Defense Exemption

Entertaining political questions in the courtroom has consequences, both legal and practical. The argument for a national defense exemption to NEPA can be reduced to three bases: (1) the impracticality of hearing national defense political questions in the courtroom; (2) the real-world impact that results; and (3) that the very nature of injunction law causes the first two bases to blend in a manner that is particularly virulent to national defense.

1. Policy and Politics in the Courtroom

Trident, Weinberger v. Wisconsin, and *Callaway* amply illustrate the issues that trial courts are unequipped to resolve, as tactical, strategic, and foreign policy elements figure into national defense undertakings.[378] One District Court judge hearing a NEPA case with foreign policy implications remarked on the oddity of the testimony given in his courtroom, more akin to a "legislative hearing" than a trial.[379] As noted in *McQueary v. Laird*, national security does not blend well with evidentiary hearings.[380]

2. Real-World Adverse Impact to the National Defense

The consequences of judicial intervention in national defense can be more than academic: Army units[381] and naval fleets not training adequately or at all,[382]

[377] *See supra* Section IV.B.
[378] *See supra* Sections III.A, IV.B.
[379] Hirt v. Richardson, 127 F. Supp. 2d 833, 846 (W.D. Mich. 1999).
[380] McQueary v. Laird, 449 F.2d 608, 612 (10th Cir. 1971).
[381] *See* Makua v. Rumsfeld, 163 F. Supp. 2d. 1202, 1221 (D. Haw. 2001).
[382] *See generally* Winter v. Natural Res. Def. Council, 555 U.S. 7 (2008); David G. Savage & Kenneth R. Weiss, *Ruling Unlikely to Quell Sonar Storm*, Los Angeles Times (Nov. 13, 2008) http://articles.latimes.com/2008/nov/13/nation/na-scotus13 (describing the injunction measures as applied, among other topics).

nuclear tests jeopardized,[383] and diplomatic missions put at risk.[384] *Winter* is but the most recent and highest profile example of unwieldy judicial process outcomes: uniformed personnel devoted to being lookouts with binoculars and adjusting sonar decibel levels as whales approach and disperse—in the middle of a warfighting exercise.[385]

3. The Nature of Injunction Law Forces Judicial Policy-Making

The law surrounding injunctions guarantees unsatisfactory results because the third and fourth prongs of the injunction test in essence require the courts to make a policy choice that, in the national defense context at least, involves the constitutional separation of powers. Some courts have simply avoided the dilemma by ignoring the portion of the injunction test corresponding to the agency's equity and the public interest in national defense,[386] while others have plainly considered the former to be more important.[387] Either way, the NEPA injunction often decides a question that the Constitution and statute intended to be handled differently.

B. Answering the Objections to a National Defense Exemption

Having established the basis for the exemption, this article now turns to diffuse some of the likely objections: that (1) an exemption would unfairly bestow preferential treatment to national defense over other from other activities of the federal government; (2) undermine environmental protection, and (3) that national defense concerns could be met through narrower remedy than a full-scale exemption.

1. Exceptional Nature of National Defense: Why it is Different?

Aside from the detrimental impact of a NEPA injunction, what argument exists for treating the national defense apparatus differently from other Federal agencies? Examining the attitudes underlying the courts' refrain "that there is no 'national security' exemption from the requirements of [NEPA]"[388] is one place to

[383] *See* People of Enewetak v. Laird, 353 F. Supp. 811, 821 (D. Haw. 1973) (enjoining simulated atomic blasts).
[384] *See* Concerned About Trident v. Schlesinger, 400 F. Supp. 454, 465-66 (D.D.C. 1975) (finding substantial delays to the Trident submarine program would have undermined President Ford's ability to bargain with the Soviets).
[385] *Winter*, 555 U.S. at 7
[386] *See e.g.,* Enewetak, 353 F. Supp. at 813-14, 820; Natural Res. Def. Council, Inc. v. Callaway, 524 F.2d 79, 95 (2nd Cir. 1975).
[387] *See e.g.*, Natural Res. Def. Council, Inc. v. Winter, 518 F.3d 658, 678, 696, 702 (9th Cir. 2007), rev'd Winter v. Natural Res. Def. Council, Inc., 555 U.S. 7 (2008); Natural Res. Def. Council, Inc. v. Evans, 232 F. Supp. 2d. 1003, 1054 (N.D. Cal. 2002); Wisconsin v. Weinberger, 582 F. Supp 1489, 1495 (W.D. Wis. 1984).
[388] Romer v. Carlucci, 847 F.2d 445, 465 (8th Cir. 1988) (quoting Brief for Appellees at 13). *See e.g.*, No Gwen Alliance of Lane Cnty., Inc. v. Aldridge, 855 F.2d 1380, 1384 (9th Cir. 1988); Wisconsin v. Weinberger, 745 F.2d 412, 425 (7th Cir. 1984); Jackson Cnty., Mo. v. Jones, 571 F.2d 1004, 1007 (8th Cir. 1978); Concerned About Trident v. Rumsfeld, 555 F.2d 817, 823 (D.C. Cir. 1976).

start. The courts are of course correct that as a matter of law, there is no NEPA provision exempting the military. That is also the case for nearly every other Federal agency. And yet the courts never begin a NEPA legal decision in which the Forest Service, Federal Highway Administration, or Food and Drug Administration is a defendant by noting "there is no Federal Highway Exemption to NEPA . . . ." Why do the courts reserve their observation that there is no agency exemption to NEPA specifically for the national defense defendants?

The District Court in *Trident* offered one explanation: the courts pause to mention that there is no national defense exemption to NEPA precisely because it is so reasonable to assume there would be one. Because "agency decisions dealing with the national defense and survival will, of necessity, be made with a different view toward environmental considerations and, indeed, most other considerations, than will non-defense related agency decisions."[389] Quite simply, national defense is different, and its relationship to the environment is different. At the end of the day, "some changes, even major changes, in the environment may be required for the survival of the Republic."[390]

This difference is confirmed by the numerous exceptions and exemptions afforded the national defense apparatus under other substantive—as opposed to procedural—environmental statutes.[391] More importantly, the mission of the military services, unlike most other Federal agencies, is enshrined in the Constitution.[392] The military, as a matter of routine operation, intentionally directs its personnel to kill people and destroy property.[393] The military is the only Federal department with its own criminal justice system outside of the Article III system[394] that can impose binding criminal penalties on its personnel (including the death penalty).[395] It is the only Federal department that can systematically deprive its personnel of the Bill of Rights.[396] Such features, alien to most civilian citizens, are in place, and can only be justified, because of a unique purpose and mission that few other Federal agencies can directly claim: securing, at the ultimate cost if necessary, a peace, prosperity,

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[389] Concerned About Trident v. Schlesinger, 400 F. Supp. 454, 484 (citing Nielson v. Seaborg, 348 F. Supp. 1369, 1372 (D. Utah 1972) (notes omitted)).

[390] *Id*.

[391] *See generally* E.G. Willard et. al., *Environmental Law and National Security: Can Existing Exemptions in Environmental Laws Preserve DOD Training and Operational Prerogatives Without New Legislation?* 54 A.F. L. Rev. 65 (2004).

[392] U.S. Const. art. I, § 8, cl. 12, 13.

[393] The Central Intelligence Agency would be one of the few other examples.

[394] U.S. Const. art. I, § 8, cl. 14 (authorizing Congress to regulate the armed forces); 10 U.S.C. § 836 (2010) (granting the President the authority to create rules for courts-martial). *But cf.*, U.S. Const. art. III (creating and prescribing the terms of the U.S. judicial system).

[395] 10 U.S.C. § 918 (2010) (Article 118, "Murder" of the Uniform Code of Military Justice, authorizing the death penalty under certain circumstances).

[396] *See e.g.*, 10 U.S.C. § 888 (2010) (Article 88, UCMJ, prohibiting and punishing "contemptuous words against the President, the Vice President, Congress, the Secretary of Defense . . ." and others); U.S. Dep't of Defense Instruction 1325.06, Handling Dissent and Protest Activities Among Members of the Armed Forces 3.b. (Nov. 27, 2009) (curtailing freedom of expression to the extent it is inconsistent with good order and discipline and national security). A change was incorporated into the DOD Instruction on 22 Feb. 2012. http://www.dtic.mil/whs/directives/corres/pdf/132506p.pdf.

and stability that allows the Republic—and all of its Federal agencies—to exist. Environmental awareness is unlikely to flourish in the absence of that stability.

2. No Exception to Environmental Protection

One obvious argument against a national defense NEPA exemption is that national defense agencies would no longer have an incentive to engage in the environmental planning that is the heart of NEPA. That objection, however, is not persuasive in light of the influence and organizational vigor wielded by environmental interest groups—a vigor brought to bear in many of the cases discussed in this article.[397] The time and resources currently applied by organizations such as Natural Resources Defense Council and Sierra Club could easily be re-routed from litigation to public relations and political pressure (both of which they already conduct); there is an eager and receptive audience in Washington for those efforts. Forty years ago at NEPA's inception in an era when information traveled comparatively slowly, and was hard to obtain, flagrant defiance of NEPA by Federal agencies could evade public scrutiny. Today it cannot evade scrutiny, and few in the public would want it to.

Congress can easily exercise the oversight now accomplished by the judiciary, and quite possibly to greater effect. A routine cycle of legislative hearings, with its attendant press coverage, would shine a far brighter spotlight on the merits and demerits of national defense projects posing risks to the environment. One commentator—who stops short of arguing for an exemption—specifically suggests periodic reviews of national defense NEPA compliance through a new subcommittee of the House and Senate Armed Services Committees.[398] Under that option, the current incentive to comply provided by the threat of litigation and injunctions would instead take the form of service commanders having to explain themselves before a congressional inquiry.[399]

It must also be noted that NEPA, while serving as the "basic national charter for protection of the environment,"[400] is not the nation's sole environmental law.[401] Sovereign immunity has been waived on nearly all of the substantive environmental

[397] Note that the lead "named" plaintiff in two of the cases in this Article is Winter v. Natural Res. Def. Council, Inc., 555 U.S. 7 (2008) and Natural Res. Def. Council, Inc. v. Evans, 364 F. Supp. 2d 1083 (N.D. Cal. 2003), is the Natural Resources Defense Council, the website for which describes itself as "the nation's most effective environmental action group, combining the grassroots power of 1.3 million members and online activists with the courtroom clout and experience of more than 350 lawyers, scientists, and other professionals." Natural Resources Defense Council: The Earth's Best Defense, *Who We Are,* http://www.nrdc.org/about/ (last visited Feb. 10, 2012).

[398] *See* Tracey Colton Green, *Providing for the Common Defense Versus Promoting the General Welfare: The Conflicts Between National Security and National Environmental Policy*, 6 S.C. Envtl L.J. 137 (1997) (suggesting creating a subcommittee as part of the House and Senate Armed Services Committees to exercise oversight of military NEPA compliance).

[399] *Id*.

[400] 40 C.F.R. § 1500.1(a) (2011).

[401] *See, e.g.*, 42 U.S.C. § 6961 (2010) (Resource Conservation and Recovery Act waiver of Federal sovereign immunity); 42 U.S.C. § 7418 (2010) (waiver of Federal sovereign immunity for the Clean Air Act); 33 U.S.C. § 1323 (2010) (waiver of Federal sovereign immunity for the Clean Water Act); 42 U.S.C. § 300j-6 (2010) (waiver of Federal sovereign immunity for the Safe Drinking Water Act).

statutes,[402] which leaves national defense agencies and activities subject to the vast array of substantive federal (and many state) environmental laws—the laws that actually limit pollution.[403] The military obtains air emissions permits, discharge permits, and hazardous waste permits, and a national defense exemption to NEPA will not change that.

In light of the calamitous consequences that often accompany a NEPA injunction, and the exceptional nature of national defense, the public interest trade-off for exempting national defense from a procedural statute that does not directly address pollution is relatively minor. If any piece of the environmental framework were to be sacrificed for the benefit of national security, a procedural statute like NEPA is an obvious candidate.

3. A Partial National Defense Exemption is Unworkable

Perhaps the most compelling argument against a national defense exemption to NEPA is that it overreaches: not all actions undertaken by, for instance, the Army or the Air Force directly impact national defense. The military builds commissaries, housing, and recreation areas. What plausible rationale exists for exempting those activities from NEPA? The answer is that from a judicial manageability standpoint, it is extremely difficult to separate mission support from mission operations in a national defense context. A paucity of available housing or facilities can undermine a mission just as powerfully as an injunction directly prohibiting the mission;[404] the only difference is that the former logistically inhibits the mission, whereas in the latter case a judge inhibits the mission. One easily slides down the slippery slope to the training missions at stake in *Barcelo v. Brown* or *Malama Makua*: in both instances courts considered the national defense interest at stake, and drew radically different conclusions as to their immediate link the agency's constitutional imperative.[405]

It is unlikely that any multi-part test could have the precision and flexibility necessary to ensure that pressing national defense projects and activities are not enjoined under the guise of merely being a fungible appendage to the national defense. As a result, the cleanest and most practical solution is an absolute exemption. By

[402] *See, e.g.*, 42 U.S.C. § 6961 (2010) (Resource Conservation and Recovery Act waiver of Federal sovereign immunity); 42 U.S.C. § 7418 (2010) (waiver of Federal sovereign immunity for the Clean Air Act); 33 U.S.C. § 1323 (2010) (waiver of Federal sovereign immunity for the Clean Water Act); 42 U.S.C. § 300j-6 (2010) (waiver of Federal sovereign immunity for the Safe Drinking Water Act).

[403] *See, e.g.*, 42 U.S.C. § 6961 (2010) (Resource Conservation and Recovery Act waiver of Federal sovereign immunity); 42 U.S.C. § 7418 (2010) (waiver of Federal sovereign immunity for the Clean Air Act); 33 U.S.C. § 1323 (2010) (waiver of Federal sovereign immunity for the Clean Water Act); 42 U.S.C. § 300j-6 (2010) (waiver of Federal sovereign immunity for the Safe Drinking Water Act).

[404] *See* Protect Key West, Inc. v. Cheney, 795 F. Supp. 1552 (S.D. Fla. 1992) (enjoining the Navy's construction of a residential development undertaken to remedy a chronic shortage of affordable housing for personnel assigned to Naval Air Station Key West on the grounds that the EA failed to adequately assess stormwater run-off, flooding, aquifer contamination, and aesthetic resources to include trees).

[405] *Compare* Barcelo v. Brown 478 F. Supp. 646, 707 (D.P.R. 1979) *with* Makua v. Rumsfeld 163 F. Supp. 2d. 1202, 1222 (D. Haw. 2001).

extension, this same logic would suggest that the best suited candidates for the exemption, such as the military services, receive the exemption *in toto*, not for certain piecemeal activities.[406] Those scenarios truly not deserving of the exemption because of their remote relationship to national defense will, as explained above, be brought to light, and can then be subjected to political pressure for rectification.

VI. Conclusion

"The public interest in conducting training exercises with active sonar under realistic conditions *plainly* outweighs the interests advanced by the plaintiffs" (emphasis added).[407] At least two Supreme Court Justices disagreed[408] with Chief Justice Roberts' characterization in *Winter*, and, arguably, four of them disagreed (depending on how the partial concurrence/dissent by Justice Breyer, partially joined by Justice Stevens, is construed).[409] Certainly the Ninth Circuit disagreed,[410] and that highlights a significant rub, namely, that the drastic remedy of an injunction appears to have no predictability whatsoever. In one nuclear detonation case, *Committee for Nuclear Responsibility v. Schlesinger*, the test goes forward;[411] another two years later, *Enewetak*, a different test is enjoined.[412] In one training case, *Barcelo v. Brown*, military training exercises are allowed to proceed,[413] whereas in others, *Evans* and *Winter* (until the Supreme Court phase) they are enjoined.[414]

Such uncertainty is a natural outcome of the process unfolding in all these cases: a judicial decision to grant an injunction under NEPA against a national defense activity is—by the very nature of the four part injunction test—a policy decision; and people (and judges) disagree about what constitutes good public policy. Policy decisions lie with the legislative and executive branches, and in the case of national defense, the policy decision has already been settled by statute and the Constitution—both of which provide for a national defense establishment that, in protecting the Republic, allows statutes like NEPA to exist in the first place.

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[406] By contrast, non-military departments such as the CIA or Homeland Security may be a better fit for an activity-specific form of the exemption.
[407] Winter v. Natural Res. Def. Council, 555 U.S. 7, 26 (2008).
[408] *Id*. at 43 (Ginsburg, J. and Souter, J. dissenting).
[409] *Id*. at 34 (Breyer, J. and Stevens, J. concurring in part and dissenting in part).
[410] Winter v. Natural Res. Def. Council, Inc., 518 F.3d 658 (9th Cir. 2008).
[411] Comm. For Nuclear Responsibility, 404 U.S. 917 (1971).
[412] People of Enewetak v. Laird, 353 F. Supp. 811 (D. Haw. 1973).
[413] Barcelo v. Brown 478 F. Supp. 646, 707 (D.P.R. 1979).
[414] Natural Res. Def. Council, Inc. v. Evans, 279 F. Supp. 2d 1129 (N.D. Cal 2003); Natural Res. Def. Council, Inc. v. Winter, 518 F.3d 658 (9th Cir. 2008).

HOW THE LEAD SYSTEMS INTEGRATOR EXPERIENCE SHOULD ENHANCE EFFORTS TO REBUILD THE DEFENSE ACQUISITION WORKFORCE

Major Daniel J. Watson[*]

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I. Introduction

At the moment, in large part due to its ability to purchase and deploy cutting edge technology, the United States military is inarguably the world's most dominant fighting force. This current status, however, is not an immutable characteristic or permanent condition.[1] The continued development, production, and acquisition of major weapons systems[2] is a critical component to ensuring the national security of the United States. It is the responsibility of our political leadership, Department of Defense (DOD) personnel, and Department of Homeland Security (DHS) personnel to seek continual improvements in the process of acquiring the technologies that ensure our military superpower status.[3] In 2010, former Secretary of Defense Robert Gates stated that "[r]eforming how and what we buy continues to be an urgent priority."[4] The most effective way to achieve this goal is to rebuild the defense acquisition workforce, so DOD and DHS can perform their essential roles in the acquisition process internally. In order to accomplish this restoration, the defense acquisition workforce must be strategically rebuilt.

The DOD major weapon systems acquisition process[5] has always carried inherent risks, particularly in relation to the development time, costs, and failure to meet expectations.[6] Acquiring major weapon systems has never been an easy process, but the difficulty is increasing for a variety of reasons.[7] Perhaps the biggest

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[1] *See generally* Dep't of Def., Quadrennial Def. Rev. Rep. (Feb. 2010).

[2] 10 U.S.C. § 2430 defines "major defense acquisition program" as:

> (a) In this chapter [10 USCS §§ 2430 et seq.], the term "major defense acquisition program" means a Department of Defense acquisition program that is not a highly sensitive classified program (as determined by the Secretary of Defense) and—
> (1) that is designated by the Secretary of Defense as a major defense acquisition program; or
> (2) that is estimated by the Secretary of Defense to require an eventual total expenditure for research, development, test, and evaluation of more than $300,000,000 (based on fiscal year 1990 constant dollars) or an eventual total expenditure for procurement, including all planned increments or spirals, of more than $1,800,000,000 (based on fiscal year 1990 constant dollars). 10 U.S.C. § 2430 (2011).

[3] In this article, all general references to the United States military include the Army, Navy, Air Force, Marines, and Coast Guard, which fall within the Department of Homeland Security (DHS). Additionally, any debate between members of President Obama's administration and members of Congress as to the types of weapon systems that are necessary and the best way of acquiring those weapon systems is not the subject of this article. The focus here concerns the people necessary to acquire whichever systems are selected by military leadership and/or funded by Congress.

[4] Robert M. Gates, Sec'y of Def., U.S. Dept. of Def., Department of Defense News Briefing with Secretary Gates and Admiral Mullen from the Pentagon (Feb. 1, 2010), available at http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4549. Secretary Gates further stated, "[T]he department and the nation can no longer afford the quixotic pursuit of high-tech perfection that incurs unacceptable cost and risk, nor can the department afford to chase requirements that shift or continue to increase throughout a program's lifecycle." *Id.*

[5] All references to DOD major weapons systems acquisition process are equally applicable to DHS.

[6] U.S. Gov't Accountability Office, GAO-10-374T, Defense Acquisitions: Managing Risk to Achieve Better Outcomes 1 (2010).

[7] *See generally* Def. Sci. Board Task Force on Def. Indus. Structure for Transformation, Dep't of Def., Creating an Effective National Security Base for the 21st Century: An Action Plan to

obstacle in the acquisition process is the lack of an adequate acquisition workforce[8] within either DOD or DHS. The best regime of laws, rules, regulations, and policies are inconsequential if there are not enough people, or the right people, to implement them.[9] In recent years, the lack of an internal workforce, particularly in the areas of program management and systems engineering, has led the military to seek the assistance of contractors to fill the void.

Congress has consistently targeted the DOD major weapons acquisition process for reform.[10] Most Congressional reform efforts have been aimed at what could be categorized as the symptoms of the problem. These include, but are not limited to, late deliveries, cost overruns, degraded performance, and organizational conflicts of interest (OCIs).[11] Unfortunately, Congress has until recently mostly ignored what can be accurately described as the root cause of the problem, which is the lack of a sufficient defense acquisition workforce.[12] This deficiency has only served to compound the difficulty of procuring major weapon systems. As recently

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Address the Coming Crisis (2008), *available at* http://www.acq.osd.mil/dsb/reports/ADA485198.pdf; *see also* Mario Loyola, Budget Defense, Nat'l Rev., May 4, 2009, at 28-29 (author states procurement costs are also rising, because of increased consolidation and reduced competitiveness in the military-industrial base); Michael E. O'Hanlon, *Obama's Defense Budget Gap*, Wash. Post, June 10, 2009, at A19 (author states the administration is adopting a policy of zero real growth in the base budget and procurement is a chief area in which Defense Secretary Robert Gates has sought savings).

[8] 10 U.S.C. § 1721(b) defines acquisition workforce as: "Required Positions – In designating the positions under subsection (a), the Secretary shall include, at a minimum, all acquisition-related positions in the following areas:

(1) Program management.
(2) Systems planning, research, development, engineering, and testing.
(3) Procurement, including contracting.
(4) Industrial property management.
(5) Logistics.
(6) Quality control and assurance.
(7) Manufacturing and production.
(8) Business, cost estimating, financial management, and auditing.
(9) Education, training, and career development.
(10) Construction.
(11) Joint development and production with other government agencies and foreign countries." 10 U.S.C. § 1721(b) (2011).

[9] Acquisition Advisory Panel, Report of the Acquisition Advisory Panel to the Office of Federal Procurement Policy and the United States Congress 343 (2007) (citing Nat'l Performance Review, Reinventing Federal Procurement, PROC02 (1993)). The Acquisition Advisory Panel was authorized by Section 1423 of the Services Acquisition Reform Act of 2003, which was enacted as part of the National Defense Authorization Act for Fiscal Year 2004. *See* 42 U.S.C. § 428(a).

[10] The most recent example is the Weapon Systems Acquisition Reform Act of 2009. Pub. L. No. 111-23, 123 Stat. 1704 (2009) (codified as amended in scattered sections of 10 U.S.C.).

[11] U.S. Gov't Accountability Office, GAO-09-271, High Risk Series—An Update 65 (2009).

[12] *See* Steven L. Schooner & Daniel S. Greenspahn, *Too Dependent on Contractors? Minimum Standards for Responsible Governance*, J. Cont. Mgmt. 9 (Summer 2008); *Is DHS Too Dependent on Contractors to Do the Government's Work?: Hearing Before the S. Comm. on Homeland Sec. & Gov't Aff.,* 110th Cong. (2007) [hereinafter *Is DHS Too Dependent on Contractors*] (statement of Steven L. Schooner, Co-Dir. of Gov't Procurement Law Program, George Washington Univ. Law School). Professor Schooner comments, "Ultimately, I find the root cause of the problems (concerning DHS's acquisition difficulties) to derive from resource deficiencies and, more specifically, an inadequate acquisition workforce." *Id.*

emphasized by the Government Accountability Office (GAO), "no reform will be successful without having the right people with the right skills to carry out and manage an acquisition program throughout the entire acquisition process."[13]

Over the past decade, due in large part to the terrorist attacks on September 11, 2001, as well as the subsequent conflicts in Afghanistan and Iraq, the DOD has experienced a serious escalation in its overall procurement requirements.[14] The DOD acquisition workforce, however, was not adequately equipped to handle the increased procurement demands. During the 1990's, the federal government made major cuts to personnel within the acquisition workforce throughout all agencies, including the DOD and each of the military branches.[15] From Fiscal Year 1990 to Fiscal Year 1999, the DOD acquisition workforce dropped from 460,516 to 230,566.[16] On top of the direct personnel cuts, there was insufficient new hiring and no succession planning leading to what is best described as a "generational void" in the acquisition workforce.[17]

The lack of experienced and qualified acquisition professionals has had, and continues to have, a profound impact on all levels of military procurement.[18] One could argue that nowhere has this impact been more noticed than in the procurement of major weapons systems. The decimation of the military acquisition workforce directly contributed to the use of the lead systems integrator (LSI) model for major weapons systems procurement.[19] LSIs are "a contractor, or team of contractors, hired by the federal government to execute a large, complex, defense-related acquisition program, particularly a so-called system-of-systems acquisition program."[20]

Over the past decade, the LSI concept has gone from a panacea within the military procurement community to the equivalent of a four-letter word on Capitol Hill, specifically as it relates to the development and production of major weapons systems.[21] Members of Congress were outraged to learn that private contractors wielded vast powers over certain government programs, which included providing

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[13] U.S. Gov't Accountability Office, *supra* note 6, at 1.

[14] Def. Sci. Board Task Force on Def. Indus. Structure for Transformation, *supra* note 7, at 43. Figure 7 provides a clear picture of how the procurement budgets—of both services and major systems—increased, even as the acquisition workforce declined. Def. Sci. Board Task Force on Def. Indus. Structure for Transformation, *supra* note 7, at 43.

[15] Acquisition Advisory Panel, *supra* note 9, at 365 (citing Office of the Inspector Gen., Dep't Of Def., D-2000-088, DOD Acquisition Workforce Reduction Trends and Impacts 4 (2000)).

[16] *Id.*

[17] *See* sources cited *supra* note 12.

[18] This includes acquisition planning through contract administration and is equally applicable to the procurement of services.

[19] 48 C.F.R. § 3052.209-75 defines the term "lead systems integrator" as:

> (A) a prime contractor under a contract for the development or production of a major system, if the prime contractor is not expected at the time of award to perform a substantial portion of the work on the system and the major subsystems; or
> (B) a prime contractor under a contract for the procurement of services the primary purpose of which is to perform acquisition functions closely associated with inherently governmental functions with respect to the development or production of a major system.

[20] Valerie Bailey Grasso, Cong. Research Serv., RS 22631, Defense Acquisition: Use of Lead System Integrators (LSIs)—Background, Oversight Issues, and Options for Congress 1 (2009).

[21] *See* discussion *infra* Part II.A.5, II.A.D.

their own oversight on major weapon systems acquisitions.[22] Congress subsequently prohibited the use of LSIs based primarily on the OCI potential presented during major acquisition programs.[23]

In all the outrage, however, Congress missed an extremely important point. The skills and expertise provided by LSIs were (and still are) desperately needed by the United States military, particularly in the area of major weapons system acquisitions. Resorting to LSIs was not a decision made in a vacuum. One can envision no scenario in which the various agencies that contracted for LSI services were seeking to advance the legal and political discussions as to what jobs are "inherently governmental"[24] or to push the envelope on OCIs.[25] While DOD has begun to restore some of the lost human capital in the public sector,[26] the real life military acquisition requirements did not wait for political leadership to catch on. Thus, this article focuses on the absence of qualified acquisition personnel, which is why the military services originally turned to LSIs for certain complex programs. LSIs were needed in order to make up for the DOD and DHS internal workforce deficits.[27]

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[22] 155 Cong. Rec. S5205, 5210 (daily ed. May 6, 2009) (statement of Sen. Levin). In addressing S.B. 454, which became the Weapon Systems Acquisition Reform Act of 2009 (Pub. L. No. 111-23), Senator Levin stated, "The bill will address the inherent conflict of interest we see in a number of programs today, when a contractor hired to give us an independent assessment of an acquisition program is participating in the development or construction side of the same program." *Id.* In reference to the same legislation Senator McCain stated, "[T]he relationship between those who are doing the contracting, other contractors, and the awardee is way too close today for us to get truly independent assessments and cost controls." 155 Cong. Rec. S5205, 5211 (daily ed. May 6, 2009) (statement of Sen. McCain).

[23] The National Defense Authorization Act (NDAA) of 2008 placed a prohibition on new LSIs effective October 1, 2010. National Defense Authorization Act of 2008, Pub. L. No. 110-181, § 802(a)(1), 122 Stat. 3 (2008). LSI prohibition applies to any entity that was not performing LSI functions in the acquisition of a major system prior to the date of enactment. *Id*.

[24] The Federal Acquisition Regulation (FAR) defines an inherently governmental function as follows: "[A]s a matter of policy, a function that is so intimately related to the public interest as to mandate performance by Government employees. This definition is a policy determination, not a legal determination. An inherently governmental function includes activities that require either the exercise of discretion in applying Government authority, or the making of value judgments in making decisions for the Government. Governmental functions normally fall into two categories: the act of governing, *i.e.*, the discretionary exercise of Government authority, and monetary transactions and entitlements." FAR 2.101 (2010).

[25] *See generally*, Daniel I. Gordon, *Organizational Conflicts of Interest: A Growing Integrity Challenge*, 35 Pub. Cont. L.J. 25 (2005); Keith R. Szeliga, *Conflict and Intrigue in Government Contracts: A Guide to Identifying and Mitigating Organizational Conflicts of Interest*, 35 Pub. Cont. L.J. 639, 640 (2006); Daniel A. Cantu, *Organization Conflicts of Interest/Edition IV*, 06-12 Briefing Papers (Nov 2006) (provides excellent overview and analysis of OCI issues). FAR 2.101 defines an OCI as a situation that arises when "because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the Government, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage." FAR 2.101 (2010).

[26] Defense Acquisition Workforce, 10 U.S.C. § 1705; *see also* Elise Castelli, *DOD to create 20,000 new jobs to do insourced work*, Federal Times, Feb. 1, 2010, http://www.federaltimes.com/article/20100201/acquisition02/2010307/1012/acqusition02.

[27] *See* discussion *infra* Part II.A.

This article explores the growth of LSIs in relation to DOD's and DHS's acquisition of major weapon systems. Namely, this article will attempt to explain why private contractor LSIs became necessary and what can be done to correct the situation while still advancing the state of the art in major weapons systems procurements. It will then explore the lack of strategic planning involved in the drastic cuts to the federal acquisition workforce that occurred during the 1990's. This article will also examine the massive expansion of procurement requirements post-September 11, 2001, and how, despite this increase in workload, the number of personnel within the acquisition workforce remained fairly constant.

The LSI functions performed by contractors directly resulted from the absence of in-house expertise. The lack of certain specialized, experienced acquisition personnel within the DOD and DHS directly resulted in the growth of the LSI concept. This article will examine two high profile examples of LSIs being used to assist the Army and the Coast Guard in the development of their premier procurement efforts: the Future Combat Systems (FCS) and Deepwater program. The problems associated with these efforts received a great deal of attention, which directly contributed to Congressional attempts to limit and eventually prohibit the use of LSIs.

Ultimately, LSIs were necessary to advance agency goals in the absence of in-house talent. Although the LSI experience generated its share of problems, and exposed the increased potential for OCIs, it was a symptom of a larger problem as opposed to simply being the problem. In this light, the article will also address the foreseeable difficulties of infusing the acquisition workforce with more personnel without strategic planning. Specifically, the military needs a concerted effort, not only to hire competent and professional program managers and systems engineers, but must also continue to train and develop these crucial pieces of the personnel puzzle. The private sector alone will not be able to save us from our shortfalls in these critical areas. While the economic and political environment may make this an uphill climb, the resolve of our political leadership will be necessary to institute the needed infusion of human capital.

II. Why Lead Systems Integrators Were Needed

A. Growth of LSIs

1. The Purge of the DOD Acquisition Workforce

In November of 1989, the Berlin Wall, perhaps the most recognizable symbol of the Cold War, began to crumble as a wave a freedom swept over Eastern Europe.[28] This event, at least symbolically, ushered the world into a new era. After

[28] Serge Schmemann, *Clamor in the East: East Germany Opens Frontier to the West for Migration or Travel; Thousands Cross*, N.Y. Times, Nov. 10, 1989, at A1, *available at* http://www.nytimes.com/1989/11/10/world/clamor-east-east-germany-opens-frontier-west-for-migration-travel-thousands.html.

the Soviet Union officially collapsed and the Cold War ended,[29] the United States was confronted with new national security requirements of the post-Cold War era. Military budgets were one area in which the impact of this change was perhaps most realized.[30]

By the time President Bill Clinton declared "the era of big government is over,"[31] the acquisition workforce was already in the midst of its decade long decline.[32] In hindsight, the drastic nature of the cuts is clearly evident. As stated above, the DOD acquisition workforce dropped from 460,516 to 230,566 from Fiscal Year 1990 to Fiscal Year 1999,[33] driven by Congressional annual statutory mandates.[34] To make matters worse, the cuts were made without any strategic plan.[35] According to one observer, the DOD's "[l]ack of strategic planning or attention to force shaping . . . has resulted in a civilian workforce unbalanced in age and experience."[36]

The cuts described above have, in the words of one DOD official, created "a crisis within DOD in terms of our people."[37] The major problem pertains to the mid-level experience employee pool. While the senior levels of the acquisition workforce (those who survived the purge) are "much more adequate," eventual retirements at this level are a major threat to "continuing adequacy of the workforce."[38] When

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[29] The precise date the Cold War ended has been the subject of much debate, which is not relevant for the purposes of this article. However, Congress established a Cold War certificate in Section 1084 of the fiscal 1998 National Defense Authorization Act, which designates the Cold War period as Sept. 2, 1945 to Dec. 26, 1991. *See* National Defense Authorization Act for Fiscal Year 1998, Pub. L. 105-85, § 1084, 111 Stat. 1629 (1997).

[30] Congressional Budget Office, NATO Burdensharing After Enlargement, at 2-4 (2001), *available at* http://www.cbo.gov/ftpdocs/29xx/doc2976/NATO.pdf. In 1985, at the height of the Cold War arms buildup, the United States spent 6.7 percent of its GDP on defense, compared with the European allies' 3.5 percent of their collective GDP spent on defense. By 1999, those figures declined to 3.0 percent and 2.3 percent, respectively. *Id.* at 3.

[31] William Jefferson Clinton, President of the United States, State of the Union Address at the United States Capitol (Jan. 23, 1996), *available at* http://clinton4.nara.gov/WH/New/other/sotu.html.

[32] Def. Sci. Board Task Force on Def. Indus. Structure for Transformation, *supra* note 7, at 43 (citing Office of the Inspector Gen., *supra* note 15; Office of the Inspector Gen., Dep't. Of Def., D-2006-073, Human Capital Report on the DOD Acquisition Workforce Count (2006)).

[33] Acquisition Advisory Panel, *supra* note 9, at 365 (citing Office of the Inspector Gen, *supra* note 15). The DOD IG Report also found that acquisition workforce reductions including maintenance depot civilian personnel for the Army, Navy, Air Force, and other DOD organizations, were about 60, 54, 36, and 31 percent, respectively. *Id.* at 4.

[34] Shelley Roberts Econom, *Confronting the Looming Crisis in the Federal Acquisition Workforce*, 35 Pub. Cont. L.J. 171, 190 n.116 (2006).

[35] Lawrence A. Skantze, *Acquisition's Lost Keystone: The Air Force should reactivate Air Force Systems Command*, Armed Forces Journal, Mar. 2010, *available at* http://armedforcesjournal.com/2010/03/4486317/. General Skantze writes "[t]he demise of Air Force Systems Command coincided with a drastic reduction in the overall Defense Department acquisition work force, from 240,000 in 1990 to 124,000 in 1999, as part of the Cold War peace dividend. The reduction was done fairly precipitously, without regard to skills retention and future needs." *Id.*

[36] Econom, *supra* note 34, at 190 (provides an excellent summary of the Congressional actions that occurred in the 1990's, which contributed to the slashing of the acquisition workforce).

[37] Acquisition Advisory Panel, *supra* note 9, at 363 (citing Shay Assad, Dep't of Def., Dir. of Def. Procurement and Acquisition Policy, Testimony before Acquisition Auth. Panel Pub. Meeting (June 14, 2006)).

[38] *Id.*

the senior level acquisition workforce personnel retire, "we don't have anybody to replace them."[39]

2. The Growth of Procurement Requirements Post 9/11

On September 11, 2001, the United States of America suffered the worst terrorist attack in our history. Before the sun set on that terrible day, it was clear the attacks had launched this nation into a new era. The attacks exposed numerous weaknesses within America's intelligence community and airline industry (particularly as it relates to airline security standards).[40] In addition to these highly publicized failures, the post 9/11 world exposed a paltry federal acquisition workforce that was ill equipped for the procurement explosion resulting from 9/11, as well as the later conflicts in Iraq and Afghanistan.

Overall federal procurement spending on contracts for Fiscal Year 2000 was $208.8 billion.[41] By Fiscal Year 2008, this amount had grown to over $527 billion.[42] This author estimates that the increase in federal procurement spending more than doubled during the past decade. Most of the increase was experienced in the procurement of goods and services,[43] but the number of major defense acquisition programs also increased.[44] Overall, federal procurement spending increased at more than five times the rate of inflation.[45] Meanwhile, Congressional investment in the personnel responsible for the increased procurement failed to keep pace.[46]

3. Military's Continued Need for Major Weapons Systems

Despite the depleted number of personnel in the acquisition workforce, the need to develop and produce major weapons systems has not decreased.[47] Between 2003 and 2009, the DOD's major defense acquisition programs grew from 77 to

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[39] *Id.*

[40] *See generally* The Nat'l Comm. on Terrorist Attacks (9/11 Commission), The 9/11 Commission Report: Final Report of the National Commission on Terrorist Attacks Upon the United States (2004), *available at* http://www.9-11commission.gov/report/911Report.pdf.

[41] *Welcome to FedSpending.Org,* Office Of Monetary Budget Watch, http://www.fedspending.org/ (last visited Dec. 26, 2011).

[42] *Id.*

[43] U.S. Gov't Accountability Office, GAO-09-342, Department of Defense: Additional Actions and Data Are Needed to Effectively Manage and Oversee DOD's Acquisition Workforce 1 (2009). The GAO states, "[S]ince fiscal year 2001, DOD's spending on goods and services more than doubled to $388 billion in fiscal year 2008 . . . . " *Id.*

[44] *Id.* at 4 (stating the number of major defense acquisition programs increased from seventy to ninety-five).

[45] Steven L. Schooner, *Federal Contracting and Acquisition*: *Progress, Challenges, and the Road Ahead,* in IBM Ctr. for the Bus. of Gov't, Framing a Public Management Research Agenda 30 (2010); Schooner & Greenspahn, *supra* note 12, at 12.

[46] Schooner & Greenspahn, *supra* note 12.

[47] U.S. Gov't Accountability Office, GAO-09-326SP, Defense Acquisitions: Assessments of Selected Weapon Programs 1 (2009). GAO reports, "[O]ver the next 5 years, DOD expects to invest about $329 billion (fiscal year 2009 dollars) on the development and procurement of major defense acquisition programs." *Id.*

96.[48] According to GAO, the total investment in research, development, test and evaluation (RDT&E) and procurement funds in this area is still about $1.6 trillion.[49] Because of all of the money allocated, the area of major weapon systems acquisition has been on GAO's high-risk list[50] since 1990.[51] The risks connected to this area generally concern cost overruns, the length of time it takes to acquire the systems, and failure to meet expectations.[52]

As stated above, the idea of using LSIs was not created in a vacuum. It is doubtful the military services that contracted with LSIs for the development of major weapons systems were seeking to expand the discussion of OCIs or what type of work is inherently governmental when they entered the contract. The military services were faced with vital procurement responsibilities that could not be ignored, particularly in the wake of 9/11, and the military engagements in Afghanistan and Iraq. LSIs were deemed necessary for the development and production of next-generation weapons programs.

4. Military Turns to LSIs to Solve the Problem

Facing internal manpower deficits, federal agencies began to seek external assistance as a means of compensating for their own technological deficits. The result was the LSI concept. As stated above, LSIs are "a contractor, or team of contractors, hired by the federal government to execute a large, complex, defense-related acquisition program, particularly a so-called system-of-systems acquisition program."[53] As noted by the Congressional Research Service, "LSIs can have broad responsibility for executing . . . programs, and may perform some or all of the following functions: requirements generation; technology development; source selection; construction or modification work; procurement of systems or components from, and management of, supplier firms; testing; validation; and administration."[54]

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[48] U.S. Gov't Accountability Office, GAO-09-663T at 2, Defense Acquisitions: Charting a Course for Lasting Reform (2009); U.S. Gov't Accountability Office, *supra* note 47, at 6.

[49] U.S. Gov't Accountability Office, *supra* note 47, at 6.

[50] U.S. Gov't Accountability Office, *supra* note 11, at 6. According to GAO, it has historically designated areas high-risk "because of traditional vulnerabilities related to their greater susceptibility to fraud, waste, abuse, and mismanagement." *Id.* As the high-risk program has evolved, GAO stated it has "increasingly used the high-risk designation to draw attention to areas associated with broad-based transformations needed to achieve greater economy, efficiency, effectiveness, accountability, and sustainability of selected key government programs and operations." *Id.*

[51] U.S. Gov't Accountability Office, GAO-09-501T, Defense Acquisitions: DOD Must Prioritize Its Weapon System Acquisitions and Balance Them with Available Resources 1 (2009).

[52] *Id.* GAO reports, "[T]he cumulative cost growth in DOD's portfolio of 95 major defense acquisition programs was $295 billion and the average delay in delivering . . . was 21 months." *Id*.

[53] Grasso, *supra* note 20, at 1.

[54] *Id.* Grasso further states, "Source selection means the solicitation, evaluation, and hiring of subcontractors to work under the supervision of the LSI. LSIs manage the procurement of all systems and components including the construction and modification of such systems; the testing of systems by validating their appropriateness and interoperability; and by performing functions usually undertaken by contracting or other acquisition officials." *Id.* at 1 n.2.

LSI advocates contend these arrangements, if used correctly, "can promote better technical innovation and overall system optimization."[55] Furthermore, the Army believed that, as it related to the Future Combat Systems (FCS) program, the LSI could serve multiple purposes for the FCS program.[56] The Army concluded the LSI could help it overcome the following challenges: (1) the cultural challenge of crossing traditional organizational lines; (2) the capability challenge related to shortage of skills in key areas (i.e., managing the development of a large information network); and (3) the capacity challenge to staff, manage, and synchronize multiple programs.[57]

Viewed favorably, LSIs represented a solution to the military's critical acquisition workforce deficits. If private-sector firms have more knowledge and expertise concerning rapidly developing commercial technologies, then it makes sense to use them to achieve the government's procurement program mission and objectives.[58] This view is particularly compelling in light of the federal government's admitted lack of the same. In addition to the Army's FCS and the Coast Guard's Deepwater,[59] which are discussed in greater detail below, other agencies also turned to LSIs. Additional examples include the DHS's Secure Border Initiative, the Air Force's Transformational Communication System, the Army's National Missile Defense Program, and NASA's partnership with United Space Alliance to manage the space shuttle program.[60] In retrospect, giving contractors substantial, if not complete, control over billion-dollar defense acquisition programs would prove not be the answer to military's workforce problem.

5. LSI "Solution" Becomes a Problem

As it turns out, the LSI "solution" exposed as many problems as it solved. The Acquisition Advisory Panel (AAP) found that "some agencies have contracted out substantive, mission critical functions, often without considering the potential adverse implications of such a step for the future."[61] It is not hard to see that once the LSI is the only entity in possession of the skill or technical expertise to manage a complex major systems program, then "the government no longer has the federal employees with the requisite skills to oversee and manage LSIs."[62]

In hindsight, it is easy to see how the "solution" to not having an experienced acquisition workforce personnel created new problems. As the AAP so aptly noted, "While in the short run such contracts may appear to be the best—or at least the simplest—way for an agency to implement a particular project or program, they can

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[55] *Id.* at 2.
[56] *See* U.S. Gov't Accountability Office, GAO-07-380, Defense Acquisitions: Role of Lead Systems Integrator on Future Combat Systems Program Poses Oversight Challenges 2 (2007).
[57] *Id.*
[58] Grasso, *supra* note 20, at 2.
[59] *See* discussion *infra* Part II.B.2.
[60] Robert Brodsky et. al., *Big Contracts, Big Problems*, Gov't Executive, Aug. 15, 2007, http://www.govexec.com/features/0807-15/0807-15s1.htm.
[61] Acquisition Advisory Panel, *supra* note 9, at 399.
[62] *Id.*

have serious adverse consequences in the long run."[63] The AAP correctly highlighted that "such consequences in the long run include the loss of institutional memory, the inability to be certain whether the contractor is properly performing the specified work at a proper price, and the inability to be sure that the decisions are being made in the public interest rather than the interest of contractors performing the work."[64]

The GAO would likely agree with the above assessment and has expressed concern that "DOD's reliance on contractors to perform roles that have in the past been performed by government employees" is very problematic.[65] GAO noted "[w]ithout the right-sized workforce, with the right skills, we believe this could place greater risk on the government for fraud, waste, and abuse."[66] As Scott Amey, General Counsel for the Project on Government Oversight (POGO), contends:

> [T]he government's use of [LSIs] . . . increases the risk for OCIs. For example, an LSI might favor its own or a subsidiary's proposals over those of other contractors. Further, if the LSI stands to benefit from the continuation of a program into production, it has a financial stake in the outcome that could compromise its decisions.[67]

The recent experiences of the Army with FCS and the Coast Guard with the Deepwater program[68] only serve to reinforce those concerns.

B. Two Most Significant LSI Experiences: Future Combat Systems and Deepwater

1. Army's Future Combat Systems

The Army's Future Combat Systems (FCS) program is perhaps the prime example of an agency turning to an LSI in order to compensate for its lack of internal capacity. The estimated $160 billion FCS program[69] was originally conceived in the 1990's as the Army had deferred the development of next generation weapons for a decade as it dealt with post-Cold War downsizing and procurement reductions.[70] The

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[63] *Id.*

[64] *Id.*

[65] U.S. Gov't Accountability Office, GAO-08-467SP, Defense Acquisitions: Assessments of Selected Weapon Programs 30 (2008).

[66] *Id.*

[67] Letter from Scott H. Amey, Gen. Counsel, Project on Gov't Oversight, to Laurieann Duarte, Gen. Services Admin. (July 18, 2008) (details the need for stronger contractor OCI regulations).

[68] *See* discussion *infra* Part II.B1-2; *see also* Don J. DeYoung, *Breaking the Yardstick: The Dangers of Market-based Governance*, Joint Force Quarterly, Oct. 1, 2009, at 5; *see also* William Mathews, *The End of LSIs*, Defense News, May 28, 2007, at 8.

[69] U.S. Gov't Accountability Office, GAO-05-442T, Defense Acquisitions: Future Combat Systems Challenges and Prospects for Success 1 (2005) (original cost estimate was $108 billion).

[70] Edward F. Bruner, Cong. Research Serv., RS 20787, Army Transformation and Modernization: Overview and Issues for Congress 1 (2001) (author lists notable exceptions to the deferred development of next generation weapon systems, which included research and development for a howitzer, the Crusader, and the Comanche helicopter); *see also* U.S. Gov't Accountability Office, GAO-08-638T, Defense Acquisitions: 2009 Review of Future Combat System Is Critical to

Army had traditionally approached modernization by simply performing upgrades to existing or "legacy" systems.[71]

As a result of operations in Kosovo, the Army, led by then-Chief of Staff Eric Shinseki set upon a course of "transformation" to develop a lighter, more rapidly deployable force.[72] As early as 1999, the Army made it a priority program to meet what it considered to be its future requirement.[73] The development of the FCS program was considered to be the cornerstone of the Army's transformation goal. FCS was going to be based on "new technologies that would equip very mobile formations with lethality and survivability equal or greater than that of present heavy units."[74] Conceptually, FCS was to consist of 18 manned and unmanned ground vehicles, air vehicles, sensors, and munitions that would be linked by an information network.[75]

A 2007 GAO report found the FCS program was "proposed as an integrated, system-of-systems (SOS) concept rather than having integration occur after systems are produced."[76] The basic goal of an SOS program is to acquire a collection of various technological platforms and link them all together via a computer network, which is designed to create a larger, integrated system.[77] The Army's game plan for FCS was to make a break from its large division centric structure of the past and transform itself into a more rapidly deployable, responsive, highly survivable fighting force.[78]

Due to the technical complexity and ambitious five and a half year development timeline of FCS,[79] the Army decided it needed an LSI "to assist in

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Program's Direction 10 (2008) (discusses the Army's $160.9 billion cost estimate).

[71] Bruner, *supra* note 70, at 2.

[72] Andrew Feickert & Nathan Jacob Lucas, Cong. Research Serv., RL 32888, Army Future Combat System (FCS) "Spinouts" and Ground Combat Vehicle (GCV): Background and Issues for Congress 1 (2009); Bruner, *supra* note 70, at 2. Bruner writes, "[I]n 1999, suggestions were made that the Army force sent to Albania in anticipation of action in Kosovo was too heavy for rapid air insertion, and once on the ground, the force was arguably too heavy for the unimproved roads and bridges there." Bruner, *supra* note 70, at 2.

[73] Bruner, *supra* note 70, at 2.

[74] *Id.*; *see also* Feickert & Lucas, *supra* note 72, at 1. Bruner's report indicates the Army intended for a key component of FCS to include a capability that could assume the role of an Abrams tank, but with the transportability and mobility of a Light Armored Vehicle (LAV). Bruner, *supra* note 70, at 2. However, it is important to note that the intended technologies were conceptual and still required actual development. *Id.*

[75] U.S. Gov't Accountability Office, *supra* note 69, at 4; *see also* Congressional Budget Office, The Army's Future Combat Systems Program and Alternatives, at 21-27 (2006) (CBO provides an extremely detailed description of the various vehicles comprising FCS). The number of vehicles contemplated for FCS was later reduced from eighteen to fourteen. U.S. Gov't Accountability Office, GAO-09-288, Defense Acquisitions: Decisions Needed to Shape Army's Combat Systems for the Future 1 (2009).

[76] U.S. Gov't Accountability Office, *supra* note 56, at 1.

[77] Grasso, *supra* note 20, at 1 n.1.

[78] U.S. Gov't Accountability Office, *supra* note 70, at 2-3.

[79] U.S. Gov't Accountability Office, *supra* note 56, at 7. The complexity of the FCS program, particularly within the five and a half year timeline, are highlighted by the major technical challenges set forth in GAO's report which included the design of fourteen major weapon systems or platforms that would have to designed and integrated simultaneously within strict size and weight limitations.

defining, developing, and integrating" the program.[80] Army leaders fundamentally believed it did not have the workforce to manage the development of FCS within its preferred timelines without external assistance.[81] Specifically, the Army believed the LSI approach was necessary because it lacked sufficient skilled program managers, scientists, and engineers.[82] In consideration of its own lack of in-house technical expertise, the Army turned to private industry in hopes of accomplishing what it determined it could not do on its own.

In March 2002, the Army selected the combined team of Boeing Company and Science Applications International Corporation (SAIC) to serve as the LSI for the concept and development phase of FCS.[83] In doing so, "the Army delegated much of its traditional acquisition function to the LSI team."[84] As GAO commented, "the Army contracted with an LSI for FCS because of the program's ambitious goals and the Army's belief that it did not have the capacity to manage the program."[85]

In May 2003, the FCS program entered into the system development and demonstration phase.[86] The Army began this phase without firm requirements or mature technologies.[87] Furthermore, seeking flexibility to negotiate the terms and conditions with Boeing, the Army entered into the FCS program on an Other Transaction Agreement (OTA) basis.[88] An OTA allows an agency to avoid compliance with procurement statutes, the FAR, as well as statutes or regulations applying to grants and cooperative agreements.[89] This arrangement removed most FAR-based contractual protections as the OTA used for FCS included several FAR and DFARS clauses.[90]

GAO also cited how at least forty-six technologies that are considered critical to achieving critical performance capabilities that would need to be matured and integrated into the system of systems. *Id.*

[80] U.S. Gov't Accountability Office, *supra* note 56, at 1.

[81] *Id.* at 2.

[82] Andrew Feickert, Cong. Research Serv., RL 32888, The Army's Future Combat System (FCS): Background and Issues for Congress 12, 26 (2005).

[83] Press Release, Dep't of Def., Def. Advanced Research Projects Agency, Army Announce Future Combat Systems Lead Systems Integrator (Mar. 7, 2002), *available at* http://www.defense.gov/releases/release.aspx?releaseid=3261.

[84] Steven L. Schooner & Christopher R. Yukins, *Emerging Policy and Practice Issues* 9-20, George Washington Univ. Law Sch. Pub. Law & Legal Theory Research Paper Series, Working Paper No. 193 (2005), *available at* http://ssrn.com/abstract=887355.

[85] U.S. Gov't Accountability Office, *supra* note 56, at 1.

[86] *Id.*; *see also* Schooner & Yukins, *supra* note 84, at 9-20.

[87] U.S. Gov't Accountability Office, *supra* note 70, at 4.

[88] U.S. Gov't Accountability Office, *supra* note 56, at 4 (all work performed from May 2003 through September 2005 is accounted for under the Other Transactions Authority (OTA); however, in response to Congressional concerns the Secretary of the Army directed the OTA be converted into a FAR-based contract); *see generally* L. Elaine Halchin, Cong. Research Serv., RL 34760, Other Transaction (OT) Authority (2008) (provides excellent summary of OTA).

[89] *See* John Cibinic, Jr. & Ralph C. Nash, Jr., Formation of Government Contracts 20 (3rd ed. 1998); *see also* Giles Smith et. al., Assessing the Use of "Other Transactions" Authority for Prototype Projects 2-3 (2002) (stating processes normally required by the Truth in Negotiations Act (TINA), the Competition in Contracting Act (CICA), the FAR, and DFARS need not be adhered to).

[90] U.S. Gov't Accountability Office, *supra* note 69, at 12.

The Army's rationale for doing so was to encourage innovation and provide flexibility in developing professional relationships (i.e., business, organizational, and technical) in order to achieve FCS goals.[91] While the OTA contained an OCI clause, it did not preclude the Boeing/SAIC LSI from competing for future subcontracts that may emerge.[92] This issue was eventually addressed by the subsequent FAR-based contract.[93]

As the GAO acknowledged, mature technologies at the start of development are key to sound business practices.[94] However, in 2003, only an estimated 40 percent of the critical technologies in the FCS program were near maturity.[95] The Army assumed it could overcome the technical risks[96] and achieve its goals by using the LSI to compensate for its own lack of technical expertise and workforce limitations.[97]

Unfortunately, the LSI solution contained the seeds of its own failure because the Army lacked the necessary personnel to provide, among other things, program management and systems engineering oversight of the LSI.[98] This put both the Army and the Boeing/SAIC LSI team at a disadvantage, especially in light of the potential financial rewards of the original contractual arrangement. When the Boeing/SAIC team entered the contract, the Army had yet to establish firm requirements matched to mature technologies and preliminary designs.[99] Thus, regardless of whether it was warranted or not, the Army and Boeing/SAIC both faced exposure to accusations of impropriety by virtue of the unique relationship at issue here.[100]

It is easy to understand the concern of Congress and others regarding the closeness of agency and contractor. In essence, the LSI was acting "like a partner to the Army, ensuring the design, development, and prototype implementations of FCS network and systems."[101] This admittedly complex relationship posed obvious program management and systems engineering oversight risks. For instance,

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[91] U.S. Gov't Accountability Office, *supra* note 56, at 4.
[92] *Id.* at 33, app. II.
[93] *Id.*
[94] *Id.* at 7.
[95] U.S Gov't Accountability Office, GAO-09-793T, Defense Acquisitions: Issues to be Considered for Army's Modernization of Combat Systems 5 (2009).
[96] U.S Gov't Accountability Office, *supra* note 56, at 7. In 2007, GAO noted some of major technical challenges faced by FCS included: "The 14 major weapon systems or platforms have to be designed and integrated simultaneously and within strict size and weight limitations. At least 46 technologies that are considered critical to achieving critical performance capabilities will need to be matured and integrated into the [SOS]. The development, demonstration, and production of as many as perhaps 170 complementary systems and associated programs have to be synchronized with FCS content and schedule. This will also involve developing about 100 network interfaces so the FCS can be interoperable with other Army and joint forces." *Id.*
[97] *Id.*
[98] Feickert, *supra* note 82, at 11-13 (author highlighted program management and systems engineering as problematic areas early on).
[99] U.S Gov't Accountability Office, *supra* note 95, at 5.
[100] Matthew Weigelt, *Army let contractor get too involved in program, IG says*, Federal Computer Week, Jan. 28, 2010, http://fcw.com/articles/2010/01/28/dod-saic-oci.aspx?sc_lang=en; *see also* Office of the Inspector Gen., *supra* note 15.
[101] U.S Gov't Accountability Office, *supra* note 95, at 7.

the partner-like relationship at least created the potential for the Army to become increasingly vested in the results of shared decisions and overly reliant on the LSI because of the disadvantage in terms of workforce and technical expertise.[102]

The preceding scenario becomes even more alarming if you accept the premise "the government cannot expect contractors to act in the best interest of the government as that could potentially conflict with their corporate financial interests."[103] This became a more pressing concern once SAIC was allowed to compete for the FCS contract after it had been involved in developing the contract requirements.[104] Ultimately, a DOD IG report determined the relationship between the Army and SAIC discussed above represented an improper OCI.[105] The IG recommended the FCS program office cease obtaining advisory and assistance services from SAIC, unless it obtained the necessary waivers.[106]

On April 6, 2009, Secretary Gates announced plans to "significantly restructure" the FCS program.[107] Secretary Gates recommended retaining and accelerating "the initial increment of the program to spin out technology enhancements to all combat brigades."[108] More importantly, Secretary Gates recommended cancelling the vehicle component of FCS, as well as a re-evaluating "the requirements, technology, and approach."[109] According to the Congressional Research Service, the manned ground vehicle program "was intended to field eight separate tracked combat vehicle variants . . . that would eventually replace combat vehicles such as the M-1 Abrams tank, the M-2 Bradley infantry fighting vehicle, and the M109 Paladin self-propelled artillery system."[110]

While calling for a "re-launch" of the Army's vehicle modernization program, Secretary Gates maintained he was "troubled by the terms of the current contract."[111] From his remarks, it appears he had lost faith in the $87 billion cost of the vehicle portion of the FCS program. Secretary Gates stated, "I believe we must

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[102] *Id.*

[103] *Id.*; *see also* David R. Graham, IDA Findings on the Use of the Lead Systems Integrator Structure for the Army's FCS Program: Statement for the Air-Ground Subcommittee of the Senate Armed Services Committee (2006), *available at* http://www.globalsecurity.org/military/library/congress/2006_hr/060301-graham.pdf.

[104] Office of the Inspector Gen., Dep't Of Def., D-2010-024, Contracted Advisory and Assistance Services for the U.S. Army Future Combat Systems (2009), *available at* http://www.dodig.mil/Audit/reports/fy10/10-024redacted.pdf.

[105] *Id.* The DOD IG concluded, "[C]ontracting officers and agencies have encountered difficulties implementing appropriate OCI avoidance and mitigation measures. The solicitation provisions and contract clauses that the Director of Operation Test and Evaluation (DOT&E), the Army FCS Program Office, and the Army test agencies used to prevent FCS development contractors from providing technical direction or supporting the operational test and evaluation of the system did not prevent the same contractors from supporting development. We also didn't identify any waivers to support and document decisions to use the same contractors when a conflict of interest was apparent." *Id.*

[106] *Id.*

[107] Press Release, Dep't of Def., Def. Budget Recommendation Statement of Sec'y of Defense Robert M. Gates (April 6, 2009), *available at* http://www.defense.gov/speeches/speech.aspx?speechid=1341.

[108] *Id.*

[109] *Id.*

[110] Feickert & Lucas, *supra* note 72, at 3.

[111] Gates, *supra* note 107.

have more confidence in the program strategy, requirements, and maturity of the technologies before proceeding further."[112] The original budget estimates for FCS were $92 billion; having those costs balloon to $234 billion[113] may have factored into the Secretary's decision to shelve major portions of the project.[114] Secretary Gates' recommendations to cancel the vehicle portion of FCS were endorsed by both the Senate and House Armed Services committees during debate of the Fiscal Year 2010 National Defense Authorization Act.[115]

Fortunately, not all news concerning FCS is negative. Despite the major cancellation, GAO noted, "[t]he Army's experience with FCS has been productive" and "worthy of emulation."[116] The difficulties FCS encountered in execution and oversight were apparent from the beginning, as opposed to unexpected discoveries made along the way.[117] Moreover, the Army conceded from the outset FCS would be a work in progress and all parties involved never expected FCS to fulfill all the Army's objectives.[118] The Army had planned to prioritize the projects it would pursue— and not pursue—within the monetary constraints imposed.[119] The creative shift of funds from unproven to proven technologies could prove a valuable lesson for the future.

Secretary Gates supported accelerating FCS's Warfighter Information Network development and fielding, along with proven FCS spin-off capabilities.[120] Ultimately, the remaining FCS technologies will be incorporated into the Army's successor program, known as the Army Brigade Combat Team Modernization (ABCTM).[121] In the end, the FCS program could be considered a worthy venture with a positive legacy. The Coast Guard's Deepwater experience will likely merit a different legacy.

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[112] *Id.*

[113] DeYoung, *supra* note 68, at 5.

[114] Christopher Drew, *Conflicting Priorities Endanger High-Tech Army Program*, N.Y. Times, July 19, 2009, at B1; Kris Osborn, *FCS is Dead; Programs Live On*, Defense News, May 18, 2009, http://www.defensenews.com/story.php?i=4094484.

[115] Feickert & Lucas, *supra* note 72, at 8; *see also* National Defense Authorization Act for Fiscal Year 2010, Pub. L. No. 111-84, 123 Stat. 2190 (2010).

[116] U.S Gov't Accountability Office, *supra* note 95, at 13.

[117] *Id.*

[118] *Addressing the Cost Growth of Major Department of Defense Weapon Systems: Hearing Before S. Comm. on Fed. Fin. Mgmt., Gov't Info., Fed. Services, & Int'l Sec. of the S. Comm. on Homeland Sec. & Gov't Affairs*, 110th Cong. (2008) [hereinafter *Addressing the Cost Growth of Major Department of Defense Weapon Systems*] (statement of Steven L. Schooner, Co-Dir. of Gov't Procurement Law Program, George Washington Univ. Law School).

[119] *Id.*

[120] Robert M. Gates, Sec'y of Def., U.S. Dept. of Def., Remarks at the Army War College (Apr. 16, 2009), *available at* http://www.defense.gov/transcripts/transcript.aspx?transcriptid=4404.

[121] Press Release, Dept. of Def., Future Combat System (FCS) Program Transitions to Army Brigade Combat Team Modernization, June 23, 2009, *available at* http://www.defense.gov/releases/release.aspx?releaseid=12763; *see also* Osborn, *supra* note 114.

2. Coast Guard's Deepwater Program

The United States Coast Guard's Deepwater Program (Deepwater) represents an even more problematic example of the human capital problem. Deepwater "refers to a collection of more than a dozen Coast Guard acquisition programs for replacing and modernizing the service's aging fleet of deepwater-capable ships and aircraft."[122] Deepwater was originally projected to cost $17 billion and included the modernization and replacement of over 90 cutters and 200 aircraft.[123] Regrettably, Deepwater may be better known for the scandal that engulfed the program, which is detailed further in this section.[124]

The post 9/11 United States Coast Guard, an agency within DHS,[125] is entrusted with the dual responsibilities of homeland security missions (e.g., port security and vessel escorts) and more traditional roles such as search and rescue.[126] In the performance of these missions, the Coast Guard requires deepwater-capable assets.[127] The various missions performed by the Coast Guard in the deepwater environment include such highly important matters as search and rescue, drug interdiction, and alien migrant interdiction.[128]

By the early 1990's, the Coast Guard had determined that many of its "assets were reaching the end of their usable lifespan and were not ideally suited to the modern Coast Guard's mission."[129] According to the Congressional Research Service, "the Coast Guard's legacy assets at the time included 93 aging cutters

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[122] Ronald O'Rourke, Cong. Research Serv., RL 33753, Coast Guard Deepwater Acquisition Programs: Background, Oversight Issues, and Options for Congress 1 (2008).

[123] U.S. Gov't Accountability Office, GAO-04-380, Contract Management: Coast Guard's Deepwater Program Needs Increased Attention to Management and Contractor Oversight 5 (2004).

[124] Allison Stanger, One Nation Under Contract: The Outsourcing of American Power and the Future of Foreign Policy 150 (2009) (refers to Deepwater as "the most glaring example of outsourcing without sufficient oversight."); Nick Baumann, *Coast Guard: Still in Deep Water?*, Mother Jones, July 29, 2009, http://motherjones.com/politics/2009/07/coast-guard-still-deepwater; Alice Lipowicz, *Deepwater in Trouble, Watchdog Says*, Washington Technology, May 22, 2009, http://washingtontechnology.com/articles/2009/05/22/deepwater-in-trouble-watchdog.

[125] Prior to the creation of DHS, the Coast Guard was an agency within the Department of Transportation. The Homeland Security Act of 2002, Pub. L. No. 107-296, § 888, 116 Stat. 2135 (2002).

[126] *See Missions: Read Today . . . Preparing for Tomorrow*, United States Coast Guard, http://www.uscg.mil/top/missions/ (last modified Aug. 15, 2011). By its own account the United States Coast Guard is a military, multi-mission, maritime service within the Department of Homeland Security and one of the nation's five armed services. *Id.* Its core roles are to protect the public, the environment, and U.S. economic and security interests in any maritime region in which those interests may be at risk, including international waters and America's coasts, ports, and inland waterways. *Id.*

[127] O'Rourke, *supra* note 122, at 2. Deepwater-capable refers generally to the Coast Guard's ability to perform missions performed "in waters more than 50 miles from shore." *Id.* at 1.

[128] *Id.* at 2. Additional deepwater missions noted include: "[F]isheries enforcement, marine pollution law enforcement, enforcement of lightering (i.e., at-sea cargo-transfer) zones, the International Ice Patrol in northern waters, overseas inspection of foreign vessels entering U.S. ports, overseas maritime intercept (sanctions-enforcement) operations, overseas port security and defense, overseas peacetime military engagement, and general defense operations in conjunction with the Navy." *Id.*

[129] Trevor L. Brown et. al., The Challenge of Contracting for Large Complex Projects: A Case Study of the Coast Guard's Deepwater Program 12 (2008).

and patrol boats and 207 aging aircraft."[130] The cost of maintaining and operating these assets, combined with their outdated technology and poor suitability for performing deepwater missions, led the Coast Guard to conclude a new acquisition effort was required.[131]

When the Coast Guard initially envisioned a desired replacement for its aging assets, it decided to conduct a system-of-systems acquisition[132] (similar to the Army's decision with FCS described above). To restate, GAO defines the SOS procurement strategy used here as "the set or arrangement of assets that results when independent assets are integrated into a larger system that delivers unique capabilities."[133] What this means in real terms is the Coast Guard sought assets that could "work in concert" and any new or upgraded asset must be able to "communicate and synchronize its capabilities with existing assets."[134]

According to a report conducted by the IBM Center for Business of Government (IBM Report), "[t]he Coast Guard's goal was to acquire a system of interoperable assets whose seamless communication and coordination would make the efficacy of the whole system greater than the sum of its parts."[135] This article will avoid debating the merits the decision to pursue a more complex SOS procurement versus the more traditional approach of buying and replacing classes of ships or aircraft through a series of individual acquisitions.[136] However, as one commentator noted from an interview with a former DHS inspector, the inspector believed "the DHS procurement office had 'so few people expert in contract procurement, the private sector was able to take [DHS] for a ride.'"[137]

On June 25, 2002, the Coast Guard formally awarded the Deepwater contract to a partnership consisting of Lockheed Martin and Northrop Grumman.[138] Awarded as an indefinite delivery, indefinite quantity (ID/IQ) contract,[139] the partnership between Lockheed Martin and Northrop Grumman was known as Integrated Coast Guard Systems (ICGS), and was selected by the Coast Guard to serve as the LSI for the various Deepwater Acquisition Programs.[140] As the largest program in the

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[130] O'Rourke, *supra* note 122, at 2.

[131] *Id.*

[132] U.S. Gov't Accountability Office, GAO-09-682, Coast Guard: As Deepwater Systems Integrator, Coast Guard is Reassessing Costs and Capabilities but Lags in Applying Its Disciplined Acquisition Approach 3 (2009).

[133] *Id.*

[134] Brown et. al., *supra* note 129, at 12.

[135] *Id.*

[136] U.S. Gov't Accountability Office, *supra* note 123, at 6.

[137] Stanger, *supra* note 124, at 150 (citing Sarah Posner, *Security for Sale,* 17 American Prospect, no. 1 (2006), *available at* http://prospect.org/article/security-sale).

[138] Ronald O'Rourke, Cong. Research Serv., RS 21019, Coast Guard Deepwater Program: Background and Issues for Congress 2 (2006).

[139] Brown et. al., *supra* note 129, at 27-28. The contract's precise structure actually consisted of three tiers: the performance-based ID/IQ, individual task orders, and Integrated project teams (IPTs). Brown et. al., *supra* note 129, at 27-28.

[140] U.S. Gov't Accountability Office, *supra* note 123, at 1.

Coast Guard's history, Deepwater was originally estimated to span thirty years[141] at a cost of $17 billion,[142] but this eventually ballooned to over $24 billion.[143]

The GAO was concerned about this program from the outset and was one of the first to criticize the program.[144] In 2004, the GAO opined the Coast Guard had "embarked on a major transformational effort using an acquisition strategy that allows a system integrator to identify the Deepwater assets and to manage the acquisition process."[145] The GAO was concerned the Coast Guard's strategy carried "inherent risks that must be mitigated by effective government oversight of the contractor."[146] However, because the Coast Guard lacked the necessary acquisition personnel to provide oversight it was destined to fail in meeting this critical responsibility.

A couple of factors fueled this failure. First, the Deepwater contract was a performance-based acquisition that put a priority on results as opposed to processes.[147] Additionally, as stated above the Coast Guard recognized that it did not have the personnel with the experience and depth to manage the acquisition, hence the reason it contracted with ICGS to be the LSI in the first place.[148] This latter point is a potential DHS-wide problem.[149] The former Chief Procurement Officer for DHS has described the DHS acquisition workforce resources as having been "gutted."[150] In fact, DHS's extensive institutional reliance on contractors (from inception to the present day) to carry out critical missions has been the subject of Congressional scrutiny.[151]

For Deepwater, this management experience deficit meant the Coast Guard would specify the outcomes it sought to achieve, but gave ICGS complete

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[141] Represents an original five-year contract with five separate option periods (each option contained five-year periods). *Id.*

[142] *Id.*

[143] Stanger, *supra* note 124, at 150.

[144] U.S. Gov't Accountability Office, GAO-06-546, Coast Guard: Changes to Deepwater Plan Appear Sound, and Program Management Has Improved, but Continued Monitoring Is Warranted 2 (2006) (stating that "From the outset, [the GAO has] expressed concern about the risks involved with the Coast Guard's acquisition strategy, which involves relying on a prime contractor (or system integrator) to identify the assets needed and then using tiers of subcontractors to design and build the actual assets."); *see also* U.S. Gov't Accountability Office *supra* note 123; U.S. Gov't Accountability Office, GAO-01-564, Coast Guard: Progress Being Made on Deepwater Project, but Risks Remain (2001).

[145] U.S. Gov't Accountability Office, *supra* note 123, at 26.

[146] *Id.*

[147] Stanger, *supra* note 124, at 151; U.S. Gov't Accountability Office, *supra* note 123, at 2.

[148] U.S. Gov't Accountability Office, *supra* note 132, at 1.

[149] *See generally* Schooner & Greenspahn, *supra* note 12.

[150] Acquisition Advisory Panel, *supra* note 9, at 364 n.59 (citing Testimony of Greg Rothwell, DHS, AAP Pub. Meeting (Mar. 17, 2006) Tr. at 215).

[151] Letter from Joseph I. Lieberman, Senator, U.S. Senate, & Susan M. Collins, Senator, U.S. Senate, to Janet Napolitano, Sec'y, Dep't of Homeland Sec. (Feb. 23, 2010), *available at* http://hsgac.senate.gov/public/index.cfm?FuseAction=Press.MajorityNews&ContentRecord_id=01a96af1-5056-8059-7687-4190c852b289. Senators Lieberman and Collins lament the fact DHS contractors (over 200,000) outnumber civilian employees (188,000), stating, "[T]he sheer number of DHS contractors currently on board again raises the question of whether DHS itself is in charge of its programs and policies, or whether it inappropriately has ceded core decisions to its contractors." *Id.*

responsibility for identifying and delivering the assets to achieve the desired outcomes.152 Therefore, the resulting situation had ICGS armed with overall management of the project, which provided them with oversight of how federal funds would be spent and assessment of the impact.153 As GAO noted, "ICGS's role [as LSI] included managing requirements, determining how assets would be acquired, defining how assets would be employed by Coast Guard users in an operational setting, and exercising technical authority over all asset design and configuration."154 In effect, "ICGS was assigned the task of choosing who should perform the work as well as the task of evaluating itself."155 As ICGS, the prime contractor, was a partnership between Lockheed Martin and Northrop Grumman, the "scandal" was cemented when both companies were chosen by ICGS to be the primary subcontractors.[156]

The foregoing decision looks particularly scandalous when considered in connection with the CBS *60 Minutes* program dedicated to Deepwater,[157] which stands in contrast to the IBM Report's more balanced examination of the positive, negative and mixed returns of Deepwater's early performance.[158] While this episode is arguably not the most objective description of events, it exemplifies how military procurement failures can become national news. The episode highlights the most scandalous failures of Deepwater,[159] including (perhaps most importantly) the fact that after four years the Coast Guard had fewer operational boats than when it began the program.[160] A former Coast Guard officer describes Deepwater's contractual arrangement as follows:

> People say that this is like the fox watching the henhouse. And it's worse than that . . . . It's where the government asked the fox to develop the security system for the henhouse. Then told them, you are going to do it. You know, by the way, we'll give you the security code to the system and we'll tell you when we're on vacation.[161]

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[152] U.S. Gov't Accountability Office, *supra* note 123, at 2.
[153] Stanger, *supra* note 124, at 151.
[154] U.S. Gov't Accountability Office, *supra* note 132, at 7.
[155] Stanger, *supra* note 124, at 151.
[156] *Id.*; U.S. Gov't Accountability Office, *supra* note 144, at 6.
[157] *60 Minutes: The Troubled Waters of Deepwater* (CBS News broadcast Aug. 19, 2007), *available at* http://www.cbsnews.com/video/watch/?id=3182951n&tag=mncol;lst;1 (Steve Kroft reports on the U.S. Coast Guard and its Deepwater refurbishment program).
[158] *See generally* Brown et. al., *supra* note 129.
[159] *60 Minutes*, *supra* note 157 (episode also details the allegations former Lockheed Martin project manager Michael DeKort who gained internet notoriety via his claims of corruption on YouTube); *see also* Alice Lipowicz, *Deepwater whistle-blower case moves forward*, Washington Technology, Apr. 8, 2010, http://washingtontechnology.com/articles/2010/04/08/deepwater-false-claims-lawsuit-to-proceed.aspx.
[160] *60 Minutes*, *supra* note 157.
[161] *Id.*; *see also* Stanger, *supra* note 124, at 151; *but see* Brown et. al., *supra* note 129, at 35 (providing a more objective examination of Deepwater).

Since Deepwater's beginning, GAO has documented the need for effective oversight in order to ensure complex, performance-based contracts such as the one here achieved intended results without wasting taxpayer dollars.[162] Unfortunately, the Coast Guard used integrated product teams (IPT) as the primary means of managing the program and providing oversight.[163] The IPTs were less than effective for a variety of reasons.[164] Ultimately, Deepwater's primary lesson was "effective acquisition of complex product requires an expanded and more highly skilled acquisition workforce."[165]

In response to heavy criticism,[166] Admiral Thad Allen, the Commandant of the Coast Guard, stated on April 17, 2007, the Coast Guard would make fundamental changes in the management of the Deepwater program.[167] Admiral Allen stated months earlier that Coast Guard engineers and procurement staff team would now

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[162] U.S. Gov't Accountability Office, *supra* note 123, at 8.

[163] *Id.* at 2.

[164] U.S. Gov't Accountability Office, *supra* note 144, at 7. The GAO found IPT problems related to "changing membership, understaffing, insufficient training, and inadequate communication among members." *Id.* Also, the Coast Guard's failure to adequately address the frequent turnover of personnel in the program and the transition from existing assets to those assets that would be part of the Deepwater program. *Id.* at 10. GAO identified four major issues impeding the effective performance of IPTS: Lack of timely charters to vest IPTs with authority for decision making, inadequate communication among members, high turnover of IPT membership and understaffing, and insufficient training. *Id.*

[165] Brown et. al., *supra* note 129, at 37. The IBM report made a comment of extreme importance stating, "Smart buying of complex products is not simply an exercise in following procedures and punching checklists, but rather it requires personnel who can synthesize information, adapt quickly to changing circumstances, and selectively apply different tools and skills to match the dynamic challenges they face." *Id.*

[166] Ronald O'Rourke, Cong. Research Serv., RL 33753, Coast Guard Deepwater Acquisition Programs: Background, Oversight Issues, and Options for Congress 34-35 app. A (2010) (provides in-depth discussion of Deepwater criticism). Author notes, "Observers also expressed concern that the Coast Guard did not have enough in-house staff and in-house expertise in areas such as program management, financial management, and system integration to properly oversee and manage an acquisition effort as large and complex as the Deepwater program, and that the Coast Guard did not make sufficient use of the Navy or other third-party, independent sources of technical expertise, advice, and assessments. *Id.* at 35.

[167] O'Rourke, *supra* note 122, at 14-15. Admiral Allen stated in part, "Working together with industry, the Coast Guard will make the following six [6] fundamental changes in the management of our Deepwater program:

> (1) The Coast Guard will assume the lead role as systems integrator for all Coast Guard Deepwater assets, as well as other major acquisitions as appropriate. . . .
> (2) The Coast Guard will take full responsibility for leading the management of all life cycle logistics functions within the Deepwater program under a an improved logistics architecture established with the new mission support organization.
> (3) The Coast Guard will expand the role of the American Bureau of Shipping, or other third-parties as appropriate, for Deepwater vessels to increase assurances that Deepwater assets are properly designed and constructed in accordance with established standards.
> (4) The Coast Guard will work collaboratively with [ICGS] to identify and implement an expeditious resolution to all outstanding issues regarding the national security cutters.

play a much larger role in overseeing the project in an effort to rein in its private sector partners, adding that the mistakes made were unacceptable.[168] In fact, 2007 would later be referred to as a watershed year for Deepwater.[169]

During 2007, the Coast Guard went from a single, integrated Deepwater acquisition program to a collection of separate Deepwater acquisition programs.[170] The Coast Guard also shifted from a SOS performance-based acquisition to what it refers to as a "defined-based" acquisition, which entails the use of more-detailed specifications of the capabilities that various Deepwater assets must possess.[171] Finally, the Coast Guard decided it would take over as the system integrator.[172]

As of March 2010, the Coast Guard has assumed full control of program development marking the end of DHS's reliance on ICGS.[173] Deputy Homeland Security Secretary Jane Holl Lute reportedly informed a House Homeland Security Appropriations Subcommittee that DHS has "reorganized its acquisition review process to better manage major procurements" in order to address the GAO finding it "lacked the involvement of senior leadership in major procurement efforts.[174]

However, from a management standpoint, there is no indication the Coast Guard was in any better position in 2010 than it was in 2002. Neither the Coast Guard nor DHS, should fool themselves in believing that either simplifying Deepwater program requirements or bringing the program under internal control fixes the underlying basis for the LSI. Both DOD and DHS would be wise to recognize additional contractor support in the areas of program management and systems engineering will still be required until this underlying problem is addressed.[175]

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(5) The Coast Guard will consider placing contract responsibilities for continued production of an asset class on a case-by-case basis directly with the prime vendor consistent with competition requirements if: (1) deemed to be in the best interest of the government and (2) only after we verify lead asset performance with established mission requirements.

(6) Finally, I will meet no less than quarterly with my counterparts from industry until any and all Deepwater program issues are fully adjudicated and resolved. Our next meeting is to be scheduled within a month. These improvements in program management and oversight going forward will change the course of Deepwater." *Id.* at 15.

[168] Eric Lipton, *Billions Later, Plan to Remake the Coast Guard Fleet Stumbles*, N.Y. Times, Dec. 9, 2006, at A1.

[169] O'Rourke, *supra* note 166, at 1. In 2007, the Coast Guard announced a number of reform actions that significantly altered the service's approach to Deepwater acquisition, and to Coast Guard acquisition in general. *Id.*

[170] *Id.* at 3.

[171] *Id.*

[172] *Id.*; *see also* John T. Bennett, *U.S. reasserts control over contractors: Despite Deepwater Takeover, Many Say Gov't Lacks Skills To Run Programs*, Defense News, April 23, 2007. Admiral Allen is quoted stating, "We've relied too much on contractors to do the work of government as a result of tightening budgets, a dearth of contracting expertise in the federal government, and a loss of focus on critical governmental roles and responsibilities in the management of acquisition programs." O'Rourke, *supra* note 166, at 16.

[173] Chris Strohm, *Coast Guard takes control from Deepwater's 'integrators,* Government Executive, Mar. 3, 2010, http://www.govexec.com/story_page.cfm?articleid=44706&sid=61.

[174] *Id.*

[175] *See* Schooner & Greenspahn, *supra* note 12, at 10 n. 28.

Thus, both entities will need to be cognizant of the OCI issues that could still arise in the future.

C. The OCI Concern

1. Summary of OCI Rules

As addressed more fully below,[176] most of the Congressional concern with LSIs pertained to the inherent OCI problems associated with them.[177] OCIs are distinguished from personal conflicts of interest (PCIs), which are generally more obvious to the casual observer and more heavily regulated by the Office of Government Ethics (OGE).[178] PCI rules regulate individual persons and can be adequately explained by the basic obligation of public service:

> Each employee has a responsibility to the United States Government and its citizens to place loyalty to the Constitution, laws and ethical principles above private gain. To ensure that every citizen can have complete confidence in the integrity of the Federal Government, each employee shall respect and adhere to the principles of ethical conduct set forth in this section, as well as the implementing standards contained in this part and in supplemental agency regulations.[179]

OCIs may be less apparent and require special attention by both the government and contractors. As one observer wrote, "an OCI arises when a contractor possesses (1) an economic incentive that renders it unable, or potentially unable, to provide impartial assistance or advice; or (2) an unfair competitive advantage in obtaining a contract as the result of access to nonpublic information about a competitor or a procurement."[180] The Federal Acquisition Regulation (FAR) defines an OCI as a situation that arises "because of other activities or relationships with other persons, a person is unable or potentially unable to render impartial assistance or advice to the Government, or the person's objectivity in performing the contract work is or might be otherwise impaired, or a person has an unfair competitive advantage."[181] The usefulness of this definition in terms of assisting either the

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[176] *See* discussion *infra* Part II.D.

[177] 155 Cong. Rec. S5205, 5210 (daily ed. May 6, 2009) (statement of Sen. Carl Levin). During debate of S.454, which eventually became the Weapon Systems Acquisition Reform Act of 2009, Senator Levin stated, "The bill will address the inherent conflict of interest we see in a number of programs today, when a contractor hired to give us an independent assessment of an acquisition program is participating in the development or construction side of the same program." *Id.* Senator McCain stated: "[T]he relationship between those who are doing the contracting, other contractors, and the awardee is way too close today for us to get truly independent assessments and cost controls." 155 Cong. Rec. S5205, 5211 (daily ed. May 6, 2009) (statement of Sen. John McCain).

[178] *See generally* Standards of Ethical Conduct for Employees of the Executive Branch, 5 C.F.R. § 2635 (2011).

[179] *Id.* § 2635.101(a).

[180] Szeliga, *supra* note 25, at 640.

[181] FAR 2.101 (2011); *see generally*, Gordon, *supra* note 25 (provides a detailed analysis of what

government or private industry is certainly open to debate. What is not debatable is "OCIs are a significant part of the landscape of public procurement today."[182]

2. OCI Categories

Based on the language of FAR 9.5, as well as the case law issued by the GAO and the Court of Federal Claims (COFC), OCIs have three generally recognized categories: (1) "biased ground rules," (2) "unequal access to information," and (3) "impaired objectivity."[183] Daniel Gordon, former Administrator of the Office of Federal Procurement Policy (OFPP), has explained the OCI rules as follows:

> "Biased ground rules" refers to situations where a company sets the ground rules for a future competition by, for example, writing the specifications that competitors for a contract must meet. "Unequal access to information" arises where a company has access to nonpublic information (typically through performance of a contract) that gives it an unfair advantage in the competition for a later contract. "Impaired objectivity" comes into play when a company is asked to perform tasks that require objectivity, but another role the company plays casts doubt on the company's ability to be truly objective (for example, where a company is to give the government an assessment of the performance of firms, where one of those firms is an affiliate of the company giving the assessment).[184]

Pursuant to FAR 9.5, the government is concerned with both actual conflicts and potential conflicts in both current and future acquisitions.[185] The AAP suggested "the principles guiding the government's efforts to avoid such conflicts are: (1) preventing the existence of conflicting roles that might bias a contractor's judgment; and (2) preventing unfair competitive advantage."[186] Importantly, the AAP also acknowledged the difficulties faced by contracting officers who are entrusted with the responsibility to identify and mitigate actual and potential OCIs.[187]

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constitutes an OCI); Cantu, *supra* note 25 (provides excellent overview and analysis of OCI issues).

[182] Gordon, *supra* note 25, at 41.

[183] *Id.* at 32; *see also* Szeliga, *supra* note 25, at 648-672 (provides detailed analysis of each of the three categories); Aetna Gov't Health Plans, Inc., et. al., B-254397, et al., 95-2 CPD ¶ 129 (Comp. Gen. July 27, 1995), *available at* http://archive.gao.gov/lglpapr2pdf19/155029.pdf (provides excellent description and discussion of the three recognized OCI groups).

[184] Gordon, *supra* note 25, at 35; *see also* Ralph C. Nash et. al., 20 Nash & Cibinic Report ¶24 (May 2006) (provides further explanation of OCI categories).

[185] The FAR states, "An organizational conflict of interest may result when factors create an actual or potential conflict of interest on an instant contract, or when the nature of the work to be performed on the instant contract creates an actual or potential conflict of interest on a future acquisition. In the latter case, some restrictions on future activities of the contractor may be required." FAR 9.502(c) (2011).

[186] Acquisition Advisory Panel, *supra* note 9, at 405 (citing FAR 9.505(a)-(b) (2007)).

[187] *Id.* (citing FAR 9.504 (2007)).

Despite being given the above responsibility, contracting officers receive "no detailed guidance in the FAR how to accomplish these tasks."[188] Of course this is little consolation to contracting officers who still must perform the avoidance, neutralization, or mitigation of OCIs required by FAR 9.5 in the absence of clear guidance. As a 2009 GAO decision stated, "[t]he responsibility for determining whether an actual or potential conflict of interest will arise, and to what extent the firm should be excluded from the competition, rests with the contracting agency.[189] DOD has amended the DFARS to better address OCIs,[190] but the results of this action are still unknown at this point.[191] Contractors would be well advised to devise their own OCI mitigation plans.

The mitigation of OCIs is undoubtedly a critical piece to any reform of major systems acquisitions. As one commentator has suggested "two overarching tools have proven to make reform effective: competition and transparency."[192] Professor Steven L. Schooner adds a third "pillar," namely that of integrity.[193] Therefore, it stands to reason if mitigating steps or precautions are not taken, then OCIs will continue to "present challenges to the integrity of the procurement system" and for all parties involved in the process.[194] The logical presumption is that with transparency comes competition and "with competition, one expects to receive better quality and lower prices."[195] Or to state it another way, "transparency helps insure integrity which, in turn, promotes competition."[196] OCIs create an atmosphere, which at a minimum has the potential to undermine competition, integrity and transparency. Thus, DOD's ability to procure major weapons systems in a cost-effective manner could certainly be degraded.

One generally accepted premise is that OCIs can injure the integrity of the entire procurement system. As stated by the AAP, "the public expects there to be no preferential treatment for particular contractors, no self-interest in the decision

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[188] *Id.* (citing FAR 9.504(a)(1), (a)(2) (2007)) (stating guidance is limited to the "general rules, procedures, and examples" in FAR 9.5).

[189] *See* L-3 Servs., Inc., B-400134.11-12, 163 LEXIS 10 (Comp. Gen. Sept. 30, 2009) (*citing* Aetna Gov't Health Plans, Inc., et. al., B-254397, et al., 95-2 CPD ¶ 129 at 12 (Comp. Gen. July 27, 1995).

[190] Defense Federal Acquisition Regulation Supplement 209.571 (2011); *see also* 75 Fed. Reg. 81908 (Dec. 29, 2010). This action was required by the Weapon Systems Acquisition Reform Act of 2009. Weapon Systems Acquisition Reform Act of 2009, *supra* note 10.

[191] *See* Defense Federal Acquisition Regulation Supplement, 75 Fed. Reg. 20954 (Apr. 22, 2010) (to be codified at 48 C.F.R. §§ 202, 203, 212, and 252) (amending sections in DFARS governing OCIs for defense contractors). The author attended a public meeting held on December 8, 2009, during which DOD considered the comments of various presenters on this subject. The various presenters reflected (1) a desire to see a policy and regulation to emphasize the importance of using mitigation strategies to address OCIs; (2) development of a more consistent approach to addressing OCIs within the government; and (3) a strong desire to allow for additional public comment prior to DOD's issuance of any rule on this subject. *Id.*

[192] Jennifer Jo Snider-Smith, *Competition and Transparency: What Works for Public Procurement Reform*, 38 Pub. Cont. L.J. 85 (2008).

[193] Steven L. Schooner, *Desiderata: Objectives for a System of Government Contract Law*, 11 Public Procurement Law Review 103 (2002), *available at* http://ssrn.com/abstract=304620.

[194] Gordon, *supra* note 25, at 41.

[195] Snider-Smith, *supra* note 192, at 88.

[196] Schooner, *supra* note 193.

making process, and no hidden agenda impacting contractor selections."[197] The best interests of the taxpayers are not being served when there is either an actual OCI or the perception that any of the foregoing expectations are not being met because of an OCI.

The POGO shares the above concern and argued that "[e]arly identification and mitigation of OCIs could have various financial benefits for the government."[198] While there is admittedly a difficulty in accurately quantifying such benefits, this should discount the utility of the effort. As Scott Amey, POGO's General Counsel wrote, "[e]nsuring that the best qualified, not the best connected, contractor is providing the government with essential goods and services could potentially decrease cost overruns resulting from less qualified contractors encountering difficulties fulfilling contractor requirements."[199]

Nevertheless, the OCI problem can serve as distraction to Congress, the media, and the public at-large. The scandals, such as the one that enveloped Deepwater, certainly grab headlines and stir the masses. The more pressing concern, however, should be to understand the systemic problem that created such a scenario in the first place. A partial answer may lie in determining the proper roles of the government employee and the contractor.

3. Inherently Governmental Functions

An issue inextricably linked to the LSI OCI issue is related to the determination of which functions are inherently governmental.[200] While a single bright line definition of inherently governmental has been elusive, efforts are ongoing to do just that.[201] The Office of Federal Procurement Policy (OFPP) recently issued a policy letter seeking to build a single definition around the Federal Activities Inventory Reform (FAIR) Act[202] definition of inherently governmental function.[203]

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[197] Acquisition Advisory Panel, *supra* note 9, at 407.

[198] Letter from Scott H. Amey, Gen. Counsel, Project on Gov't Oversight, to Laurieann Duarte, Gen. Services Admin. (July 18, 2008) (detailing the need for stronger contractor OCI regulations).

[199] *Id.*

[200] Office of Mgmt. & Budget, Exec. Office of the President, Circular A-76 Revised (2003); U.S. Gov't Accountability Office, GAO-08-572T, Defense Management: DOD Needs to Reexamine Its Reliance on Contractors and Continue to Improve Management and Oversight 5 (2008). GAO writes, "[T]he Circular reinforces that government personnel shall perform inherently governmental functions." *Id.*

[201] *See* President Barack H. Obama, Remarks on Procurement at the Dwight D. Eisenhower Executive Office Building (Mar. 4, 2009); Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, Pub. L. No. 110-417, § 321 (2009); Work Reserved for Performance by Federal Government Employees, 75 Fed. Reg. 16188 (Mar. 31, 2010); Robert Brodsky, *Administration puts its stamp on 'inherently governmental,* Gov't Executive, Mar. 31, 2010, http://www.govexec.com/story_page.cfm?articleid=44925&sid=59; Charles Clark, *OMB announces final guidance on inherently governmental functions*, Gov't Executive, Sep. 9, 2011, http://www.govexec.com/story_page.cfm?articleid=48770&oref=todaysnews.

[202] Federal Activities Inventory Reform Act of 1998, Pub. L. 105-270, 112 Stat. 2382 (1998).

[203] Office of Federal Procurement Policy (OFPP), Policy Letter 11-01, Performance of Inherently Governmental and Critical Functions, 76 Fed. Reg. 56227 (Sep. 12, 2011); *see also* Work Reserved for Performance by Federal Government Employees, 75 Fed. Reg. 16188 (Mar. 31, 2010).

The FAIR Act defines inherently governmental function as "function that is so intimately related to the public interest as to require performance by Federal Government employees."[204] The purpose of this ongoing effort is to establish clarity throughout the federal government with a single definition.[205] Critics of this effort assert the proposed phrases "closely associated with inherently governmental function" and "critical function" create further confusion.[206]

As the debate rages over what constitutes "inherently governmental," it is fair to state that some functions "are so intimately related to the public interest are considered inherently governmental and should only be performed by government personnel."[207] Thus, having contractors operating in areas that should be the federal government's responsibility strikes at the heart of Congressional concern associated with LSIs. While contractors and government "are partners in public procurement, the government and industry have separate agendas."[208]

Because of these separate agendas, "the closer contractor services come to supporting inherently governmental functions, the greater risk of their influencing the government's control over and accountability for decisions that may be based, in part, on contractor work."[209] It is not an attack on contractors to state they are typically motivated by profit.[210] However, it is a legitimate concern that allowing them into areas that are inherently governmental "may result in decisions that are not in the best interest of the government, and may increase vulnerability to waste, fraud, and abuse."[211]

D. Congressional Response

Congressional action in response to the use of LSIs for FCS and Deepwater has focused on the symptoms of the problem rather than the manpower problem itself. Although Congress has been concerned with the use of LSIs for several years,[212] Congressional focus has mostly centered on OCI issues inherent in the use

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[204] Federal Activities Inventory Reform Act of 1998, *supra* note 202, at § 5(2)(A).

[205] Office of Federal Procurement Policy, *supra* note 203; *see also* Work Reserved for Performance by Federal Government Employees, *supra* note 203.

[206] Matthew Weigelt, *Inherently governmental job proposal blurs a blurry world*, Federal Computer Week, Apr. 29, 2010, http://fcw.com/articles/2010/04/28/panel-inherently-governmental-function-insourcing.aspx; Charles Clark, *OMB announces final guidance on inherently governmental functions*, Gov't Executive, Sep. 9, 2011, http://www.govexec.com/story_page.cfm?articleid=48770&oref=todaysnews.

[207] Office of Mgmt. & Budget, *supra* note 200, at 5.

[208] Snider-Smith, *supra* note 192, at 89.

[209] Office of Mgmt. & Budget, *supra* note 200, at 6.

[210] Entities such as not-for-profit firms and federally funded research and development centers (FFRDCs) may have different institutional agendas than the federal government as well, but the profit motive of defense contractors arguably causes greater concern for those charged with protecting taxpayer dollars. Whether this viewpoint is fair, or even accurate, is not the focus of this article.

[211] Office of Mgmt. & Budget, *supra* note 200, at 6.

[212] *See* National Defense Authorization Act for Fiscal Year 2006, Pub. L. 109-163, § 805 (2006); John Warner National Defense Authorization Act for Fiscal Year 2007, Pub. L. 109-364, §§ 115, 807 (2007); National Defense Authorization Act for Fiscal Year 2008, *supra* note 23, at § 802(a)(1) (2008); Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, *supra* note 209, at

of LSIs.[213] While OCIs are not unimportant and adversely affect the procurement process,[214] this author's opinion is that such a focus detracts from the larger issue of why LSIs were needed in the first place. Congress needs to understand that the root cause of the LSI OCI problem lies in its mandated decimation of the defense acquisition workforce. Unfortunately, it is much more palatable to place blame elsewhere.

The first Congressional attempt to address LSIs, Section 805 of the National Defense Authorization Act (NDAA) for Fiscal Year 2006,[215] merely called for information.[216] Congress required DOD to address how LSI OCIs would be prevented and mitigated,[217] as well as how DOD would minimize functions that could be considered inherently governmental.[218] This mandate stemmed from complaints from contractors on the FCS program who were concerned the LSI role gave the prime contractor too much authority in the selection and award of contracts.[219]

Certain legislation was specifically aimed at either FCS or Deepwater. For example, Section 115 of the John Warner NDAA for Fiscal Year 2007, required the GAO to review and report on the use of the LSI (Boeing/SAIC team) involved with the Army's FCS.[220] The GAO was required to provide a description of the LSI's responsibilities in managing FCS under the contract, as well as an evaluation of whether those responsibilities differed from other LSIs under DOD contracts.[221] Section 115 also tasked GAO with providing a description and assessment of the Army's responsibilities in managing FCS, including the Army's oversight of the LSI's activities and decisions.[222] Finally, Section 115's final provision reflected Congress' primary concern with OCIs.[223] Congress requested GAO identify the

§112 (amending National Defense Authorization Act for Fiscal Year 2008, Pub. L. 110-181, § 802); Weapon Systems Acquisition Reform Act of 2009, *supra* note 10.

[213] Grasso, *supra* note 20, at 4 (stating, "[S]ome observers have expressed concern that LSI arrangements can create conflicts of interest for an LSI in areas such as determining system requirements and soliciting, evaluating, and hiring contractors.").

[214] *See* discussion *infra* Part II.C.

[215] National Defense Authorization Act for Fiscal Year 2006, *supra* note 212, at § 805.

[216] *Id.* at § 805(a) (stating, "Not later than September 30, 2006, the Secretary of Defense shall submit to the congressional defense committees a report on the use of lead system integrators for the acquisition by the [DOD] of major systems.").

[217] *Id.* at § 805(b)(2).

[218] *Id.* at § 805(b)(3).

[219] Schooner & Yukins, *supra* note 84, at 9-21.

[220] John Warner National Defense Authorization Act for Fiscal Year 2007, *supra* note 212, at § 115(a) (stating, "Not later than March 15, 2007, the Comptroller General of the United States shall submit to the congressional defense committees a report on the participation and activities of the lead systems integrator in the [FCS] program under the contract of the Army for the [FCS].").

[221] *Id.* at § 115(b)(1).

[222] *Id.* at § 115(b)(2). Section 115(b)(3) of the John Warner NDAA for Fiscal Year 2007 required GAO to provide "[a]n assessment of the manner in which the Army—(A) ensures that the lead systems integrator meets goals for the [FCS] in a timely manner; and (B) evaluates the extent to which such goals are met." *Id.* at § 115(b)(3).

[223] *Id.* at § 115(b)(5).

mechanisms in place to mitigate OCIs in connection with future competition on FCS technologies and equipment under FCS subcontracts.[224]

Section 807 represented the first general Congressional limitations on LSIs.[225] With certain statutorily defined exceptions,[226] Section 807 mandated that no entity performing LSI functions in the acquisition of a major system by the DOD may have any direct financial interest in the development or construction of any individual system or element of any SOS.[227] Additionally, Section 807 also required the Secretary of Defense to craft a precise and comprehensive definition for LSIs.[228] Congress also required DOD to specify the various types of contracts and fee structures that are appropriate for use by LSIs in the production, fielding, and sustainment of complex systems.[229]

In the NDAA for Fiscal Year 2008, Congress raised its concern to another level by placing a prohibition on DOD's use of any new LSIs effective October 1, 2010.[230] Section 802 set forth that DOD may not award a contract to LSIs in major systems acquisitions if that entity was not performing LSI functions in the major system before the enactment of this law.[231] Additionally, Congress placed restrictions on DOD's use of LSIs beyond low rate initial production.[232] This led to a revision of

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[224] *Id.*

[225] *Id.* at § 807; 10 U.S.C. § 2410p (2011).

[226] John Warner National Defense Authorization Act for Fiscal Year 2007, *supra* note 212, at § 807(a)(1); 10 U.S.C. § 2410p(b) (2011). Section 2410p (b) provides the following exceptions, "An entity described in subsection (a) may have a direct financial interest in the development or construction of an individual system or element of a system of systems if—

> (1) the Secretary of Defense certifies to the Committees on Armed Services of the Senate and the House of Representatives that—
> (A) the entity was selected by [DOD] as a contractor to develop or construct the system or element concerned through the use of competitive procedures; and
> (B) [DOD] took appropriate steps to prevent any organizational conflict of interest in the selection process; or
> (2) the entity was selected by a subcontractor to serve as a lower-tier subcontractor, through a process over which the entity exercised no control." 10 U.S.C. § 2410p(b) (2011).

[227] John Warner National Defense Authorization Act for Fiscal Year 2007, *supra* note 212, at § 807(a)(1); 10 U.S.C. § 2410p(a) (2011). Per section 2410p(c) of the U.S.C., the prohibitions in subsection would not preclude an LSI from performing work necessary to integrate two or more individual systems or elements of a SOS with each other. 10 U.S.C. § 2410p(c) (2011).

[228] John Warner National Defense Authorization Act for Fiscal Year 2007, *supra* note 212, at § 807(c)(1).

[229] *Id.* at § 807(c)(2).

[230] National Defense Authorization Act for Fiscal Year 2008, *supra* note 23, at § 802.

[231] *Id.* at § 802(a)(1).

[232] *Id.* at § 802(a)(2). The Act states, "[DOD] may award a new contract for lead systems integrator functions in the acquisition of a major system only if—

> (A) the major system has not yet proceeded beyond low-rate initial production; or
> (B) the Secretary of Defense determines . . . that it would not be practicable to carry out the acquisition without . . . a contractor to perform lead systems integrator functions . . . .
> (3) REQUIREMENTS RELATING TO DETERMINATIONS. – A determination under paragraph (2)(B)—
> (A) shall specify the reasons why it would not be practicable to carry out the acquisition without . . . a contractor . . . (including a discussion of alternatives,

the Defense Federal Acquisition Regulation Supplement (DFARS) Subpart 209.5.[233] An important facet of Section 802 that we will revisit in further depth below is the Congressional recognition of the acquisition workforce connection to the LSI issue.[234]

The Duncan Hunter NDAA for Fiscal Year 2009, amended Section 802 above to include a new subsection specifically relating to FCS.[235] In addition to clarifying how long the FCS prime contractor would be considered the LSI,[236] Congress provided that any modification to the existing FCS contract for the purpose of entering into full-rate production of FCS major systems or subsystems would be considered a new contract.[237]

Deepwater was by no means exempt from Congressional attention. On September 27, 2008, despite ultimately becoming a failed Congressional initiative, the House of Representatives passed H.R. 6999, the Integrated Deepwater Program Reform Act of 2008.[238] The bill has essentially died in the Senate, but would have

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such as the use of the [DOD] workforce, or a system engineering and technical assistance contractor);
(B) shall include a plan for phasing out the use of contracted [LSI] functions over the shortest period of time consistent with the interest of the national defense;
(C) may not be delegated below the level of the Under Secretary of Defense for Acquisition, Technology, and Logistics; and
(D) shall be provided to the [Congress] at least 45 days before the award of a contract pursuant to the determination." *Id.* at § 802(a)(2)-(3)*; see also* Defense Federal Acquisition Regulation Supplement 209.570-2(d) (2011).

[233] Defense Federal Acquisition Regulation Supplement 209.570-2(d) (2011) (stating, "In accordance with Section 802 of the National Defense Authorization Act for Fiscal Year 2008 (Pub. L. 110-181), DOD may award a new contract for [LSI] functions in the acquisition of a major system only if—
(1) The major system has not yet proceeded beyond low-rate initial production; or (2) The Secretary of Defense determines . . . that it would not be practicable to carry out the acquisition without . . . a contractor to perform [LSI] functions and that doing so is in the best interest of DOD. The authority to make this determination may not be delegated below the level of the Under Secretary of Defense for Acquisition, Technology, and Logistics. (Also see 209.570-3(b).)
(d) Effective October 1, 2010, DOD is prohibited from awarding a new contract for [LSI] functions in the acquisition of a major system to any entity that was not performing [LSI] functions in the acquisition of the major system prior to January 28, 2008.")

[234] National Defense Authorization Act for Fiscal Year 2008, *supra* note 23, at § 802(b).

[235] Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, *supra* note 201, at§ 112 (stating, "Section 802 of the NDAA for FY08 (P.L. 110-181; 10 U.S.C. § 2410p) is amended by adding at the end the following new subsection:
(e) Status of Future Combat Systems Program Lead System Integrator—
(1) Lead systems integrator.—In the case of the [FCS] program, the prime contractor of the program shall be considered to be a [LSI] until 45 days after the Secretary of the Army certifies in writing to [Congress] that such contractor is no longer serving as the [LSI].
(2) New contracts.—In applying subsection (a)(1) or (a)(2), any modification to the existing contract for the [FCS] program, for the purpose of entering into full-rate production of major systems or subsystems, shall be considered a new contract.").

[236] 10 U.S.C. § 2410p(e)(1) (2011).

[237] 10 U.S.C. § 2410p(e)(2) (2011).

[238] H.R. 6999, 110th Cong. (2008); *see also* Grasso, *supra* note 20, at 6.

prohibited the Coast Guard from using a private contractor as LSI,[239] mandated use of full and open competition,[240] established a new Chief Acquisition Officer position,[241] and generated other reporting requirements (costs, changes, deliveries and contracts).[242] With the changes the Coast Guard has already made discussed above, further legislation on Deepwater is unlikely at this point.

On May 22, 2009, President Barack Obama signed the Weapon Systems Acquisition Reform Act of 2009 (WSARA),[243] the most significant recent Congressional attempt to deal with the OCI issue within in major defense acquisition programs.[244] Section 207 requires the Secretary of Defense to provide uniform guidance and tighten existing requirements for OCIs by contractors in major defense acquisition programs.[245]

First and foremost, those regulations are required to address OCIs that could arise as a result of LSI contracts on major defense acquisitions and the follow-on contracts related to those programs, particularly production contracts.[246] In addition, the regulations must also address potential OCIs in connection with contractors who own business units who compete to perform as the prime contractor or supplier of a major subsystem of a program in which they are already providing systems engineering and technical assistance functions, professional services, or management support services.[247] Another area of OCI concern DOD was required to address is the award of major subsystem contracts by a prime contractor to business units or affiliates of the same parent corporate entity.[248] Finally, DOD had to address the OCI concern stemming from a private contractor's performance or assistance with conducting technical evaluations.[249]

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[239] H.R. 6999, 110th Cong. § 102(a)(1) (2008).
[240] *Id.*
[241] *Id.* at § 107.
[242] *Id.* at § 109.
[243] Weapon Systems Acquisition Reform Act of 2009, *supra* note 10.
[244] *See id.* at § 207. Not specifically addressed in this article, but worthy of note here is § 207(b)(2)-(4) which states revised regulations must also, "(2) ensure that [DOD] receives advice on systems architecture and systems engineering matters with respect to major defense acquisition programs from federally funded research and development centers or other sources independent of the prime contractor; (3) require that a contract for the performance of systems engineering and technical assistance functions for a major defense acquisition program contains a provision prohibiting the contractor or any affiliate of the contractor from participating as a prime contractor or a major subcontractor in the development or construction of a weapon system under the program; and (4) establish such limited exceptions to the requirement in paragraphs (2) and (3) as may be necessary to ensure that [DOD] has continued access to advice on systems architecture and systems engineering matters from highly-qualified contractors with domain experience and expertise, while ensuring that such advice comes from sources that are objective and unbiased." *Id.* at § 207(b)(2)-(4).
[245] *See id.* at § 207(a).
[246] *See id.* at § 207(b)(1)(A).
[247] *See id.* at § 207(b)(1)(B).
[248] *Id.* at § 207(b)(1)(C) (noting particular concern for the award of subcontracts for software integration or the development of a proprietary software system architecture).
[249] *See id.* at § 207(b)(1)(D).

All Congressional efforts to deal with OCIs are no doubt necessary, but once again these efforts only address the symptoms of a much bigger problem. The common denominator in all of this is the human capital deficit within the acquisition workforce. Whether the issue is FCS, Deepwater, LSIs, or OCIs, it should be recognized that it was the lack of internal human capability that required these military organizations to turn to LSIs from the outset.

III. Solution: Address the Human Capital Crisis

A. Recognize the Root Problem

On March 4, 2009, President Barack Obama signaled that government procurement problems such as "massive cost overruns, outright fraud, and the absence of oversight and accountability" were going to be major reform priorities for his administration.[250] While acknowledging that overall "government spending on contracts had doubled to over a half trillion dollars," the President further stated, "in some cases, contracts are awarded without competition. In others, contractors actually oversee other contractors. We are spending money on things that we don't need, and we're paying more than we need to pay. And that's completely unacceptable."[251]

The President's statement particularly focused on defense contracting:

> Last year [2008], GAO looked into 95 major defense projects and found cost overruns that totaled $295 billion. Let me repeat: That's $295 billion in wasteful spending. And this wasteful spending has many sources. It comes from investments and unproven technologies. It comes from a lack of oversight. It comes from influence peddling and indefensible no-bid contracts that have cost American taxpayers billions of dollars. In Iraq, too much money has been paid out for services that were never performed, buildings that were never completed, companies that skimmed off the top. At home, too many contractors have been allowed to get away with delay after delay after delay in developing unproven weapon systems.[252]

The President's perspective is probably widely held, but placing the blame primarily on contractors or on particular types of contracts misses the bigger picture of why the system is "completely unacceptable."

The entire government is experiencing a human capital crisis in the federal acquisition workforce generally, and the defense acquisition workforce specifically.[253]

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[250] Obama, *supra* note 201.
[251] *Id.*
[252] *Id.*
[253] *See generally* Tishisa L. Braziel, *Contracting Out Contracting,* 38 Pub. Cont. L.J. 857 (2009);

As one commentator noted, "there simply are not enough warm bodies in government service to man the oversight positions."[254] As Professor Schooner aptly noted in his September 2008 congressional testimony, "the government has not sufficiently invested in its acquisition workforce since the 1980's, precipitating a crisis even before the massive post-2000 increase in federal procurement spending."[255] An the GAO recently noted that "[p]rogram offices have reported that workforce shortfalls have resulted in a degradation in oversight, delays in certain management and contracting activities, and increased workloads for existing staff."[256] This only highlights the fact noted by both GAO and DOD "that without an adequate workforce to manage . . . acquisitions, there is an increased risk of poor acquisition outcomes and vulnerability to fraud, waste, and abuse."[257]

The National Defense Industry Association (NDIA) agrees and supports bolstering the federal acquisition workforce because "an overburdened and under staffed acquisition workforce is frequently a factor in problems that arise during the life-cycle of major acquisition programs."[258] One industry authority remarked "[t]he major issue is there are too few government acquisition personnel with the right measure of critical skills such as system engineering, program management, contract oversight, and cost estimating to name a few."[259]

It is no accident that DOD relies heavily on contractor personnel "to supplement its in-house acquisition workforce."[260] The GAO has stated:

> [T]he institutional resources we have must match the outcomes we desire. For example, if more work must be done to reduce technical risk before development start—milestone B—DOD needs to have the organizational, people, and financial resources to do so. Once a program is approved for development, program offices and testing organizations must have the workforce with the requisite skills to manage and oversee the effort.[261]

At this point, DOD and DHS are still behind the power curve.

Fortunately, it appears the highest levels of our government are recognizing the importance issue. The 2010 Quadrennial Defense Review (QDR) recognized "the Pentagon's acquisition workforce has been allowed to atrophy, exacerbating a decline

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Stanger, *supra* note 124, at 17; Acquisition Advisory Panel, *supra* note 9, at 327; Econom, *supra* note 34.

[254] Stanger, *supra* note 124, at 17.

[255] *Addressing the Cost Growth of Major Department of Defense Weapon Systems*, *supra* note 118.

[256] U.S. Gov't Accountability Office, *supra* note 6, at 15.

[257] *Id.* at 1.

[258] Nat'l Def. Indus., Top Issues: Nat'l Def. Indus. 2010, at 11 (2009), *available at* http://www.ndia.org/Advocacy/PolicyPublicationsResources/Documents/2010-Top-Issues-Final-to-the-Printer.pdf.

[259] *Defense Acquisition Reform Panel: Hearing Before H. Comm. on Armed Services*, 111th Cong. (2009) (statement of Lawrence P. Farrell, Jr., Pres. of the Nat'l Def. Indus. Assoc.), *available at* http://armedservices.house.gov/DAR_072109/Farrell_Testimony072109.pdf.

[260] U.S. Gov't Accountability Office, *supra* note 6, at 15.

[261] U.S. Gov't Accountability Office, *supra* note 48, at 13.

in the critical skills necessary for effective oversight."[262] While not accounting for the purge of the 1990's, the QDR acknowledged that as DOD's contractual obligations tripled over the previous ten years the acquisition workforce decreased by ten percent.[263] The QDR further noted that DOD has operated with vacancies in key acquisition positions over the past eight years.[264] These vacancies have averaged between 13 percent for the Army to 43 percent for the Air Force.[265]

Former Secretary Gates once stated that fundamental changes to how the DOD procures major weapon systems "requires enough full-time professionals with the right skills and training."[266] Thus, the DOD's Fiscal Year 2011 "budget plan includes an increase of more than 20,000 such positions to supervise or replace contractors by 2015."[267] In order to fully realize the opportunity inherent in this plan, care must be taken in order to avoid this simply becoming a numbers game.[268]

In March 2009, House Armed Services Committee created the Panel on Defense Acquisition Reform (DAR Panel) to carry out a comprehensive review of the defense acquisition system.[269] In March 2010, the DAR Panel issued its final report in which it acknowledged "[e]nsuring that the acquisition workforce is adequately staffed, skilled and trained, and improving the workforce's quality and performance are as important as improvements to acquisition processes and structures."[270] While this author believes the human capital problem is the root cause of most of the other

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[262] Dep't of Def., *supra* note 1, at 76. QDR recognizes four major problems within DOD acquisition: (1) The requirements for new systems are too often set at the far limit of current technological boundaries; (2) Atrophy of acquisition workforce; (3) System of defining requirements and developing capacity encourages overly optimistic cost estimates; and, (4) effective and efficient delivery of logistical support to troops in the field. *Id.*; *see also* Geoff Emeigh, *QDR Amplifies Pentagon's Need To Reform Acquisition System, Develop Acquisition Cadre*, 93 Fed. Cont. Rep. (BNA) 112 (Feb. 16, 2010).

[263] *See* Dep't of Def., *supra* note 1, at 76.

[264] *Id.*

[265] *Id.* QDR further recognized the DOD's urgent need for technically trained personnel, namely cost estimators, systems engineers, and acquisition (or program) managers to be able to conduct effective oversight responsibilities. *Id.*

[266] Gates, *supra* note 4.

[267] *Id.*

[268] *See* discussion *infra* Part III.B.; *see also* Gregg Carlstrom, *Tables turned: Contracting complain insourcing tactics unfair*, Federal Times, Mar. 21, 2010, http://www.federaltimes.com/article/20100321/acquisition03/3210306/1009/acquisition.

[269] Panel on Def. Acquisition Reform, House Armed Servs. Comm., 111th Cong., Findings and Recommendations (2010), *available at* http://www.seaonline.org/AboutSEA/news/NewsDownloads/DARFINALREPORT032310.pdf.

[270] *Id.* at 35. The DAR Panel provided the following aspirational statement: "[DOD] should establish the acquisition workforce as a model within the Department for more flexible personnel management that rewards success and includes accountability. The Department's Acquisition Workforce Demonstration Program and the authorities in section 1113 of the National Defense Authorization Act for Fiscal Year 2010 provide a solid foundation for creating an acquisition workforce that will obtain the value the Department needs. To achieve this, the Department requires flexibility to efficiently hire qualified new employees, and to manage its workforce in a manner that promotes superior performance. Using these tools the Department can develop new regulations for the civilian workforce which include fair, credible, and transparent methods for hiring and assigning personnel, and for appraising and incentivizing employee performance." *Id.* at 2.

systemic defense acquisition problems, the foregoing at least shows that Congress recognizes an extremely important problem.

B. Need a Substantial and Targeted Investment in the Acquisition Workforce

1. Strategic Insourcing

As Professor Allison Stanger wrote, "[t]he business of government would grind to a halt if contractors were banned without expanding the federal workforce to replace them."[271] Moreover, the media, public, and Congress all have the unfortunate tendency to scapegoat the contractors.[272] It is easy to blame the contractors when things go wrong, but the government needs to accept accountability for its own shortcomings. In Professor Stanger's assessment, "contractors aren't the problem; the problem is loss of good government."[273] Government officials cannot solve the larger human capacity problem by engaging in a blame game.

Now that the Obama Administration and Congress appear to have recognized the human capital problem, where do we go from here? There had been indications of a new government trend towards insourcing in order to cut our reliance on contractors.[274] Unfortunately, simply throwing money and bodies at the problem will not be an adequate solution. In fact, adding thousands of new employees to the acquisition workforce could overwhelm a system that is unprepared to receive, train, allocate or develop them.[275] Another real concern is the possibility that the new hiring initiatives will morph into a numbers game as opposed to achieving results.[276]

While these are legitimate concerns, if Congress truly seeks to address the problems that made LSIs necessary, then it needs to remain committed to funding a federal hiring campaign of competent and qualified acquisition personnel. Fortunately, it appears Congress has recognized this fact with the creation of the DOD

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[271] Stanger, *supra* note 124, at 28.

[272] *Id.* at 11.

[273] *Id.*

[274] Castelli, *supra* note 26; Walter Pincus, *Pentagon sees big savings in replacing contractors with federal employees*, Wash. Post, Dec. 24, 2009, at A13; Elise Castelli, *How DOD Will Add 20,000 Acquisition Officers*, DefenseNews, Apr. 13, 2009, http://www.defensenews.com/story.php?i=4035334.

[275] Steven L. Schooner & David J. Berteau, *Emerging Policy and Practice Issues* 9-8 (George Washington Univ. Law Sch., Pub. Law & Legal Theory Working Paper Grp., Paper No. 49, 2009), *available at* http://ssrn.com/abstract=1562842 (citing Vernon J. Edwards, *Feature Comment: Throwing People at the Problem—Massive Hiring Will Not Revitalize the Acquisition Workforce*, 51 Gov't Contractor ¶ 288 (Westlaw, New York, N.Y.). The authors state, "[T]he Government's primary approach to workforce revitalization, which is to overwhelm the workload problem with numbers, will result in needlessly higher labor and training costs, suboptimal worker performance and suboptimal retention rates among the best new hires." *Id.*

[276] Carlstrom, *supra* note 268; Schooner & Berteau, *supra* note 275, at 9-7.

Acquisition Workforce Development Fund.[277] The key will be to hire strategically and ensure this does not turn into a quota-driven exercise.[278]

One way to do this is to re-examine the types of acquisitions DOD and DHS sought to accomplish using LSIs in the first place. The procurement efforts behind FCS and Deepwater involved complex systems. As one foreign policy expert stated regarding the development of complex major weapon system acquisitions, "[w]e still need systems integrators . . . the government still does not have that experience in capacity."[279] It is probably no coincidence that when portions of FCS were eliminated and the Coast Guard assumed integrator functions for Deepwater, the complexity of what was being attempted was also significantly reduced.

A partial explanation to the foregoing could be attributed to the viewpoint advanced by former Secretary Gates. Secretary Gates had institutionally determined the "[DOD] and the nation can no longer afford the "quixotic pursuit" of high-tech perfection that incurs unacceptable cost and risk."[280] However, if the military could strategically hire the personnel who would put it in the best position to reduce the unacceptable cost and risk of such programs, then perhaps much of the opposition to the complexity of the technology involved would likely recede as well.

2. Focus Hiring on Program Managers and Systems Engineers

The above case studies show the military is vulnerable to poor outcomes in major systems acquisitions without an adequate acquisition workforce.[281] Figuring out what is needed to solve this predicament is yet another problem unto itself. One difficulty in determining how to best address this acquisition workforce crisis is DOD's lack of information on what it has and what it needs.[282] The lack of complete information on the composition and skills of its current acquisition workforce, including contractors, puts the military in a less than ideal position to make an informed decision concerning the way ahead.[283]

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[277] National Defense Authorization Act for Fiscal Year 2008, *supra* note 23, at § 852; 10 U.S.C. § 1705(a) (2011) (requiring the Secretary of Defense to establish the DOD Acquisition Workforce Fund to provide funds for the recruitment, training, and retention of acquisition personnel within DOD).

[278] *Defense Acquisition Reform Panel: Hearing Before H. Comm. on Armed Services*, *supra* note 259 (General Farrell stated, "[Revitalizing the DOD acquisition workforce] is a complex task with no easy fix. And it is not just a question of insourcing work. The major issue is there are too few government acquisition personnel with the right measure of critical skills such as system engineering, program management . . . .").

[279] Alice Lipowicz, *Troubled waters: Systems integrators fall from grace, but many doubt the government can run without them*, Washington Technology, June 9, 2007, http://washingtontechnology.com/articles/2007/06/09/troubled-waters.aspx (quoting James Carafano, a senior research fellow at the Heritage Foundation specializing in homeland security and military operations).

[280] Press Release, Dep't. of Def., Def. Budget/QDR Statement of Sec'y of Def. Robert M. Gates (Feb. 1, 2010), *available at* http://www.defense.gov/speeches/speech.aspx?speechid=1416.

[281] Applying the definition of "acquisition workforce" in 10 U.S.C § 1721(b). 10 U.S.C. § 1721(b) (2011).

[282] U.S. Gov't Accountability Office, *supra* note 6, at 15; *see generally* U.S. Gov't Accountability Office, *supra* note 43.

[283] U.S. Gov't Accountability Office, *supra* note 6, at 15.

For instance, there have been at least three different way of counting the defense acquisition workforce over nearly two decades: (1) Federal Acquisition Institute (FAI) Count for DOD, (2) Acquisition Organization Count for DOD, and (3) the Acquisition, Technology and Logistics (ATL) Count for DOD, which is also referred to as the "Refined Packard Model.[284] The inconsistency of the defense acquisition workforce definition has led to an extreme range of numbers. Numbers have ranged from the Fiscal Year 2004 FAI Count of 25,918, to the DOD Acquisition Organization Workforce FY04 count of 206,653,[285] to a DOD Refined Packard method count somewhere in between of 134,602.[286] This disparity makes it nearly impossible to provide an accurate headcount of the defense acquisition workforce

Regardless of the overall number, what is clear is there are two specific, acute, and problematic holes that need urgent attention. Specifically, the military should focus its immediate attention on hiring two types of personnel: systems engineers and program managers. These areas are absolutely required for the success of any major program. The Defense Science Board Task Force,[287] the DAR Panel,[288] and experts in this field[289] have all been on record in advocating for the hiring of program managers and systems engineers among other specialties.[290]

In seeking to determine lessons learned from successful programs, the GAO issued a report in 2010 detailing its examination of the DOD major defense acquisition program (MDAP) portfolio.[291] The GAO looked at 63 individual programs and subprograms and found that 13 programs (21 percent) "appeared to be stable and on track to meet original cost and schedule projections."[292] While the stable programs tended to be smaller, less expensive programs with shorter development cycles,[293] there are still lessons to be learned. This is equally true for the unstable programs.

The GAO found that a primary reason for cost and schedule problems is the DOD acquisition environment often allows programs to start without a full understanding of requirements, overly ambitious and lengthy development cycles, and too many unknowns involving performance, production, and technology.[294] The GAO attributes these knowledge gaps to the lack of early and disciplined systems engineering analysis of a weapon system's requirements prior to beginning

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[284] Acquisition Advisory Panel, *supra* note 9, at 346-347 (provides an in-depth description of how each number is calculated).

[285] *Id.* at 349 (citing Office of the Inspector Gen., Dep't. Of Def., D-2006-073, *supra* note 32, at 7).

[286] *Id.* (citing Office of the Inspector Gen., Dep't. Of Def., D-2006-073, *supra* note 32, at 9).

[287] Def. Sci. Board Task Force on Def. Indus. Structure for Transformation, *supra* note 7, at 44.

[288] Panel on Def. Acquisition Reform, *supra* note 269, at 37.

[289] *Defense Acquisition Reform Panel: Hearing Before H. Comm. on Armed Services, supra* note 259; *Addressing the Cost Growth of Major Department of Defense Weapon Systems*, *supra* note 118.

[290] Other areas of need include, but are not limited to, contracting officers, software engineers, cost estimators, development planners, and attorneys.

[291] U.S. Gov't Accountability Office, GAO-10-522, Defense Acquisitions: Strong Leadership is Key to Planning and Executing Stable Weapon Programs (2010).

[292] *Id.* at 5 (twenty-four programs were determined to be moderately unstable and twenty-six were highly unstable).

[293] *Id.*

[294] *Id.* at 4.

development.[295] Systems engineers provide the critical function of translating customer needs into specific product requirements that the necessary technological, software, engineering, and production capabilities can be identified via requirements analysis, design and testing.[296] The lack of such systems engineering has resulted in significant cost increases as neither the government nor the contractor involved has sufficient understanding of what the program will realistically entail.[297] This scenario sets the government up in a poor position before the process really even begins.

Therefore, the military should target systems engineers in an effort to help ensure the planning phase is conducted properly, because "extraordinary implementation cannot save a program with a business case that was flawed from the beginning."[298] However, there are a few notable concerns that loom in this area. First, some in the defense industry have expressed concern the United States not producing enough graduates who can qualify for security clearances in the areas of science, technology, engineering, and mathematics.[299] Second, it is also doubtful that the military will be able to hire experienced systems engineers at a government salary.[300] To some degree the DOD and DHS will need to cultivate engineers from within, which will take more than a few years assuming this matter is addressed promptly. Addressing the foregoing issues will take time, so immediate and careful Congressional examination is clearly warranted.

Program managers are arguably the most important piece of the acquisition puzzle and should be a key target for recruitment and development. The deficit of program managers has been noted with regularity over the past several years.[301] Program managers are a primary area to conduct targeted recruitment, because as stated previously "no reform will be successful without having the right people with the right skills to carry out and manage an acquisition program throughout the entire acquisition process."[302] As the GAO astutely noted:

> Weapon system program managers are the central executors of the acquisition process. They are responsible for all aspects of

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[295] *Id.*

[296] U.S. Gov't Accountability Office, GAO-09-362T, Defense Management: Actions Needed to Overcome long-standing Challenges with Weapon Systems Acquisition and Service Contract Management 5 n. 5 (2009).

[297] U.S. Gov't Accountability Office, *supra* note 292, at 4.

[298] *Id.* at 31.

[299] *Defense Acquisition Reform Panel: Hearing Before H. Comm. on Armed Services*, *supra* note 259 (statement of Lawrence P. Farrell, Jr., Pres. of the Nat'l Def. Indus. Assoc.); *see also* Feickert, *supra* note 82, at 12. Feickert posits recruiting scientists and engineers will prove difficult, if not impossible, because: "(1) more than half of the science and engineering graduates from American universities are foreign nationals who are supposedly 'off-limits' to federal agencies; (2) a declining number of students entering the science and engineering fields; and (3) stiff competition from the private sector for these graduates." Feickert, *supra* note 82, at 12.

[300] *See* Schooner & Greenspahn, *supra* note 12, at 10 n.24.

[301] *See* Dep't of Def., *supra* note 1; *Addressing the Cost Growth of Major Department of Defense Weapon Systems*, *supra* note 118; Def. Sci. Board Task Force on Def. Indus. Structure for Transformation, *supra* note 7, at 44.

[302] U.S. Gov't Accountability Office, *supra* note 6, at 1.

> development and delivery of a new system and for assuring that systems are high quality, affordable, supportable, and effective. In carrying out this responsibility, they are also responsible for balancing factors that influence cost, schedule, and performance.[303]

In GAO's examination of strong stable programs, it not surprisingly found that these programs benefitted from solid business plans, strong leadership support, and disciplined program managers.[304] The program managers of successful programs shared key traits such as "experience, leadership, continuity, and communication skills that facilitated open and honest decision making."[305] While each program has its own set of unique circumstances, program managers of stable programs were empowered to make good decisions by having the support of top DOD and service leadership. The GAO found these program managers "were able to make knowledge-based, disciplined decisions from the start and resist pressure to overreach or add requirements because of this strong institutional support."[306]

Leadership must allow the program manager to be accountable for the success or failure of their program, but that program manager should have the necessary qualifications to reduce the risks involved. The GAO described one program manager in a lessons learned memo developed by program officials as "part technical expert, part bulldog, and part diplomat. Steeped in technical details of weapon development and aircraft integration, he sniffed out and pre-empted technical risks, made quick decisions, and aptly convinced stakeholders to support his positions."[307] It should go without saying that this type of individual is not developed overnight, so there is no time to waste.

C. Incentivize the Acquisition Workforce Career Path

The AAP recommended employing incentives in order to retain senior acquisition workforce personnel.[308] The AAP recognized this option was a stop-gap measure only.[309] Unfortunately, every year we are staring further down the barrel of the senior leadership retirement gun. Making the task more difficult is overcoming any negative perceptions of employment within the federal acquisition

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[303] U.S. Gov't Accountability Office, GAO-06-110, Best Practices: Better Support of Weapon System Program Managers Needed to Improve Outcomes 4 (2005).
[304] U.S. Gov't Accountability Office, *supra* note 291, at 9.
[305] *Id.* at 9, 14.
[306] *Id.* at 9.
[307] *Id.* at 14.
[308] Acquisition Advisory Panel, *supra* note 9, at 339, 373, 381-82 (citing Office of the Inspector Gen., *supra* note 15, at 4).
[309] *Id.* at 382. AAP wrote, "Accordingly, it is imperative that we use strong incentives to lengthen the federal acquisition careers of senior and mid-level personnel in the acquisition workforce, while we are recruiting, training, and developing their successors. We need to hold onto the scarce human resources at the mid-level so they can develop into senior acquisition leaders. But at the same time, because of the thin ranks of this mid-level cohort we need also to hold onto senior leadership within the acquisition workforce. At each level we need to "buy time" so that we can develop future leadership from more junior levels." *Id.*

workforce.[310] However, as the overall prospect of private sector employment has become more difficult any negative perceptions may be overcome by economic necessity. Regardless of the hurdles, a concerted recruitment effort must be implemented that properly incentivizes the acquisition career path.

The Defense Science Board recommended the DOD should introduce programs similar to the Presidential Management Fellows (PMF) Program in order to attract top candidates from graduate programs.[311] The stated purpose of the PMF is "to attract to the Federal service outstanding men and women from a variety of academic disciplines and career paths who have a clear interest in, and commitment to, excellence in the leadership and management of public policies and programs."[312] The board also recommended the development, funding, and implementation of "training, advanced degree education, and career develop programs for government acquisition civilians, comparable to the military's program."[313]

The DAR Panel set forth several recommendations related to the acquisition workforce.[314] A key theme advanced by the DAR Panel was the need for DOD to take advantage of provisions within the NDAA Fiscal Year 2010, particularly Section 1112.[315] The DAR panel believes the Defense Civilian Leadership Program "should provide the DOD with an important tool to recruit individuals with the academic merit, work experience and demonstrated leadership skills necessary to build the most effective acquisition workforce possible."[316]

The federal government must examine a range of areas to improve recruitment including issues that may otherwise be overlooked. For instance, the NDIA suggests revising the recruitment process, including making substantial changes to "the woefully inadequate government website, www.usajobs.com."[317] The NDIA opines that this website "is not only user-unfriendly, but is a disincentive as the first experience for many as they consider government employment."[318] It stands to reason that at least some qualified candidates may abandon the government hiring process from the outset if the process proves unduly burdensome.

IV. Economic and Political Problems Facing the Solution

Efforts to rebuild the defense acquisition workforce must account for the current economic problems facing the United States. Since September 2008, the

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[310] *Defense Acquisition Reform Panel: Hearing Before H. Comm. on Armed Services*, *supra* note 259 (statement of Lawrence P. Farrell, Jr., Pres. of the Nat'l Def. Indus. Assoc.) General Farrell believes "[e]ven in these difficult economic times, attracting qualified, clearable employees, especially low to mid level employees, will be a challenge for DOD due to a negative perception of 'government jobs.'" *Id.*

[311] Def. Sci. Board Task Force on Def. Indus. Structure for Transformation, *supra* note 7, at 44.

[312] Exec. Order 13562, 75 Fed. Reg. 82585 (Dec. 30, 2010).

[313] Def. Sci. Board Task Force on Def. Indus. Structure for Transformation, *supra* note 7, at 44.

[314] Panel on Def. Acquisition Reform, House Armed Servs. Comm., *supra* note 269, at 38-41.

[315] Department of Defense Civilian Leadership Program, Pub. L. No. 111-84, § 1112, 123 Stat. 2496.

[316] Panel on Def. Acquisition Reform, House Armed Servs. Comm., *supra* note 269, at 38.

[317] Nat'l Def. Indus., *supra* note 258, at 11.

[318] *Id.*

United States has been in the midst of a serious economic crisis.[319] Arguably, there may not be a worse time politically or economically for the political leadership of the United States to try to sell anything perceived as a massive federal hiring binge to the American people.[320] Concern about federal budget deficits and the national debt are affecting the national political discourse.[321] As one New York Times columnist noted in 2010 "[b]y President Obama's own optimistic projections, American deficits will not return to what are widely considered sustainable levels over the next 10 years."[322]

The federal budget deficit has been over a trillion dollars annually since 2009.[323] In 2010, the CBO estimated projected federal budget deficits over the 2011-2020 period will average $600 billion per year provided current laws remain unchanged.[324] The conservative Heritage Foundation believes that a more realistic budget baseline will eventually add $13 trillion in debt by 2020.[325] In either case, neither scenario paints a rosy fiscal outlook for the country.

If the federal budget deficit issues do not create concern, then the overall national debt should. The United States national debt is over $15 trillion and continues to grow.[326] In September 2009, David Walker, former Comptroller General of the United States, stated "we suffer from a fiscal cancer . . . our off balance sheet obligations associated with Social Security and Medicare put us in a $56 trillion financial hole—and that's before the recession was officially declared last year. America now owes more than Americans are worth—and the gap is growing!"[327]

Adding the cost of wars in Iraq and Afghanistan[328] to the other costs of the post 9/11 military spending binge, it is understandable that the DOD budget

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[319] While many of the systemic reasons leading to the recent economic recession occurred prior to September 2008, the current U.S. financial crisis is generally traced to the collapse of Lehman Brothers on September 14, 2008. *See* Andrew Ross Sorkin, *Lehman Files for Bankruptcy; Merrill is Sold*, N.Y. Times, Sept. 14, 2008, at A1.

[320] *But see* discussion *infra* note 341 and accompanying text concerning New Deal economic philosophy.

[321] David E. Sanger, *A Red Ink Decade*, N.Y. Times, Feb. 2, 2010, at A1; Dana Milbank, *Bipartisan action on the federal debt—outside the Capitol, of course*, Wash. Post, Jan. 26, 2010, at A02; Richard Wolf, *U.S. in fiscal peril with $12.1 trillion debt*, USA Today, Jan. 4, 2010, http://www.usatoday.com/news/washington/2009-12-30-debt_N.htm.

[322] Sanger, *supra* note 321, at A1.

[323] Cong. Budget Office, Monthly Budget Review Fiscal Year 2011 (2011), *available at* http://www.cbo.gov/ftpdocs/125xx/doc12541/2011_Nov_MBR.pdf.

[324] *The Budget and Economic Outlook: Fiscal Years 2010 to 2020: Hearing Before the Comm. on the Budget*, 111th Cong. 1 (2010) (statement of Douglas W. Elmendorf, Dir., Cong. Budget Office), *available at* http://www.cbo.gov/ftpdocs/110xx/doc11014/01-28-Testimony_Senate.pdf.

[325] Brian M. Riedl, *Realistic Budget Baseline Shows $13 Trillion in Debt over the Next Decade*, The Heritage Foundation (Jan. 26, 2010), http://www.heritage.org/Research/Budget/wm2780.cfm.

[326] U.S. National Debt Clock, http://www.usdebtclock.org/ (last visited Jan. 2, 2011) (national debt was over $15 trillion as of January 2011).

[327] John Fund, *Warning: The Deficits Are Coming!*, Wall St. J., Sep 4, 2009, at A11.

[328] Amy Belasco, Cong. Research Serv., RL 331110, The Cost of Iraq, Afghanistan, and Other Global War on Terror Operations Since 9/11 1-2 (2009), *available at* http://www.fas.org/sgp/crs/natsec/RL33110.pdf. Based on DOD estimates and budget submissions, the cumulative total for funds appropriated from the 9/11 attacks through FY2009, total funding enacted to date for DOD, State/USAID and VA for medical costs for the wars in Iraq, Afghanistan and enhanced security is $944 billion. *See id.* at 26. Of this total, 72% is for Iraq, 24% for Afghanistan, 3% for enhanced

will and must decline. The DOD realizes that for the foreseeable future it will be receiving less money proportionally via congressional appropriations than it has grown accustomed to.[329] Combining the foregoing with rising personnel costs, modernization efforts, and "cost overruns in its major defense acquisition programs," GAO suggests DOD should be getting the best value for every dollar it invests by prioritizing its weapon system programs.[330] As stated by Michael J. Sullivan, GAO Director Acquisition and Sourcing Management "[e]very dollar wasted during the development and acquisition of weapon systems is money not available for other priorities within DOD and elsewhere in the government."[331] At his swearing-in ceremony on July 22, 2011, current Secretary of Defense Leon Panetta stated "[DOD] must continue to be accountable to the American people, for what we spend, where we spend it, and what the results are."[332]

The financial problems being experienced by the United States government are not exclusively within the control of DOD to address. In face, Secretary Panetta seems to agree with his predecessor Secretary Gates that he expects DOD to be part of the solution and not part of the problem.[333] During a speech on May 8, 2010, former Secretary Gates remarked that the large post-September 11th military defense budgets were a thing of the past.[334] He pointedly stated that "[g]iven America's difficult economic circumstances and parlous fiscal condition, military spending on things large and small can and should expect closer, harsher scrutiny. The gusher has been turned off, and will stay off for a good period of time."[335]

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security and 1% unallocated. *See id.* at 1. The CBO report goes on to state, "Almost all of the funding for Operation Enduring Freedom (OEF) is for Afghanistan. Some 94% of this funding goes to the Department of Defense to cover primarily *incremental* war-related costs, that is, costs that are in addition to normal peacetime activities." *Id.* at 1-2. "Incremental war-related" costs include funds to: Deploy troops and their equipment to Iraq and Afghanistan; conduct military operations; provide in-country support at bases; provide special pay for deployed personnel; and to repair, replace, and upgrade war-worn equipment. *See id.* at 2, 27.

[329] *See* Loyola, *supra* note 7, at 28-29; O'Hanlon, *supra* note 7, at A19.

[330] U.S. Gov't Accountability Office, *supra* note 51, at 1.

[331] *Id.*

[332] Leon E. Panetta, Sec'y of Def., U.S. Dep't of Def., Swearing-In Ceremony (July 22, 2011), *available at* http://www.defense.gov/speeches/speech.aspx?speechid=1596.

[333] *Id.* (Secretary Panetta remarked, "Based on my long experience in government and working with budgets, I really believe that we do not have to make a choice between fiscal discipline and national security. By setting priorities based on sound strategy, based on good policy, we can focus on a strong and innovative defense policy that confronts the future and deals with the threats that we will face in the future, and that focuses those resources that we need at those threats of today and tomorrow."); *See also* Jim Garamone, *Gates Calls for Significant Cuts in Defense Overhead*, Armed Forces Press Service, May 8, 2010, http://www.defense.gov//news/newsarticle.aspx?id=59082; Christopher Drew & Elisabeth Bumiller, *Military Budget Reflects a Shift in U.S. Strategy*, N.Y. Times, April 7, 2009, *available at* http://www.nytimes.com/2009/04/07/us/politics/07defense.html.

[334] Robert M. Gates, Sec'y of Def., U.S. Dep't of Def., Address at Eisenhower Library (May 8. 2010), *available at* http://www.defense.gov/speeches/speech.aspx?speechid=1467.

[335] *Id.* Secretary Gates further stated, "The Defense Department must take a hard look at every aspect of how it is organized, staffed, and operated—indeed, every aspect of how it does business. In each instance we must ask: First, is this respectful of the American taxpayer at a time of economic and fiscal duress? And second, is this activity or arrangement the best use of limited dollars, given the pressing needs to take care of our people, win the wars we are in, and invest in the capabilities

Nevertheless, Secretary Gates understood that rebuilding the acquisition workforce would ultimately serve cost saving principles.[336]

In addition to the growing concern over burgeoning deficits, the national debt, and reduced defense budgets, the current political winds are also not very favorable to any perceived or actual expansion of the federal workforce. A 2010 Washington Times headline trumpets "Largest-ever federal payroll to hit 2.15 million."[337] Any large federal hiring initiative, even one that is desperately needed, will not be without opposition.

At a time when the national unemployment rate is hovering near nine percent,[338] the public is becoming increasingly reticent to see further expansion of the federal government.[339] We have even seen this anti-expansion sentiment manifest itself in the form of a political movement.[340] In spite of the current environment, it is incumbent upon political leadership to be more forward looking in this vital area that directly impacts national security.

The President and Congress must be prepared to articulate the reasons why replenishing the acquisition workforce is necessary now more than ever. In fact, an argument could be made that the Obama administration should emulate President Franklin D. Roosevelt's New Deal strategy of reducing overall unemployment through federal hiring programs.[341] While such a strategy would likely be in

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necessary to deal with the most likely and lethal future threats?" *Id.*

[336] *Id.* (while lamenting DOD's overall lack of reductions in overhead costs, Secretary Gates aptly noted, "The one area of real decline in overhead was in the area where we actually needed it: full-time contracting professionals, whose numbers plunged from 26,000 to about 9,000. We ended up with contractors supervising other contractors—with predictable results."); *see also* Craig Whitlock, *Pentagon asking Congress to hold back on generous increases in troop pay*, Wash. Post, May 8, 2010, at A01; Jordan Reimer, *Officials Announce Plans to Curb Fighter Program's Cost*, Armed Forces Press Service, Mar. 12, 2010, http://www.defense.gov/news/newsarticle.aspx?id=58317; Walter Pincus, *Pentagon sees big savings in replacing contractors with federal employees*, Wash. Post, Dec. 24, 2009, at A13.

[337] Stephen Dinan, *Largest-ever federal payroll to hit 2.15 million*, Wash. Times, Feb. 2, 2010, http://www.washingtontimes.com/news/2010/feb/02/burgeoning-federal-payroll-signals-return-of-big-g//print/. Mr. Dinan wrote, "The era of big government has returned with a vengeance, in the form of the largest federal work force in modern history. The Obama administration says the government will grow to 2.15 million employees this year, topping 2 million for the first time since President Clinton declared that "the era of big government is over" and joined forces with a Republican-led Congress in the 1990s to pare back the federal work force." *Id.*

[338] Labor Force Statistics From the Current Population Survey, U.S. Department of Labor, Bureau of Labor Statistics, http://www.bls.gov/cps/ (last visited Jan. 2, 2011) (unemployment rate was 9.6% for 2010).

[339] Kent Osband, *Fatted Leviathan*, Nat'l Rev., Feb. 22, 2010, at 40-42 (author asserts that while payrolls and benefits are shrinking for the private sector, the public sector continues to increase its benefits); *see also* Frank Newport, *Americans Concerned About Gov't. Spending, Expansion*, Gallup, July 22, 2009, http://www.gallup.com/poll/121829/Americans-Concerned-Govt-Spending-Expansion.aspx.

[340] *See generally* Liz Halloran, *What's Behind The New Populism*, NPR, Feb. 5, 2010, http://www.npr.org/templates/story/story.php?storyId=123137382 (discusses the rise of the Tea Party movement in the United States).

[341] This author will not delve into the debate as to whether it was President Roosevelt's New Deal economic policies or the industrial mobilization requirements of World War II that led the United States out of the Great Depression. The point here is to simply highlight a historic parallel to the

accordance with the political philosophy of the current administration, this article does not advocate a large-scale New Deal style expansion of the federal government.

The focus here is limited simply to restoring the defense acquisition workforce. In this regard, the current environment presents an opportunity to make use of the excess capacity in the marketplace. There are potentially a large number of talented people who are unemployed and could be used to revitalize the acquisition workforce. Whether the nation's unemployed workers possess the desired skills needed is at best speculative. What is clear is an opportunity exists within the current economic environment to attract new hires into the acquisition workforce. A targeted recruitment effort among this group could provide a high economic return on investment and should be explored further.

In this regard, it would pay to heed the words of the AAP when it stated "[i]nadequacy in the acquisition workforce is, ultimately, 'penny wise and pound foolish,' as it seriously undermines the pursuit of good value for the expenditure of public resources."[342] As Professor Schooner once commented, "[m]ore auditors and inspectors general will guarantee a steady stream of scandals, but they'll neither help to avoid the scandals nor improve the procurement system. Conversely, a prospective investment in upgrading the number, skills, and morale of [the acquisition workforce] would reap huge dividends for the taxpayers."[343] If we fail to do the correct thing by rebuilding the defense acquisition workforce, then we should fully expect an even more demoralized acquisition community besieged by procurement requirements it cannot handle and the future scandals such an environment will produce.

V. Alternatives to Rebuilding Acquisition Workforce

There are simply no attractive alternatives to rebuilding the acquisition workforce. However, one option is to do nothing. The military could continue to do business as usual and hope to get a different result, but the folly in that approach should be apparent. Doing nothing is a bad idea, provided you consider the status quo as unacceptable. While this alternative does not warrant a lengthy discussion, it must still be considered as a possibility. As discussed above, rebuilding the acquisition workforce had some institutional momentum from both the executive and legislative branches, but such moments can be fleeting, particularly in Washington, DC. Future Congresses or Presidents may view this issue in a different light than the current occupants. For the reasons stated throughout this article, however, this option should not receive any serious consideration.

A better alternative would be to reduce acquisition requirements by reducing the size of the federal government. One lesson we learned from the so-called end of "the era of big government"[344] is that despite the significant reductions in the number of government employees in the acquisition workforce, the work itself did not go

current situation.

[342] Acquisition Advisory Panel, *supra* note 9, at 363.

[343] *Is DHS Too Dependent on Contractors*, *supra* note 12.

[344] Clinton, *supra* note 31.

anywhere.[345] In fact, the work increased dramatically. Simply shifting jobs from the public to the private sector does not equate to reducing the size of government.[346] This alternative would require a full-scale examination of the federal government in order to determine if certain agencies and departments could be eliminated. The theoretical discussion that could ensue from this alternative goes well beyond the limited scope of this article, but on a surface level a reduction in the size of the federal government could potentially provide the opportunity to consolidate acquisition personnel into fewer organizations. This option is unlikely to gain traction in Congress, but the financial benefits from doing so may be worth exploring.

Yet another alternative to hiring more DOD or DHS employees would be to waive or relax the existing rules concerning OCIs, or simply manage the OCI or contract process more aggressively. This author does not recommend this approach. The current OCI rules summarized more fully above[347] essentially prohibit contractors from operating in the same manner as the LSIs discussed in this article did. Any changes to the current approach would certainly create more problems. However, if significant opposition to reinforcing the acquisition workforce arises, then we must at a minimum consider this idea for purposes of intellectual discussion. This option would require new legislation, which would likely be more politically unfeasible than efforts to rebuild the military's acquisition workforce.

VI. Conclusion

While the LSI potential for OCIs is an important issue, the OCI issue has served primarily as a distraction because of its ability to attract media and Congressional attention. The more significant issue here, although perhaps less interesting to the casual observer, is how OCIs in relation to LSIs are but a symptom of a larger problem: the larger problem is the lack of an adequate defense acquisition workforce to effectively develop and manage the desired major programs. When the military decided it needed to develop complex weapon systems, as it did with FCS and Deepwater, then what should give concerned parties pause is that it could not do so without the outside assistance of contractors. Neither the wholesale cancellation, nor the major restructuring of those programs truly addressed this underlying problem.

The ugly truth is that LSIs were needed because the military lacked, and frankly still lacks, the skills and expertise to develop and produce complex weapon systems internally. This deficiency of internal capacity extended to the inability to perform any meaningful oversight of the LSIs performance. There will always be a need for contractors in the development of major weapon systems, but the United States military should never be in a position where it is so devoid of internal

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[345] *See* Schooner & Greenspahn, *supra* note 12, at 10 (stating, "Despite a generation of bipartisan efforts to portray a 'small government' to the public, government mandates continue to increase, leaving agencies no choice but to increasingly rely upon contractors . . . .").

[346] *See* Steven L. Schooner, *Competitive Sourcing: More Sail Than Rudder?*, 33 Pub. Cont. L.J. 263, 276-278 (2004) (providing a discussion of the "Shrinking Government Myth").

[347] *See* discussion *supra* Part II.C.

technological expertise and management capability that it cedes its governmental responsibility to the private sector.

The future of our military superiority depends on rebuilding the military acquisition workforce with skilled, competent, and professional personnel. This is not an overstatement. There have been positive signs that the Obama Administration and Congress have recognized this point, but this momentum could easily be lost. However, the military must make its case by strategically targeting the positions necessary to achieve the desired efficiencies in the system. To reap any benefits from a rebuilt system, this cannot become simply a numbers exercise.

Absent any viable alternatives, the benefits to rebuilding the defense acquisition workforce should be enough to outweigh any potential opposition that may be mounted against the effort. In fact, if the United States has any chance of maintaining our military's technological dominance, then the military has no choice except to rebuild this vital function. Absent an unforeseen legislative retreat, the military will no longer have the option of turning to LSIs to aid in attempts to advance the state of the art.

MYTH BUSTED: WOMEN ARE SERVING IN GROUND COMBAT POSITIONS

*Major Shelly S. McNulty**

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In every time of crisis, women have served our country in difficult and hazardous ways . . . women should not be considered a marginal group to be employed periodically only to be denied opportunity to satisfy their needs and aspirations when unemployment rises or a war ends.
—John F. Kennedy[1]

I. Foreword

From February to September of 2008, I deployed to Iraq in support of Operation Iraqi Freedom. I served at a Headquarters level office, in a support position for all ground forces engaged in Special Operations on the Arabian Peninsula. I was surrounded by mostly male counterparts and could count the number of other women serving at Headquarters on one hand. I only travelled outside the wire once, on a mission to inspect a detention facility. However, I saw many women, usually young enlisted soldiers, leaving our compound to participate in "battlefield" missions. I was surprised to see these women serving in unique positions that I doubted the general public or even the majority of members of the armed forces knew about. Inspired by these observations, I wanted to meet the women that served in these unique roles and to hear directly from them about their experiences in Iraq and/or Afghanistan.

While stationed as an Assistant Professor at the United States Air Force Academy (USAFA), I had an opportunity to learn more about the women that served alongside all-male ground combat units and the military's policies regarding women being assigned these duties. A colleague at the time, Johanna Astle, and I developed an independent study course, Law 499, Women in Combat, that was offered at USAFA in the spring of 2010. As part of this course, four USAFA cadets (two male and two female) conducted a small-scale research project that involved surveying and interviewing cadets at both USAFA and the United States Military Academy (USMA or "West Point"). The goal of the project was to determine the cadets' knowledge of the existing rules restricting women from serving in combat and their opinions of women serving in various combat roles. Cadets Second Class Katherine Wilson, Grant Hadley, Tania Buda, and Kyle Ames participated in the independent study course. Additionally, my colleague and I received a small grant from the USAFA Department of Faculty Education and Research to travel to four locations and conduct interviews as part of this research project. The goal of our research was to interview female service members who had recently returned from deployments to Iraq or Afghanistan and had served in ground combat positions.

[1] President John F. Kennedy, Remarks at the Launch of the Commission of the Status of Women (Dec. 1961) (quotation etched on one of the Women's Memorial Glass Tablets, located at the Women In Military Service For America Memorial, Arlington National Cemetery, Va.).

II. Introduction

History is replete with accounts of women serving in support of military operations and in combat situations, sometimes by chance but usually by intention.[2] Officially, women have been serving in our country's military operations since 1901; though, unofficially, women have been serving in the military since the American Revolution.[3] For example, during the Revolutionary War, Deborah Samson disguised herself a man to join the Continental Army and Margaret Corbin accompanied her husband to his military camp and into battle.[4] By chance, a female instructor pilot was possibly the first plane in the sky to encounter Japanese fighter planes during the attack on Pearl Harbor. Cornelia Fort, a civilian pilot instructor at the time, wrote an article about finding herself unexpectedly in the middle of the battle of Pearl Harbor.[5] She was in the air over Pearl Harbor practicing landing and take-off procedures during the early morning hours of December 7, 1941, when she had a near miss with a military plane painted with the Rising Sun on its wings.[6] She saw bombs exploding in the harbor and the formation of bombers responding to the attack and, as bullets spattered all around her, she managed to land her plane safely back at the civilian airport.[7] She said that she knew at that moment that she wanted to serve her country as a pilot—even though by law it was not possible at the time.

Cornelia Ford later joined the Women's Auxiliary Ferry Squadron (WAFS), a squadron of experienced female civilian pilots created in 1942 to help ferry aircraft for the Air Transport Command.[8] She died in the course of her duties. In 1943, the Women Airforce Service Pilots (WASP) of World War II was formed from the two earlier programs for female pilots, the WAFS and the Women's Flying Training Detachment (WFTD).[9] Since the creation of these flying programs in the early 1940s,[10] laws and policies have slowly evolved to allow increasing opportunities for women to serve in support of the U.S. Armed Forces.[11] In 1948, Congress passed the Women's Armed Services Integration Act, allowing women to officially serve in the regular active duty armed forces with certain restrictions.[12] However, there are still restrictions on what roles or assignments women are allowed to fill in the military.

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[2] *See, e.g.*, Amy Nathan, Count on Us: American Women in the Military (2004); Evelyn M. Monahan & Rosemary Neidel-Greenlee, And If I Perish: Frontline U.S. Army Nurses in World War II (First Anchor Books ed. 2004).

[3] *See* Lory Manning, Women's Research and Education Institute, Women in the Military: Where They Stand 1 (7th ed. 2010).

[4] *Id.*; Nathan, *supra* note 2, at 8-11.

[5] Cornelia Fort, *At the Twilight's Last Gleaming*, Woman's Home Companion, July 1943, at 19, http://www.pbs.org/wgbh/amex/flygirls/filmmore/reference/primary/lettersarticles01.html (in The Woman's Collection, Texas Woman's University).

[6] *Id.*

[7] *Id.*

[8] *Id.*; *see also* Dora Dougherty Strother, *Introduction* to Anne Noggle, For God, Country, and the Thrill of It (1990), http://www.wingsacrossamerica.us/records_all/wasp_articles/strother.pdf.

[9] Strother, *supra* note 8.

[10] *Id.*

[11] *See* Manning, *supra* note 3.

[12] The Women's Armed Services Integration Act of 1948, Pub. L. No. 80-625 (Jun. 12, 1948), *available at* http://www.patriotfiles.com/index.php?name=Sections&req=viewarticle&artid=7838&page=1.

III. The Department of Defense's Policy on Assigning Women to Ground Combat Positions

Common misperceptions exist regarding the current Department of Defense (DOD) policy on assigning women to ground combat positions, along with many incorrect references to repealed rules or outdated policies. Secretary of Defense Les Aspin established the current DOD policy in a memorandum, dated January 13, 1994, which went into effect on October 1, 1994.[13] To provide consistency among the military Services, the "Aspin Memorandum" established both the rule regarding assigning women to ground combat positions and a new definition of direct ground combat.

The assignment rule established by the memorandum is sometimes referred to as the "Ground Combat Exclusion Policy." This rule and definition of direct ground combat are as follows:

> A. Rule. Service members are eligible to be assigned to all positions for which they are qualified, except that women shall be excluded from assignments to units below the brigade level whose primary mission is to engage in direct combat on the ground, as defined below.
>
> B. Definition. Direct ground combat is engaging an enemy on the ground with individual or crew-served weapons, while being exposed to hostile fire and to a high probability of direct physical contact with the hostile force's personnel. Direct ground combat takes place well forward on the battlefield while locating and closing with the enemy to defeat them by fire, maneuver, or shock effect.[14]

The memorandum required each of the Services to provide a list of all units and positions currently closed to women, as well as the Service's proposed status of those same positions based on the new policy.[15] Additionally, the memorandum required the Services to develop their own policies and regulations and, in accordance with Section 542 of the 1994 Fiscal Year National Defense Authorization Act, coordinate any new policies and regulations with the Assistant Secretary of Defense (Personnel and Readiness) prior to their issuance.[16] The Aspin Memorandum was intended to "expand opportunities for women." However, the memorandum went on to provide a list of assignment restrictions that the different Services could impose on women in the military to include:

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[13] Les Aspin, SECDEF Memorandum, Direct Ground Combat Definitions and Assignment Rule (Jan. 13, 1994), http://cmrlink.org/CMRNotes/LesAspin%20DGC%20DefAssign%20Rule%20011394.pdf.
[14] *Id.*
[15] *Id.*
[16] *Id.*

• Where the Service Secretary attests that the costs of appropriate berthing and privacy arrangements are prohibitive;

• Where units and positions are doctrinally required to physically collocate and remain with direct ground combat units that are closed to women;

• Where units are engaged in long range reconnaissance operations and Special Operations Forces missions; and

• Where job-related physical requirements would necessarily exclude the vast majority of women service members.

The Services may propose additional exceptions, together with the justification to the Assistant Secretary of Defense (Personnel and Readiness).[17]

The Aspin Memorandum remains the current DOD policy regarding the restriction of assigning women to ground combat positions. It replaced the previous DOD policy, commonly referred to as the "Risk Rule," on its effective date.[18] The Risk Rule had been established in an earlier Secretary of Defense memorandum, dated February 2, 1988, by then Secretary of Defense Frank Carlucci.[19] The Risk Rule stated, "risks of exposure to direct combat, hostile fire, or capture are proper criteria for closing noncombat positions or units to women, provided that . . . such risks are equal to or greater than that experienced by associated combat units in the same theater of operations."[20] The Risk Rule was intended to open opportunities for women and eliminate inconsistencies among the Services; however, the rule was repealed after a committee created by Secretary of Defense Aspin to review the rule concluded it was no longer appropriate because during contingency operations everyone serving in the theater of operations was considered "at risk."[21]

The ground combat exclusion policy remains in effect and is applicable to all military Services. Thus, all assignments of women in United States Army, Navy, Marine Corps and Air Force are controlled by this memorandum. The Coast Guard does not fall under the memorandum, as the Coast Guard generally falls under the jurisdiction of the Department of Homeland Security.[22] Notably, the Coast Guard does not have any current assignment restrictions based on gender; all assignments have been open to women since 1978.[23]

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[17] *Id*.

[18] *Id*.

[19] *Id*. *(*reference made to the SECDEF memo, February 2, 1988); *see also* United States General Accounting Office, Gender Issues: Information on DOD's Assignment Policy and Direct Ground Combat Definition 2 (October 1988).

[20] Jeanne Holm, Women in the Military: An Unfinished Revolution 433 (rev. ed. 1993).

[21] *Id*. at 432-6; *see also* Aspin, *supra* note 13.

[22] United States Coast Guard, http://www.uscg.mil/top/careers.asp (last visited Jan. 1, 2012); *see also* Manning, *supra* note 3, at 16 tbl.3.

[23] *E.g.*, Manning, *supra* note 3, at 6; Richard Degener, *United States Coast Guard tops women's options for leadership opportunities in the military*, The Military Family Network (Mar. 23, 2008),

A further change was made when Section 542 of the 1994 Fiscal Year National Defense Authorization Act was repealed and replaced by Section 652 of the 2006 Fiscal Year National Defense Authorization Act.[24] Section 652 requires the Secretary of Defense to notify Congress of any proposed changes to the existing DOD or military Services' ground combat exclusion policies.[25]

IV. Public and Military Member Opinions on the Current Assignment Policies

A common argument heard against women being assigned to various combat positions is that the public is against seeing women in these roles. However, the public polls conducted over the last decade show that the majority of those polled are in favor of women serving in full combat roles.

A. 2001–2010 Public Opinion

In December of 2001, CNN/USA Today/Gallup conducted a survey asking Americans their opinions on whether military opportunities should be available for women to serve in combat roles, including combat aviation, submarines, and Special Forces.[26] In the survey, 77% of those polled supported women flying in combat aircraft and 73% supported women serving on submarines.[27] The majority of those polled also supported women serving in ground combat positions, but the numbers dropped to 63% supporting women serving as Special Forces conducting operations behind enemy lines and to 52% supporting women serving as ground combat troops.[28]

In May of 2005, CNN/USA Today/Gallup conducted another survey asking whether women should be allowed to serve in combat roles.[29] In this survey, 72% of those polled thought women should be able to serve anywhere in Iraq.[30] Additionally, 67% of those polled supported women serving in combat zones in support of ground troops, while only 44% supported women serving as ground troops who are doing most of the fighting.[31] Interestingly, the survey was conducted shortly after lawmakers sought unsuccessfully to pass a measure forcing the Army to strictly comply with the policies restricting female service members from serving in direct ground combat positions below the brigade level.[32] The media reported

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http://emilitary.org/article.php?aid=13344.

[24] National Defense Authorization Act for Fiscal Year 2006, Pub. L. No. 109-163, Sec. 541(a)(1), 119 Stat. 3251 (Jan. 6, 2006).

[25] 10 U.S.C. § 652 (2006).

[26] Gallup Organization, *Gallup Poll—Americans Support Combat Roles for Military Women*, http://userpages.aug.com/captbar/gallup.html (last updated 2002).

[27] *Id.*

[28] *Id.*

[29] Dave Moniz, *Public backs female troops in Iraq, but not in ground force*, USA Today (May 25, 2005), http://www.usatoday.com/news/world/iraq/2005-05-25-women-combat_x.htm.

[30] *Id.*

[31] *Id.*

[32] Darren K. Carlson, *Do Americans Give Women a Fighting Chance?*, GALLUP, Jun. 14, 2005,

intense debate among lawmakers in the spring of 2005 about whether to change the current policy, but the policy outlined in the Aspin Memorandum remained in effect.[33] By 2005, there was already a big disconnect between what the policy said female troops could do and what female troops on the ground in Iraq were actually doing.[34] Around the same time as the debate among lawmakers, the media also reported that senior Army leaders were opposed to any changes in policy because of the potential loss of at least 21,000 female service members already serving in combat "support-related" jobs in Iraq, as well as, confusion over the policy's application in Iraq.[35] As one Army company commander that served in Iraq explained, a lot of people were concerned about the legal positions of women fulfilling certain roles in the Army.[36] It is unclear whether those polled actually knew what the Army's assignment policy was regarding women serving in ground combat, or even about the attempt by lawmakers to strictly enforce the existing policies. It is also unclear whether those polled actually knew about the types of jobs female service members were doing in Iraq. Nevertheless, the majority of those polled at that time appeared to support women serving in combat roles.

In February 2010, a CNN Quick Vote reported that 66% of those polled indicated they thought the Pentagon should allow women to serve in full combat roles.[37] This begs the question, what does the public think "full combat roles" are and, depending on the definition, would it change their opinion? The polls are not scientific and the questions on each survey are phrased differently, making it hard to compare the results. On the downside, the public polls on this specific issue are few and far between; are unique each time because they ask different questions; are debatably unscientific and unrepresentative of the overall population; and are arguably reactive to current issues being addressed in the media and, thus, the polled audience is biased. On the up side, these polls do offer some insight into the public's opinion at a given time on what public policy should be—regardless of whether the public is actually knowledgeable on what the current policy is. Overall, it appears from the surveys that the majority of the public is supportive of women serving in combat roles. This paper will now consider what civilian and military

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http://www.gallup.com/poll/16810/americans-give-women-fighting-chance.aspx.

[33] *Id.*; *see also* Alex Chadwick, *House Debates Role of Female Soldiers in Combat*, National Public Radio (May 19, 2005), http://www.npr.org/templates/story/story.php?storyId=4658358; *see also* Thom Shanker, *House Bill Would Preserve, and Limit, the Role of Women in Combat Zones*, The New York Times (May 20, 2005), http://www.nytimes.com/2005/05/20/politics/20military.html.

[34] Interview with Lory Manning, Captain, United States Navy (Ret.), at the Women's Research and Education Institute in Washington, D.C. (Jun. 8, 2010) (all interview notes are on file with author); Meg Malagan & Daria Sommers, Lioness (docuramafilms 2008) (similar comments made by Lory Manning, Captain, United States Navy (Ret.) in the documentary film), *available at* http://lionessthefilm.com/.

[35] Carlson, *supra* note 32; *see also* Ann Scott Tyson, *Panel Votes To Ban Women From Combat: Army Leaders Strongly Oppose House Subcommittee's Action*, Wash. Post 8 (May 12, 2005), http://consul-at-arms.blogspot.com/2005/05/wp-panel-votes-to-ban-women-from.html.

[36] Malagan, *supra* note 34 (referencing comments made by Major Kate Guttormsen in the documentary film).

[37] *See generally* Scott Teeters, 2/3 In Poll Think US Women Should Fight In Combat, Rense.com (Feb. 28, 2010), http://www.rense.com/general89/poll.htm.

college students think the current policy is and should be regarding women serving in ground combat positions.

B. 2005 Civilian College Student and Cadet Opinions

Around 2005, a poll was conducted of West Point cadets, Reserve Officer Training Corps (ROTC) cadets, and non-military affiliated students from civilian colleges. The students were asked whether women should serve in a variety of military roles, including as hand-to-hand combat soldiers.[38] On the question regarding serving in hand-to-hand combat soldier positions, women were more approving than men.[39] Additionally, civilian students were much more approving than ROTC or West Point cadets.[40] Of the (598) civilian students surveyed, 67.2% of the female students and 43.5% of the male students approved of women serving in these roles.[41] Of the (509) ROTC cadets surveyed, 41.3% of the female cadets and 18.2% of the male cadets approved of women serving in these roles.[42] Of the (218) West Point cadets surveyed, 32.4% of the female cadets and 10.3% of the male cadets approved of women serving in these roles.[43] Overall, from this study, it appears that civilian students are much more supportive than ROTC or West Point cadets regarding their views of women serving in direct combat roles.[44]

C. 2010 USAFA & West Point Cadet Opinions

As part of an independent study course offered at USAFA in the spring of 2010, four USAFA cadets conducted a small-scale research project that involved surveying and interviewing cadets at both USAFA and West Point.[45] The survey, approved by the Institutional Review Board process at both USAFA and West Point,[46] first asked cadets about their knowledge of existing rules regarding women serving in combat positions and then asked about their opinion of women serving in various roles. Within the constraints of the project, the four cadets in the class surveyed 106 USAFA cadets and 57 West Point cadets, and also interviewed approximately 26 cadets and more than a dozen service members.[47] The goal of the project was

[38] Michael D. Matthews, Morten G. Ender, Janic H. Laurence, & David E. Rohall, *Role of Group Affiliation and Gender on Attitudes Toward Women in the Military*, *in* Military Psychology 241-251 (2009).
[39] *Id.* at 241, 248.
[40] *Id.*
[41] *Id.*
[42] *Id.*
[43] *Id.*
[44] *Id.*
[45] Law 499, Women in Combat, was an independent study course offered by the Department of Law at the United States Air Force Academy during the spring semester of 2010. The instructors were Shelly McNulty and Johanna Astle and the students were Kate Wilson, Grant Hadley, Tania Buda, and Kyle Ames.
[46] Cadets Second Class Kate Wilson, Grant Hadley, Tania Buda, and Kyle Ames, *Women in Combat Survey 2010*, *approved by* United States Air Force Academy (USAFA) SCN 10-33 and United States Military Academy Exemption (Apr. 2010) (surveys are on file at USAFA, Department of Law).
[47] Cadet Second Class Grant Hadley, *Cadet Perception and Opinion on US Exclusionary Rules for*

to research existing DOD policies on assigning women to combat roles and to gain insight into the cadet perception and opinion of women serving in various combat roles.

The survey results regarding the knowledge questions were inconclusive on whether the cadets at either academy knew or understood the current DOD policies on assigning women to combat roles.[48] However, the survey results regarding opinion questions were more notable, especially in comparison to the earlier public polls on this topic. The overwhelming majority of cadets polled at USAFA (90.57%) and West Point (80.70%) believed women should be engaged in air combat today.[49] Interestingly, the exact same number of USAFA cadets (90.57%) believed that women are already allowed to fly in combat.[50] These responses may reflect the fact that most cadets come to USAFA with an interest in flying and general knowledge about their options of becoming a pilot in the Air Force. These responses may also demonstrate cadets' knowledge of female Air Force pilots that have flown in combat. For example, one of the cadets mentioned that his cadet squadron was commanded by a female fighter pilot.[51] This should not be a surprise, since women have been allowed to fly in combat missions since 1991, when the provisions of 10 U.S.C. § 8549, which prohibited women from serving on combat aircraft engaged in combat missions, were repealed under the Defense Authorization Act of Fiscal Year 1992 and 1993.[52] Further, in 1993, the Secretary of Defense directed all Services to open combat aviation to women.[53] Female aviators flew their first official combat missions during Operation Desert Fox, which was an enforcement of the no-fly zone in Iraq in 1998.[54] Women have since participated in air combat operations in Kosovo, Iraq and Afghanistan.[55]

The overwhelming majority of cadets polled at USAFA (87.62%) and West Point (85.71%) also believed women should be able to serve on combat ships today.[56] However, a smaller percentage of cadets at USAFA (43.81%) and West Point (57.14%) believed that women should serve on submarines.[57] It is unclear whether the cadets' opinions were in reaction to the recent media coverage of the Navy's decision during the spring of 2010 to lift the restriction of women serving on submarines.[58] During the cadet interviews, several cadets indicated having

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Women in Combat 4 (May 6, 2010) (unpublished student thesis for Law 495) (on file with author); *see also* trip notes by Major McNulty (on file with author).

[48] *Id.* at 5-6 tbl.1: Percentage of Survey Responses by Institution.

[49] *Id.*

[50] *Id.*

[51] Interviews with E, Cadet, United States Air Force Academy, at USAFA, Colo. (Apr. 2010 (according to USAFA SCN 10-33, the identity of any cadets surveyed or interviewed as part of this research project must be masked if the information is later used in any publication).

[52] Manning, *supra* note 3, at 7.

[53] *Id.*

[54] *Id.* at 9.

[55] James E Wise, Jr. & Scott Baron, Women at War: Iraq, Afghanistan, and Other Conflicts 37–54, 101–109 (2006); *e.g.*, Kirsten Holmstedt, Band of Sisters: American Women at War in Iraq 27–51, 81– 113, 155–83 (2008).

[56] Hadley, *supra* note 47 at 5–6.

[57] *Id.*

[58] *US Navy lifts ban on women submariners*, BBC News (Apr. 29, 2010, 1604 GST), http://news.bbc.

knowledge of the Navy's recent change in policy. Interestingly, several cadets interviewed indicated that there had been unfavorable discussion among cadets and the midshipmen (on exchange programs to the other Service academies) regarding this decision.[59] According to the media coverage at the time, Secretary of Defense Robert Gates notified Congress, in accordance with 10 U.S.C. § 652, of the Navy's proposed policy change to lift the restriction on assigning women to submarines and no objections were filed by the deadline of April 28, 2010.[60]

There was a notable difference in opinion between USAFA and West Point cadets regarding whether women should be engaged in ground combat. Among USAFA cadets, 41.90% thought women should be engaged in ground combat, while 23.81% did not agree and 34.29% said "it depends."[61] On the other hand, 40.35% of West Point cadets did not think women should be engaged in ground combat, while 26.32% did not agree and 33.33% said "it depends."[62] This may indicate a possible difference in culture between the Service academies. These responses may also reflect the fact that, at least according to all of the cadets interviewed, most West Point cadets know that women cannot serve in the infantry.[63]

The four USAFA cadets conducted this research project with the goal of determining whether the service members' opinions varied from the public's opinion of women serving in combat roles. In general, the cadet surveys appear consistent with the overall public polls—demonstrating that the majority of cadets and the public support women serving in combat roles, however, with less overall support for women serving specifically in ground combat positions. Comparing the cadet survey results to the 2001 CNN/USA Today/Gallup poll, it is interesting to note, the cadets were more supportive (87.12%) than the public (77%) for women serving in air combat, but less supportive than the public for women serving on submarines, (48.45% versus 73%), or in ground combat roles (36.42% versus 52%).

In another survey question, the majority of cadets polled at USAFA (53.77%) and West Point (50.91%) believe that society will accept women in combat.[64] According to the earlier surveys of civilian college students, as well as ROTC and West Point cadets, the civilian students were much more supportive than the military cadets regarding women serving in combat roles.[65] According to the public polls on this issue, it appears that the public is already more supportive than the military members regarding women serving in combat roles.

The question that naturally follows is whether the public's opinion and the military members' opinions match the reality of what is happening in our current contingency operations? According to the cadets polled at USAFA (42.71%) and

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co.uk/2/hi/americas/8652180.stm.

[59] Interviews with T, Midshipman, United States Naval Academy, at USAFA, Colo. (Apr. 2010) [hereinafter Interviews with T].

[60] BBC News, *supra* note 58.

[61] *Id.*

[62] *Id.*

[63] Interviews with Cadets, United States Military Academy, at USMA, N.Y. (Apr. 22-23, 2010) [hereinafter Interviews with Cadets].

[64] Hadley, *supra* note 47, at 5–6.

[65] Matthews, *supra* note 38, at 241, 248.

West Point (56.14%), there are inconsistencies in existing policy and reality.[66] Further, in a separate survey question, the overwhelming majority of cadets polled at USAFA (81.73%) and West Point (78.57%) indicated they believe that the war on terror alters women's roles in combat.[67] Follow-up interviews conducted as part of the independent study course showed that cadet opinions varied regarding why current contingency operations alter women's roles in combat, but the interviews showed that, in general, USAFA cadets were more supportive than West Point cadets of women serving in ground combat roles.[68]

The cadets at the service academies are in a unique position—having just begun their military careers at a time of ongoing contingency operations—to provide insight into popular opinion on the issues. This paper will now examine what roles women are serving in during current contingency operations in Iraq and Afghanistan.

V. Myth Busted: Women are Serving in Ground Combat Positions

A. The Army's Assignment Policy

The Army's policy for women serving in their service is regulated by Army Regulation 600-13, Army Policy for the Assignment of Female Soldiers.[69] This regulation, which became effective on April 27, 1992,[70] was not impacted by the Aspin Memorandum in 1994, and states:

> The Army's assignment policy for female soldiers allows women to serve in any officer or enlisted specialty or position except those specialties, positions, or units (battalion size or smaller) which are assigned a routine mission to engage in direct combat, or which collocate routinely with units assigned a direct combat mission.[71]

Consequently, women in the Army are restricted from certain specialties, including infantry, armor, cannon field artillery, multiple rocket artillery, and special forces.[72]

The media reports that some senior Army leaders agree that it is time to reassess the Army's assignment policy.[73] However, under the DOD policy outlined in the Aspin Memorandum, the Army can only remove the unit size restriction or the "collocation" restriction, as stated in Army Regulation 600-13. The other

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[66] Hadley, *supra* note 47, at 5-6.
[67] *Id.*
[68] Interviews with Cadets, United States Military Academy, at USMA, N.Y. and Cadets, United States Air Force Academy, at USAFA, Colo. (Apr. 2010).
[69] U.S. Dep't of the Army, Army Reg. 600-13, Army Policy for the Assignment of Female Soldiers (Mar. 27, 1992) (established an effective date of Apr. 27, 1992).
[70] *Id.* at i.
[71] *Id.* at 1.
[72] Manning, *supra* note 3, at 14.
[73] Dan De Luce, *Wars force US military to review ban on women in combat*, AFP (Feb. 28, 2010), http://www.spacewar.com/reports/Wars_force_US_military_to_review_ban_on_women_in_combat_999.html (last visited Sep. 11, 2011).

assignment restrictions can only be lifted by a change in the policy at the DOD level. As of November 2010, the Army has approximately 73,771 women serving (14,346 officers and 59,425 enlisted), or about 13.4% of Army personnel.[74]

B. History of the Army's Lioness Program in Iraq

Starting as early as 2003, Army service women were serving in a variety of roles beyond their assigned positions or specialties in Iraq in order to support the mission. The film documentary LIONESS highlights a group of female soldiers that went out on missions with all-male ground combat teams during the early days in Iraq.[75] As Captain Lory Manning, United States Navy (Ret.), stated in the documentary,

> A lot of the general public knows that women are serving in Iraq and know that women have been killed over there; but they probably have no sense at all of the kinds of things that the women like the Lionesses are doing. The Lionesses did what had to be done even though they were sent with other occupations and skills.[76]

In September 2003, Lieutenant Colonel (Lt Col) Richard Cabrey, Commander of the 1/5 Field Artillery, and Lieutenant Colonel (Lt Col) William Brinkley, Commander of the 1st Engineer Battalion, were based in and operating around the town of Ramadi, in the Al Anbar Province of Iraq.[77] As discussed in the documentary, this area was a hotbed of insurgent activity and the soldiers based there were conducting operations that required the local people, including women and children, be searched for weapons and evidence of insurgent activities. However, the male soldiers could not conduct physical searches of the local women, due to the cultural restraints preventing a male soldier from touching and conducting a physical search of an Iraqi woman. The commanders quickly realized they were in a new type of situation that required a special solution.[78] Lt Col Cabrey recognized that he needed female soldiers on the missions so that the female soldiers could search and stay with the women and children that units encountered during the operations.[79] He then asked Lt Col Brinkley of the 1st Engineer Battalion for female volunteers to support these missions.[80] Brinkley started allowing teams of two female soldiers, later growing to larger groups, to go out with the all-male units of the 1/5 Field

[74] MANNING, *supra* note 3, at 14.
[75] MALAGAN, *supra* note 34.
[76] *Id.* (comments made by Lory Manning, Captain, United States Navy (Ret.), in the documentary film).
[77] *Id.*
[78] *Id.* (referencing comments made by William Brinkley, Lieutenant Colonel, Commander of the 1st Engineer Battalion, and Richard Cabrey, Lieutenant Colonel, Commander of the 1/5 Field Artillery, in the documentary film).
[79] *Id.*
[80] *Id.*

Artillery to help support their missions.[81] He called the female soldiers on these particular missions "Team Lioness."[82]

According to Major Kate Guttormsen, Company Commander of the 1st Engineer Battalion, the battalion had approximately twenty-five women to select from, to leave their desk jobs for short periods of time and fulfill the Team Lioness requirements.[83] These women covered the full spectrum of physical and mental capabilities and had little to no training for the task at hand.[84] Almost all of the twenty-five women available participated in the Team Lioness program during 2003-2004; some participated much more than others due to their own particular skills or abilities.[85] As the artillery units realized the usefulness of having the Lionesses on their missions, they started requesting certain soldiers by name due to their particular skills, matching them for particular missions.[86]

Team Lioness started by accompanying the all-male units into the local area on their missions to search local houses for weapons and information about the insurgent activities going on in and around Ramadi.[87] In the documentary, the Lionesses described how these missions usually occurred at night. The all-male units would enter the houses first and gather the men found inside the house in one room and the women and children in another room. The male soldiers would then search the men, while the Lionesses would stay with and search the women and children. During the day, the teams would also go out to conduct civil affairs missions, such as visiting and providing supplies to local schools.

The Lionesses also explained that they quickly realized it helped to calm the situation if the local women saw that they were also women. Thus, the female soldiers would take off their helmets to show the local women that they were women. The local women would then calm down and, as they waited, would start talking to them and sharing valuable information about suspected insurgents or insurgent activities.[88]

However, the female soldiers involved in Team Lioness also quickly realized their lives were in danger during these missions because there were no "front" lines defining where or what the women were doing in Iraq.[89] Several of the Lionesses were involved in the infamous firefight that broke out in Ramadi in the spring of 2004.[90] The documentary shows that, in April 2004, Team Lioness was tasked with

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[81] *Id.*

[82] *Id.*

[83] MALAGAN, *supra* note 34 (referencing comments made by Kate Guttormsen, Major (Maj), Company Commander, 1st Engineer Battalion, in the documentary film).

[84] *Id.*

[85] *Id.*

[86] *Id.*

[87] MALAGAN, *supra* note 34.

[88] *Id.*

[89] MALAGAN, *supra* note 34 (referencing comments made by Kate Guttormsen, Maj, Company Commander, 1st Engineer Battalion, in the documentary film).

[90] *Id.* (referencing comments made by Specialist Shannon Morgan, Specialist Rebecca Nava, Captain (Capt) Anastasia Breslow, and Sergeant Ranie Ruthig, all from 1st Engineer Battalion, in the documentary film).

supporting a Marine unit, the 2nd Battalion, 4th Marines. This created some unique problems due to the differences in training and operating procedures between the Services.[91] On that particular night in April 2004, Team Lioness was accompanying the Marine unit on a mission to arrest two known insurgent leaders in Ramadi. They were dismounted and doing foot patrols to search local homes, following their standard procedures of separating the men and women to conduct the searches. During the night, they successfully found and captured the two insurgent leaders as planned. However, early the next morning , their presence became known and a massive firefight erupted, ambushing the troops. The Team Lioness members that were involved in that mission described being engaged in firefights and attacks over a distance of approximately five to seven miles. It was not just the Marines and soldiers in the "front" engaged in fire fight, but everyone out on the mission that night.[92] They were attacked with small arms fire, grenades, rocket propelled grenades (RPGs), and improvised explosive devices (IEDs). The Team Lioness members described in detail the intense firefight that lasted around four hours.[93] One of the Lionesses on this mission, Specialist Shannon Morgan, spoke in the documentary about her experience of having to return fire, including having to shoot and kill an enemy combatant who was firing at her.

Colonel Paul Kennedy, Commander of the 2/4 Marines, explained in the documentary that it was not an ideal situation to have the Lioness team out there because the situation transitioned from a search operation to semi-urban combat.[94] Lt Col Brinkley went further and stated, "Did I have female soldiers in battle? Yes. Was the intent of those soldiers to be in battle when they went? Ah, well, I don't know—probably not. But did battle come to them on occasion? Yeah, it did."[95]

The Lioness program shows in stark reality that women are serving alongside all-male units engaged in direct ground combat, despite the Army's policy restricting women from being assigned to positions or units, whose primary mission is to engage in direct combat or routinely collocates with units assigned a direct combat mission. Regardless of whether the soldiers on the ground correctly interpreted the Army's policy, the situation on the ground required them to adapt and find a way to get the job done despite Army's policy or soldiers' opinions of the existing policies. As one Lioness member who served in Iraq remarked, the Lionesses were needed so badly and in such great numbers, that while she hoped she would not be needed often she understood how important the job was and would never try to get out it.[96]

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[91] *Id.*

[92] *Id.*; *see also* MALAGAN, *supra* note 34 (referencing comments made by Robert Weiler, Major, Commander of "Whiskey" Company, 2/4 Marines, in the documentary film).

[93] *Id.* (referencing comments made by Specialist Shannon Morgan, Specialist Rebecca Nava, Captain Anastasia Breslow, and Sergeant Ranie Ruthig, all from 1st Engineer Battalion, in the documentary film).

[94] *Id.* (referencing comments made by Paul Kennedy, Colonel, Commander 2/4 Marines, in the documentary film).

[95] *Id.* (referencing comments made by William Brinkley, Lt Col, Commander of 1st Engineer Battalion, in the documentary film).

[96] *Id.* (referencing comments made by Anastasia Breslow, Capt, Signal Officer from 1st Engineer Battalion, in the documentary film).

In October 2004, a reporter with the 1st Brigade Combat Team of the Army's 1st Infantry Division wrote the first news article about the Lioness program in Iraq.[97] The reporter, Erin Solaro, stayed with the 1st Engineer Battalion and her roommate was Captain Anastasia Breslow, one of the Lionesses featured in the LIONESS documentary.[98] The Lionesses talked to her about their missions.[99] One Lioness, Private First Class Jennifer Acy, described her first mission where her team was supporting a Marine unit on duty at a traffic control point and how the team encountered fire while interacting with Iraqi women.[100] Acy explained how they came under fire but couldn't fire back for fear of hitting the Marines at the checkpoint.[101] The reporter accompanied the Lioness teams on several missions and later published a book describing these experiences.[102]

One of the biggest challenges for the Lioness teams was the lack of training for the women prior to being "attached" to the all-male ground combat units; especially when supporting the Marine units.[103] The Army Lionesses quickly discovered that the Services train and function differently and have different techniques and terminology on the battlefield. As such, the Lionesses were often left trying to figure out the Marine vocabulary and procedures in the midst of difficult situations. One way to circumvent this issue was for the Marines to create their own, internal Lioness teams, which they soon did.

Given the Army's creative use of female soldiers in Iraq, the concern among ground troops was whether employing female soldiers as part of Team Lioness violated existing policies.[104] The common argument, heard during the interviews conducted for this project, was that using female soldiers in this way does not violate the Army's policy because all service members, including women, may be employed to support the mission as needed so long as women are not permanently "assigned" to the direct ground combat units.[105] The argument is that the Lioness program does not violate the Army's assignment policy or DOD's policy because the Lionesses were only temporarily "attached" or "in support of," and not permanently "assigned," to the all-male ground combat units.[106] Furthermore, as some of the commanders

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[97] Erin Solaro, *Lionesses of Iraq*, Seattle Weekly (Oct. 6, 2004), *available at* http://www.seattleweekly.com/2004-10-06/news/lionesses-of-iraq&page=54.

[98] *Id.*

[99] *Id.*

[100] *Id.*

[101] *Id.*

[102] Erin Solaro, Women in the Line of Fire: What You Should Know About Women in the Military 75-103 (2006).

[103] Malagan, *supra* note 34 (referencing comments made by Shannon Morgan, Specialist, the 1st Engineer Battalion; Lory Manning, Capt, United States Navy (Ret.); and Robert Weiler, Major, Commander of "Whiskey" Company, 2/4 Marines, in the documentary film).

[104] Malagan, *supra* note 34 (referencing comments made by Kate Guttormsen, Major, Company Commander, 1st Engineer Battalion, in the documentary film).

[105] Telephone Interview with L, Lieutenant Colonel, United States Army (Apr. 2010) [hereinafter Interview with L]; Interview with U, Colonel, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 4, 2010) [hereinafter Interview with U] (making a similar argument in reference to the Marine Corps' policy).

[106] *Id.*; *see also, e.g.*, Manning, *supra* note 3, at 10; Gina DiNicolo, *Engendering Trust*, Military Officer 95 (Mar. 2011) (referencing a similar argument).

of all-male units argued, the missions which the Lioness teams supported were not "intended" to be combat missions and the women were not intended to serve in direct ground combat.[107]

However, as explained by the female service members who have deployed to Iraq or Afghanistan, the problem with the current policy is that the battlefield has changed in today's contingency operations and the definition of "direct ground combat" outlined in the Aspin Memorandum no longer matches the reality on the ground. Female service members are confirming that the enemy is not staying neatly behind enemy lines that are "well-forward on the battlefield," nor is the enemy only engaging male service members. Further, commanders in Iraq are using their female soldiers as they see fit in ground operations, including sending them well forward on the "battlefield" to conduct missions for extended periods of time alongside the all-male combat units.[108]

As the Military Leadership Diversity Commission (MLDC) recently pointed out in its report to Congress, "Such concepts as 'enemy,' 'exposed to hostile fire,' 'forward,' and 'well forward' are no longer useful when determining which units should be closed to women. The enemy is no longer clearly and consistently identifiable, and all units are exposed to hostile fire."[109] Further, the MLDC explained:

> [O]nce a female servicemember has been assigned to a unit, the assignment policy prescribes neither what duties she can do nor with which other units she may interact. As a result, women are performing in combat roles. Indeed, local commanders have the authority to use their personnel as they see fit to fulfill the unit missions.[110]

C. The Marine Corps' Assignment Policy

The Marine Corps' current assignment policy restricts females from certain military occupational specialties altogether (infantry, tank and assault amphibian vehicles (AAV), and artillery), from certain units (all tank and AAV units, reconnaissance units, low altitude air defense units, and fleet antiterrorism security teams), and from certain units below a certain organizational level (infantry regiments and below; artillery battalions and below; combat engineer divisions and below).[111] Additionally, women cannot be assigned to occupations or positions that routinely "collocate" with ground combat troops or reconnaissance troops.[112]

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[107] Interview with L, *supra* note 105; Interview with U, *supra* note 105; *see also* Malagan, *supra* note 34 (referencing comments made by Robert Weiler, Major, Commander of "Whiskey" Company, 2/4 Marines, in the documentary film).

[108] *See* Solaro, *supra* note 102, at 83.

[109] Military Leadership Diversity Commission, Final Report, From Representation To Inclusion: Diversity Leadership for the 21st-Century Military 73-74 (Mar. 15, 2011), http://mldc.whs.mil/.

[110] *Id.* at 74 (making reference to Margaret C. Harrell et al., RAND's National Defense Research Institute, Assessing the Assignment Policy for Army Women (2007)).

[111] Manning, *supra* note 3, at 21-22.

[112] *Id.* at 22.

Due to the unit-level restrictions, some career fields that are open to women have restrictions which limit the number of women allowed in the field.[113] Marine Corps Order 1200.17, the Military Occupational Specialties (MOS) Marine Corps Manual, details the occupations available to women.[114] Each year the Marine Corps Human Resource Development Process is synchronized through publication of this Order. This Order defines all the occupational specialties and otherwise provides information that will enable the Marine Corps to carry out its assigned mission to organize, train, assign, and manage the force.[115] The Marine Corps has since opened a new MOS, 0211, a counter intelligence position previously closed to women.[116] As of November 2010, the Marine Corps had 12,964 women serving (1,207 officers and 11,757 enlisted), or about 6.3% of Marine Corps personnel.[117]

D. Development of the Marine Corps' Lioness Program in Iraq

Instead of relying on the Army battalions for Lioness teams to support Marine Corps missions, in 2004 and 2005, the Marines started tasking female officer and enlisted Marines deployed in the area of responsibility to become part of Marine Lioness teams.[118] As part of this research project, numerous women who served on Marine Corps Lioness teams from 2007 to 2009 were interviewed and spoke proudly of their experiences. However, due to confusion about the rules and concern that what they did was against current policy, those interviewed asked that their names not be used. Therefore, only generic references will be made to the women and men interviewed. Names will be used for those reported in other sources.

By 2007, the female Marines deployed to Iraq were eager to get away from their desk jobs and were looking for opportunities to get more involved "outside the wire."[119] As Corporal Gizelle Guitierrez, an embark clerk in the 3rd Marine Aircraft Wing (Fwd), stated, "This environment is totally different from my normal job."[120] She explained, "Normally, I am moving equipment or loading planes and now I have the opportunity to be in a combat zone dealing with the Iraqi people on a daily basis."[121] As another female Marine put it, "I wanted to do something important—it was my duty as a Marine."[122] They knew they could offer assistance, at the very least,

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[113] *Id.* at 21.

[114] U.S. Dep't of the Navy, U.S. Marine Corps, Marine Corps Order 1200.17, Military Occupational Specialties (MOS) Marine Corps Manual 1 (23 May 2008).

[115] *Id.*

[116] U.S. Dep't of the Navy, U.S. Marine Corps, Marine Corps Order 1200.17B, Military Occupational Specialties (MOS) Marine Corps Manual 1 3-15 to 3-17 (15 April 2010).

[117] *Id.* at 21.

[118] Interview with Y, 1st Lieutenant, and C, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010).

[119] Interview with N, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010) [hereinafter Interview with N] (regarding first deployment to Iraq).

[120] Corporal Jessica Aranda, *Following the paw prints of the Lioness program*, 3rd marine Aircraft Wing (Fwd) Official Website (Jun. 5, 2008).

[121] *Id.*

[122] Interview with W, Corporal, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 4, 2010) [hereinafter Interview with W].

in searching female Iraqis at various checkpoints and so the young female Marines started requesting to serve in these roles.[123] Thus, they started organizing Marine Lioness teams and also started to develop their own monthly training programs for these roles.[124] The training started out as only a few days of training each month, focused mainly on various body and vehicle search techniques,[125] and evolved to up to ten days of training each month on a variety of skills which were tested using scenarios at a mock control point.[126]

In 2008, several Marine officers initiated and developed the concept of training Iraqi women to serve in local police roles.[127] The first group of female Iraqi women trained in search techniques and other police procedures were called the "Sisters of Fallujah."[128] The Sisters of Fallujah assisted in searching Iraqi women at the entry control points. The female Marines also started working at the entry control points, sometimes alongside the Sisters of Fallujah, to assist in search operations.[129] Lioness teams would go out in teams of two or four, escorted to and from their base camp by convoys, to spend the day searching the female Iraqis going through the checkpoints. They started finding that the Iraqi women were concealing all types of items that would have been missed had they not been searched; including, among other things, ammunition, empty magazines, maps, military-issued handheld radios, and large amounts of copper wire.[130] Further, men were no longer able to pass undetected through checkpoints, by dressing as women, to smuggle such items through the checkpoints.[131]

As one Lioness trainer explained, the mission of the Lioness program, at least initially, was to eliminate potential threats posed by women.[132] However, the Lioness program soon expanded far beyond just checkpoint search operations. The Lioness teams started joining dismounted patrols, where they would walk through the villages along with their male counterparts and do "knock and talks" at several local houses.[133] The women's presence on these missions helped calm the occupants of the houses[134] and "showed the softer side" of security patrols.[135] As one Lioness

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[123] Interview with N, *supra* note 119.
[124] *Id.*; Telephone Interview with D, Captain, United States Marine Corps (Mar. 30, 2010) [hereinafter Telephone Interview with D].
[125] Interview with N, *supra* note 119; Telephone Interview with D, *supra* note 124; Interview with S, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010) [hereinafter Interview with S].
[126] Aranda, *supra* note 120; Sergeant Courtney Martincano, *8th Communication: Lioness Program*, II MEF Headquarters Group Official Website (Sep. 28, 2009)
[127] Interview with N, *supra* note 119; Telephone Interview with D, *supra* note 124; *see also* Aranda, *supra* note 120.
[128] Interview with N, *supra* note 119; Telephone Interview with D, *supra* note 124.
[129] Interview with K, *supra* note 138; Interview with N, *supra* note 119.
[130] Interview with N, *supra* note 119.
[131] Interview with Y, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010) [hereinafter Interview with Y].
[132] Aranda, *supra* note 120.
[133] Interviews with N, 1st Lieutenant, and S, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010).
[134] *See* Solaro, *supra* note 102, at 82.
[135] Interview with U, *supra* note 105.

pointed out, it was a way to show the Iraqi women that there were opportunities for women to get involved in providing security to the local towns and villages.[136]

As the all-male units started to realize the skills and usefulness of the Lioness teams, they began requesting the Teams' assistance with all sorts of missions that might involve searching or talking to female Iraqis.[137] By late 2008, the Lioness teams were supporting a wide variety of other missions, including providing security at election sites, doing foot patrols and "knock and talks" in the communities, and assisting with searches of local women attending various types of community meetings.[138] The female Marines would leave their desk jobs, usually without a replacement, to serve on the Lioness teams for a day, several days, or even several weeks at a time.[139]

The Lioness teams also started doing what they called "Iraqi female (or women) engagement," while supporting missions such as providing medical care at community clinics or security at community agricultural classes that local women attended. During these types of missions, the Lionesses would talk with the local women. They found that the local women would speak openly with them and would start to share information with them, such as their concerns in their own communities.[140] The Lionesses learned that the local women often wanted supplies other than those that were being offered through the community service projects. For example, the local women would talk about how they wanted rice, flour, cold medicine or pain killers, rather than birth control and school supplies.[141] More importantly, the women started talking about what their fears were regarding the latest insurgent activities in the area. For example, on one occasion the local women told the Lionesses that they were afraid to let their children attend school because the insurgents in that area had started to attack the schoolchildren on their way to school and the schools that the local girls attended.[142] Their support of these types of missions even led to the Lioness teams being sometimes called "Iraqi Women Engagement Teams."[143]

By early 2009, the Lioness program was much more advanced than in its early days. The training program had advanced from a few days covering search procedures to at least two weeks of vigorous training on a variety of areas.[144] After training, the Lioness teams were "attached" to a particular all-male unit, usually an

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[136] *Id.*

[137] Interviews with N, 1st Lieutenant, and Y, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010).

[138] Interview with K, Lance Corporal, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 4, 2010) [hereinafter Interview with K]; Interview with N, *supra* note 119; Interview with S, *supra* note 125.

[139] Interview with K, *supra* note 138; Interview with S, *supra* note 125.

[140] Interviews with S, 1st Lieutenant, and N, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010).

[141] Interview with S, *supra* note 125.

[142] *Id.*

[143] Interview with P, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 4, 2010) [hereinafter Interview with P]; *see also* Interview with U, *supra* note 105.

[144] Interview with K, *supra* note 138.

infantry unit, for a period of thirty days. After thirty days, another Lioness team would replace the existing team with, ideally, a period of two days of overlap.[145] The infantry units requested the Lioness team's support based on their mission requirements. One Lioness described going out on three to four missions per week, totaling approximately twenty missions, which varied from search operations to Iraqi women engagement missions at reconstruction team meetings in the community.[146] Another Lioness recounted her experiences conducting search operations and engagement missions during agricultural classes (affectionately called "moo" classes) held in the communities.[147] Yet another Marine Lioness was asked to accompany an Army Operations Team on a mission; her presence on the mission was so successful that she stayed for two months to assist with information gathering, rapport-building, and engaging with both the women and men in the local area.[148]

During the engagement missions, the Lionesses would interact and talk with the local women present to assess the overall climate of the area. The Lionesses quickly realized that when the local women saw that they were also women, they started talking freely with them. Thus, the Lionesses started wearing brightly-colored head scarves under their helmets and sometimes removing their sunglasses, so that they would be visible and identifiable to the local women.[149] The Lionesses also realized that the male interpreters were interfering with this process; so they petitioned for female interpreters instead. Once the Lionesses were assisted by female interpreters, the engagement missions soon proved more useful in gathering intelligence because the local women were willing to talk to other women about their concerns.[150]

There was no formal promotion of the Lioness program; it was usually advertised through word of mouth in the units or during mass-training events.[151] However, once the all-male units that were working with the Lioness teams realized the effectiveness of having the female Marines as part of the mission, especially on the Iraqi women engagement missions, the requests for Lioness support quickly grew.[152] Additionally, as the Lionesses reported the intelligence that they were gathering, the ground commanders started responding and supporting the requests to give up their female Marines to serve on Lioness teams.[153]

By late 2009, the Marine Lioness program in Iraq had a well-developed training plan. Training occurred in an established, centralized location in theater at the Marine Expeditionary Force level.[154] The training program was held once a month and covered a multitude of subject matter areas, including some combined

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[145] Interview with Y, *supra* note 131; *see also* Interview with W, *supra* note 122.
[146] Interview with K, *supra* note 138.
[147] Interview with W, *supra* note 122.
[148] Lance Corporal Melissa A. Latty, *Lionesses work to improve community in local Iraq city*, Marine Corps News Room (posted on Jun. 12, 2009), http://www.marine-corps news.com/2009/06/lionesses_work_to_improve_comm.htm.
[149] Interview with S, *supra* note 125; *see also* Interview with K, *supra* note 138.
[150] Interview with N, *supra* note 119.
[151] Interview with W, *supra* note 122.
[152] Interview with N, *supra* note 119 (regarding her second deployment to Iraq).
[153] Interview with N, *supra* note 119; *see also* Interview with U, *supra* note 105.
[154] Interview with N, *supra* note 119.

training with the infantry units.[155] Approximately twenty participants went through the training each month. Each participant was graded based on her proficiency in the trained areas and she would only be put on a Lioness team if she passed a certain standard of proficiency in the needed skill areas. As such, not all of the women that attended training actually served on a Lioness Team. Rather, the Lioness Program coordinator always had a pool of about twenty trained women to choose from and, based on their skills, the women were selected and sent to specific units or areas depending on the anticipated mission.[156]

Additionally, female Marines who served on the Lioness teams would no longer be tasked for only a day or a few days at a time. Now, after they completed the training program, they would be attached to a particular unit for around thirty-to-sixty days straight to support a particular unit.[157] One hundred and twenty days was reportedly the longest time period that a Lioness was attached to a unit so as not to be away from her regular unit for too long.[158] Additionally, the Lioness teams were attached to specific units (not just infantry units) and if the unit moved; the Lioness team moved with them.[159] The women would often stay out in the field alongside their counterparts for significant periods of time.[160]

While the female Marines enjoyed this new level of involvement in the missions outside the wire, they also understood the increased risk to their own safety. For security reasons, the Lionesses were always sent in teams of two, four, six or eight. The standard procedure was that one Lioness would search and then talk to or engage with the female Iraqis at the location, while the other Lioness would serve as security, or "the Guardian Angel."[161] The Lioness teams realized this procedure was necessary because often the all-male units would leave them alone with the Iraqi women.[162] Despite these precautions, the Lionesses related incidents when they came under indirect fire[163] while providing support at community meetings, election sites, or while conducting dismounted patrols. If they came under direct fire, they were often told not to engage or to get into the vehicles when the fire started.[164] The Lionesses also remarked that Ramadi was generally known to be one of most dangerous locations because you were always under fire and there were often car bombs exploding near you.[165]

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[155] Interview with N, 1st Lieutenant, and Y, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010).
[156] Interview with Y, *supra* note 131.
[157] *Id*; Interview with K, *supra* note 138; *see also* Dr. Regina T. Akers, *In and out of harm's way: women in combat*, Barstow Log Vol. 13, No. 11 (Mar. 19, 2009).
[158] Interview with Y, *supra* note 131.
[159] Interview with S, 1st Lieutenant, and Y, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010).
[160] Interview with S, *supra* note 125.
[161] Interview with K, *supra* note 138; *see also* Solaro, *supra* note 102, at 93 and 96 (referring generally to this standard operating procedure).
[162] Interview with Y, *supra* note 131.
[163] Interviews with K, Lance Corporal, and P, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 4, 2010).
[164] Interview with S, *supra* note 125.
[165] Interview with K, *supra* note 138; Interview with Y, *supra* note 131.

There were even occasions when it appeared that the Lioness teams were the targets of the attacks. In June of 2005, a suicide bomber in Fallujah drove his car into a military convoy transporting the Lioness teams (called Female Search Force in the article) on their daily trip from their base camp to their jobs at the checkpoint downtown.[166] Three of the six service members killed that day were Lioness team members; Corporal Ramona M. Valdez, Lance Corporal Holly A. Charette, and Petty Officer First Class Regina R. Clark (a Navy Seabee serving on the Lioness team).[167] In 2007, Corporal Jennifer M. Parcell was killed, along with a male soldier and two Iraqi police officers, when an Iraqi woman that she was searching detonated an explosive vest.[168] Further, a Lioness that served in Iraq in 2008 reported that it was common knowledge that there were local hits out on their Lioness teams.[169]

By the time the Marine Lioness program ended in Iraq, there was an established program with a female Marine tasked for the length of her deployment as the Officer in Charge of coordinating the Lioness program.[170] Granted, this job was still considered a "side-billet" or additional duty for her and there were still problems with the continuity or turn-over of the program between units. Overall, the female Marines enjoyed these duties and the ground commanders supported the program by allowing the women to serve in these roles.[171] The Lioness program ended in Iraq in 2010, after the United States announced the end of combat operations and the beginning of U.S. troop withdrawals.[172] According to the Marine Lionesses, there was never an official Army Lioness program; it was always an ad-hoc program in individual units because the Army didn't have the time or resources to commit to it.[173] While some Army and Navy service women went through the Marine Corps' Lioness training programs from 2007 to 2009, there was little coordination with the sister Services on a coordinated Lioness program.[174] Consequently, the Marine Corps' program became the model for female engagement missions in Afghanistan.

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[166] Michael Moss, *A Mission That Ended in Inferno for 3 Women*, N.Y. Times, Dec. 20, 2005; Solaro, *supra* note 102, at 101-102; *see also, e.g.*, James Glanz & John F Burns, *Iraq Bombing Kills 4 U.S. Women, a Record Toll*, N.Y. Times, Jun. 25, 2005.

[167] Moss, *supra* note 166.

[168] DiNicolo, *supra* note 106.

[169] Interview with S, *supra* note 125.

[170] Interview with Y, *supra* note 131.

[171] Interview with N, *supra* note 119; *see also* Interview with U, *supra* note 105.

[172] Helene Cooper & Sheryl Gay Stolberg, *Obama says Iraq combat mission is over*, NDTV, Sep. 1, 2010), *available at* http://www.ndtv.com/article/world/obama-says-iraq-combat-mission-is-over-48602; The Associated Press & Reuters, *Obama: U.S. combat role in Iraq is ending, Iraq war will end "as promised and on schedule," president says*, MSNBC.COM News Services, Sep. 1 2010, http://www.msnbc.msn.com/id/38518416/ns/politics/t/obama-us-combat-role-iraq-ending/.

[173] Interview with Y, *supra* note 131.

[174] Interview with S, *supra* note 125; Interviews with K, Lance Corporal, and W, Corporal, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 4, 2010); *see also* Akers, *supra* note 157.

E. Transition to the Female Engagement Teams (FET) in Afghanistan

As military operations and troop numbers decreased in Iraq, the focus turned to the ongoing operations in Afghanistan.[175] The Lioness program closed in Iraq just in time to begin employing women in combat operations in Afghanistan.[176] By then, the term "Lioness teams" was viewed as outdated and therefore replaced by the term "Female Engagement Teams" (FETs). This was an intentional change on the part of the female Marines and was meant to emphasize that these teams are now focused primarily on engagement missions rather than mere search operations at entry control points around military compounds.[177]

An early version of the FETs began operating in Afghanistan in 2004.[178] According to one report, the Combined Joint Task Force 76 in Kabul, Afghanistan, developed "Team Xena," later called "The Women's Shura" in 2004.[179] Lieutenant Colonel Steve Morgan, the Paktika Province provincial reconstruction team commander at the time, explained that the team was designed to engage Afghan women.[180]

By early 2009, the first official FET operation was conducted in Afghanistan.[181] A blog posted an article in March of 2009 summarized the first female engagement mission that occurred in Afghanistan. On February 9, 2009, a FET accompanied the Marines of Company I, 3rd Battalion, 8th Marine Regiment (Reinforced), the ground combat element of the Special Purpose Marine Air Ground Task Force-Afghanistan (SPMAGTF-A), on their first engagement mission with the local population in Farah Province.[182] According to the blog, the FET members wore brightly colored head scarves to make themselves identifiable as women and to show respect for the Afghan women. The FET members were granted access to talk with the local women and children and, thus, were able to obtain valuable information about how the local population lived and what they thought of the Marines operating in the area.[183]

The FETs in Afghanistan are serving in missions similar to those of the Lioness teams in Iraq, but the program is now primarily focused on search operations

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[175] Gordon Lubold, *Drawdown in Iraq begins: 12,000 troops to return by fall: The two combat brigades that would have replaced them will go to Afghanistan instead*, The Christian Science Monitor, Mar. 9, 2009; Barbara Starr, *Obama approves Afghanistan troop increase*, CNN Politics, Feb. 17, 2009, *available at* http://articles.cnn.com/2009-02-17/politics/obama.troops_1_afghanistan-troop-increase-troop-levels?_s=PM:POLITICS.

[176] Interview with Y, *supra* note 131.

[177] *Id.*

[178] DiNicolo, *supra* note 106, at 88

[179] *Id.*

[180] *Id.*

[181] Internal Report submitted by V, 1st Lieutenant, United States Marine Corps (Aug. 9, 2009) (on file with author) [hereinafter Internal Report submitted by V].

[182] Lance Corporal Monty Burton, *US Marines All-Female Combat Team Conducts First Mission in Southern Afghanistan*, The Tension, posted on Mar. 12, 2009, *available at* http://thetension.blogspot.com/2009/03/us-marine-all-female-team-conducts.html

[183] *Id.*

and intelligence collection in the local towns and villages.[184] Similar to the Lioness teams in Iraq, the FETs are organized into pairs or small teams and then attached to all-male ground units for periods of time to help support their missions as needed.[185] There have been some growing pains as the program adapts to a new area of operations. As one FET member pointed out, the concept has had to adapt because the cultural background of Afghanistan is completely different from that of Iraq and the women are more timid.[186]

The FETs also have the daunting task of trying to gain the trust of and build relationships with the local communities. As the FETs start to enter the more remote, and more dangerous, areas in Afghanistan, they are discovering that not all of the male villagers are willing to allow the female Marines to interact with the local women.[187] As Captain Jennifer Gregoire, a FET leader based in Helmand Province, Afghanistan, explained, "This is going to be a slow process. We have to understand that when we go, we might not get that contact that we want, that we have to establish a relationship."[188] However, a FET operating in that same area in 2009 said that the FETs were having a positive impact in engaging females in the local Pashtun population.[189]

Later in 2009, another blog posted an article discussing how the FETs in Afghanistan were successful in reaching for and gaining support from the local women.[190] The blog noted how the female Marines, while on patrols in the local villages, were often invited inside the compounds to talk with the local women, while the male Marines had to wait outside. The FETs usually bring basic humanitarian aid items for the women (popular items are rice, beans, sugar, tea, cooking oil, and aspirin), getting the local women to openly discuss their daily lives and concerns.[191] According to an internal Marine report on the FETs, the local women related how they had watched the patrolling FETs through a crack in the wall and had "prayed you would come to us."[192] Additionally, a local man who allowed an FET to enter his home said, "Your men come to fight, but we know the women are here to help."[193]

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[184] Internal Report submitted by V, *supra* note 181.

[185] Interview with V, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010); *see also* Trista Talton, *All-female teams reach out to Afghan women*, Marine Corps Times, Jan. 10, 2010, http://www.marinecorpstimes.com/news/2010/01/marine_fet_010910w/.

[186] Burton, *supra* note 182.

[187] Soraya Sarhaddi Nelson, *Woman To Woman: A New Strategy in Afghanistan*, NPR, posted on Sep. 7, 2009, *available at* http://www.npr.org/templates/story/story.php?storyId=112606206.

[188] *Id.*

[189] *Reaching Out to the Women of Afghanistan*, Marine Corps Center For Lessons Learned (MCCLL), Vol 6, Iss 3 (Mar. 2010) (referring to a briefing on FETs developed by Major Maria Vedder, a United States Army Reservist, serving at International Security Assistance Force Headquarters).

[190] Thomas E. Ricks, *Women in COIN (II): How to do it right*, Foreign Policy (posted on Oct. 9, 2009), http://ricks.foreignpolicy.com/posts/2009/10/09/women_in_coin_ii_how_to_do_it_right.

[191] *Id.*

[192] *Id.*; *see also* Talton, *supra* note 185.

[193] Ricks, *supra* note 190; *see also* Elisabeth Bumiller, *Letting Women Reach Afghan Women in Afghan War*, N.Y. Times, Mar. 6, 2010, *available at* http://www.nytimes.com/2010/03/07/world/asia/07women.html?emc=eta1 (citing to an internal report written by Captain Matt Pottinger, United States Marine Corps).

As one FET member explained, "If the women know we are here to help them, they will likely pass that on to their children. If the children have a positive perspective of alliance forces, they will be less likely to join insurgent groups or participate in insurgent activities."[194]

Up to this point, participation on the FETs has been voluntary from the perspectives of both female Marines and their commanders.[195] Some commanders are unwilling to release female Marines in their battalion to serve on FETs mainly due to lack of personnel to fulfill their primary duties while they are gone.[196] At the same time, other commanders are excited about the concept and want to train all their female Marines on FET roles, regardless of whether they will assist with FET operations while they are deployed.[197] One supportive battalion commander took the initiative to start identifying FET members before the Marines left for their deployed location.[198] They also started training the FET members a month before their scheduled deployment, with additional training once they arrived at the deployed location.[199] However, the trainers pointed out that not all of the women in the battalion were trained on FET duties due to lack of personnel and poor advertisement of the program.[200]

By early 2010, a proactive Marine Expeditionary Brigade (MEB) at Camp Pendleton, California, had developed and initiated a four-month long program to "train the trainers."[201] By February of 2010, the trainers were instructing women who volunteered to serve on FETs during their upcoming deployments.[202] These women were among the first FETs to be trained in advance of their deployment and, more notably, to be deployed exclusively for the FET missions.[203]

Additionally, the units are not having any problems finding female Marines who want to join the FETs, despite the danger that they will likely face once in theater. As Lieutenant Colonel Julie Nethercot, the 9th Communications Battalion Commander out of Camp Pendleton explained, "We get calls literally every other day from Marines who are interested in being a part of it. . . . They're really interested in making a difference. They just want to be part of something like this."[204] Corporal Vanessa Jones said, "When I heard about this, I said, 'Oh, that's it, let's go.'"[205]

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[194] Burton, *supra* note 182 (citing to comments made by 2nd Lieutenant Johanna Shaffer).
[195] Interview with V, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010) [hereinafter Interview with V].
[196] Interview with B, Lieutenant Colonel, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010) [hereinafter Interview with B].
[197] Interview with V, *supra* note 195.
[198] *Id.*; *see also* Interview with H, Captain, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010) [hereinafter Interview with H].
[199] Interview with V, *supra* note 195; interview with H, *supra* note 198.
[200] *Id.*
[201] Talton, *supra* note 185.
[202] *Id.*; *see also* DiNicolo, *supra* note 106, at 91.
[203] Bumiller, *supra* note 193.
[204] Talton, *supra* note 185.
[205] Bumiller, *supra* note 193.

Corporal Michele Greco-Lucchina explained, "Every Marine wants to go outside the wire. We all join for different reasons, but that's the basis of being a Marine."[206]

Even with new training, some obstacles remain. Due to the nature of the battlefield today, the FETs are encountering similar security threats in Afghanistan as the Lioness teams did in Iraq. One FET member described a time in 2009 when her team went out with an infantry unit to help conduct a dismounted foot patrol in the local community.[207] She described how the FETs were usually placed in the middle or rear of the foot patrol, and would then help provide security to the sides or rear of the patrol. However, she was quick to point out that the male Marines were not tasked with taking care of the women. Rather, everyone had to be ready to engage regardless of their placement on the patrol. On that particular mission, she explained how they came under direct fire and encountered six IEDs, two of which detonated. She said the FETs had to "be ready to do anything" during these missions.[208] According to Captain Brandon H. Turner, Commander of Golf Company, 2nd Battalion, 6th Marines, "We don't plan for our FETs to be in a kinetic role, but once you step outside that wire, you cannot be sure what will happen. Yes they have engaged insurgents, and then they go back to their role engaging the populace."[209]

Despite the danger, the female Marines are eager to be part of the FETs and are going on increasingly dangerous missions. In November 2009, the Marine Corps Special Operations Command deployed a task force to the western region of Afghanistan and their task force included a FET with four female Marines.[210] As Corporal Sara Bryant stated, "This is what I joined the Marine Corps to do. This is what it's all about. This is the closest a woman will get to doing the infantry . . . side of the house. I can't wait to get over there."[211]

As the FET program in Afghanistan continues, it is gaining recognition and media attention.[212] Given the nature of the war on terrorism, commanders are recognizing that women are an essential part of the counter-insurgency operation whether they like it or not. As one Marine commander put it, "To win the COIN (counter-insurgency) operation in Afghanistan, you need to engage the entire population—that means that the FET teams are critical."[213] For that reason, in today's contingency operations, women are serving in roles far beyond the awareness of the average member of the public or even member of the military. Moreover, women are serving in roles arguably far beyond what is allowed by a literal interpretation of current assignment policies. The reality today is that women are serving in ground combat roles, even if not known or officially acknowledged. Given the

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[206] *Id.*
[207] Interview with V, *supra* note 195.
[208] *Id.*
[209] DiNicolo, *supra* note 106, at 91.
[210] Talton, *supra* note 185.
[211] *Id.*
[212] Chuck Holton, *US Employs Secret Weapon in Afghanistan War*, CBN News, Oct. 27, 2009, *available at* http://www.cbn.com/cbnnews/world/2009/October/US-Employs-Secret-Weapon-in-Afghanistan-War/; *see generally* DiNicolo, *supra* note 106.
[213] Interview with B, *supra* note 196.

nature of current contingency operations, the DOD and Service policies regarding the assignment of women to various combat positions no longer accurately reflect the reality on the ground.

VI. Past Studies on the Assignment of Women to Ground Combat Positions

Over the past two decades, there have been several government-sponsored studies regarding gender issues in the military. These studies have generally considered whether women should be assigned to various combat roles, including positions in combat aviation, on combat ships, and in direct ground combat. During this same timeframe, there have also been an increasing number of books and peer-reviewed research articles published on gender issues in the military.[214] The issue keeps coming up as the number of women in the military increases and their roles become more diverse.

A. 1992 Presidential Commission on the Assignment of Women in the Armed Forces[215]

Prompted by the success of women serving in the Gulf War during the early 1990s, President George H. W. Bush appointed a commission of fifteen members to study whether the existing rules were appropriate for the present day's war.[216] The National Defense Authorization Act for Fiscal Years 1992 and 1993 formally established the Presidential Commission on the Assignment of Women in the Armed Forces.[217] The Commission's task was to consider the legal, policy, and societal implications of the current restrictions on assigning women to ground combat positions.[218] In November 1992, the Commission presented its findings and, among other things, recommended retaining the laws and policies excluding women from participating in direct ground combat.[219] However, the Commission has been heavily

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[214] Brian Mitchell, Women in the Military: Flirting with Disaster (Regnery Publishing, Inc. 1998); Lorry M. Fenner & Marie E. deYoung, Women in Combat: Civic Duty or Military Liability? (Georgetown University Press 2001); Holmstedt, *supra* note 55; Alice W.W. Parham, T*he Quiet Revolution: Repeal of the Exclusionary Statutes in Combat Aviation—What We Have Learned From a Decade of Integration*, 12 Wm. & Mary J. Women & L. 377 (2006); Solaro, *supra* note 102; Wise, *supra* note 55; Martha McSally, W*omen in Combat: Is the Current Policy Obsolete?*, 14 Duke J. Gender L. & Pol'y 1011 (May 2007); Scott E. Dunn, The *Military Selective Service Act's Exemption of Women: It is Time to End It*, 2009 Army Law 1; *E.g.*, Holm, *supra* note 20.

[215] Presidential Commission on the Assignment of Women in the Armed Forces (Nov. 15, 1992, ISBN0-02-881091-0), Executive Summary, *available at* http://cmrlink.org/printfriendly.asp?docID=233.

[216] Telephone Interview with Thomas V. Draude, Brigadier General, United States Marine Corps (Ret.) (Mar. 16, 2010); *see also Women in Land Combat: Selected Findings—1992 Presidential Commission*, Center for Military Readiness (last updated on Nov. 18, 2004), *available at* http://cmrlink.org/printfriendly.asp?docID=233.

[217] National Defense Authorization Act for Fiscal Years 1992 and 1993, H.R. 2100, 102nd Congress, Title V, Part D, Subparts 1 & 2 (1991-1992), *available at* http://thomas.loc.gov/cgi-bin/query/F?c102:1:./temp/~c10223O4rt:e247828:.

[218] *Id.*; *see also* Manning, *supra* note 3, at 8.

[219] *Women in Land Combat: Selected Findings—1992 Presidential Commission,* Center for

critiqued by those claiming that members of the Commission were biased before the study even began.[220]

B. 1993 Secretary of Defense's Implementation Committee[221]

In April 1993, Secretary of Defense Les Aspin created the Implementation Committee to review the appropriateness of the then-current DOD policy, the Risk Rule, which excluded women from serving in non-combat units or missions if the risks of exposure to direct combat, hostile fire, or capture were equal to or greater than the risks faced by the combat units they supported.[222] Contrary to the earlier recommendation by the 1992 Presidential Commission that the Risk Rule should be retained, the Implementation Committee advised that the Risk Rule was no longer appropriate because during contingency operations everyone serving in the theater of operations is considered "at risk."[223] Based on this recommendation, the Secretary of Defense repealed the Risk Rule, effective October 1994, and replaced it with the policy that remains in effect today, the Ground Combat Exclusion Policy.[224] Since this current DOD policy went into effect, several other studies have reviewed the assignment policies that limit how women may be employed on the battlefield.

C. 1997 RAND's National Defense Research Institute Study[225]

In 1997, a special interest item in the House Report for the National Defense Authorization Act for Fiscal Year 1997 initiated a study on the performance of the military Services in integrating women into previously closed military positions and units.[226] RAND's National Defense Research Institute carried out the study, which included conducting surveys and interviews at fourteen military units across the Services.[227] The study was aimed at assessing each military Service's progress and the effects of gender integration on readiness, cohesion, and morale. The report concluded that gender integration is perceived to have a relatively small effect on readiness, cohesion, and morale in the units that were studied.[228] In fact, gender integration was mentioned as having a positive effect in some cases by increasing

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Military Readiness (last updated on Nov. 18, 2004), *available at* http://cmrlink.org/printfriendly.asp?docID=233.

[220] Telephone Interview with Brigadier General Thomas V. Draude, United States Marine Corps (Ret.) (Mar. 16, 2010); *see also* Interview with J, Major, United States Air Force, in Colo. Sprgs, Colo. (Apr. 2010).

[221] Aspin, *supra* note 13.

[222] *Id.* (referencing an earlier SECDEF memo dated 28 April 1993); *see also* Holm, *supra* note 20, at 433.

[223] Aspin, *supra* note 13; *see also* Holm, *supra* note 20, at 432-36.

[224] Aspin, *supra* note 13.

[225] Margaret C. Harrell & Laura L. Miller, RAND's National Defense Research Institute, New Opportunities for Military Women: Effects Upon Readiness, Cohesion, and Morale (1997).

[226] *Id.* at iii, 4.

[227] *Id.* at vi.

[228] *Id.* at xvii.

morale and raising the level of professional standards.[229] Other influences, mainly leadership and training, were perceived as being far more influential on readiness, cohesion, and morale.[230] Of the military personnel surveyed and interviewed, more than eighty percent of the women supported a change in the combat exclusion policy, differing only in whether women should fill ground combat positions voluntarily or should be selected involuntarily.[231] More than half of the enlisted men surveyed favored some relaxation of current policy, with only one-third of male officers agreeing with a change in policy.[232]

D. 1998 United States General Accounting Office Study[233]

In 1998, the General Accounting Office (GAO) was asked by the U.S. Senate's Subcommittee on Readiness, Committee on Armed Services, to review various gender issues in the Armed Forces, including a review of DOD's Ground Combat Exclusion Policy.[234] In October of 1998, GAO presented their findings on: (1) the numbers and types of assignments currently closed to women; (2) DOD's current rationale for excluding women from direct ground combat; and (3) the relationship of DOD's definition of direct ground combat to current military operations.[235] While the GAO did not evaluate the appropriateness of DOD's ground combat exclusion rationale, they did determine DOD's rationale for excluding women from such positions.[236] According to the report, DOD's rationale for excluding women from direct ground combat was because: (1) there is no military need for women in ground combat positions because an adequate number of men are available; (2) the idea of women in direct ground combat lacks congressional and public support; and (3) most service women do not support the involuntary assignment of women to direct ground combat units.[237] Furthermore, the report indicated that DOD officials believe that the assignment of women to direct ground combat units would not contribute to the readiness and effectiveness of those units because of physical strength, stamina, and privacy issues.[238] The report also determined that DOD's definition of "direct ground combat" was no longer descriptive of actual battlefield conditions due to the fact that emerging military operations no longer operate on a linear battlefield and do have a well-defined forward area.[239]

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[229] *Id.*
[230] *Id.*
[231] *Id.* at xix.
[232] *Id.*
[233] U.S. General Accounting Office, Gender Issues: Information on DOD's Assignment Policy and Direct Ground Combat Definition (Oct. 1998), *available at* http://www.gao.gov/archive/1999/ns99007.pdf.
[234] *Id.*
[235] *Id.* at 1.
[236] *Id.* at 1, 3-4, 6-7.
[237] *Id.* at 3-4.
[238] *Id.* at 4 and 6.
[239] *Id.* at 7-10.

E. 2007 RAND's National Defense Research Institute Study[240]

The National Defense Authorization Act for Fiscal Year 2006 commissioned a study on the current and future implementation of the DOD policy for assigning military women.[241] In 2007, RAND's National Defense Research Institute carried out a study to answer three main questions: (1) whether there is a shared interpretation of the assignment policy for Army women, (2) whether the Army was complying with the assignment policy, and (3) whether the assignment policy is appropriate for future Army operations.[242] The study concluded that while the Army is adhering to the DOD policy of not assigning women to direct ground combat units, the Army may not be adhering to the Army-specific assignment policy (referring to the collocation issue) depending on how you define certain terms within the policies.[243] The study also determined that the DOD and Army assignment policies are not well understood, due to words or phrases that are not well defined, such as close combat, repelling the enemy's assault, counterattack, and collocate.[244] Furthermore, DOD personnel and members of Congress appear to have conflicting understandings of the overall spirit behind the policies.[245] Finally, the 2007 study pointed out that the language in the current policy may not be appropriate for current or future military operations. The study pointed out:

> Military effectiveness and flexibility entail adapting to new changes in enemy strategy, tactics, and weapons, and this implies that commanders may need to employ military resources, including individual women and units with women, in ways not initially envisioned in policy and possibly not well covered in doctrine. The Iraq example has shown how the application of the current assignment policy has led to the employment of units that include women in ways that are consistent with the DOD assignment policy, but might not be consistent with the Army assignment policy and yet, based on our interviews and focus groups, have been consistent with maintaining unit effectiveness and capability.[246]

Therefore, the study recommended redrafting the assignment policy for women to clarify the policy and to make it conform to the nature of warfare today and in the future.[247]

F. 2011 Military Leadership Diversity Committee Study[248]

Most recently, the National Defense Authorization Act for Fiscal Year 2009 established the Military Leadership Diversity Committee (MLDC) to evaluate

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[240] Margaret C. Harrell et al., RAND's National Defense Research Institute, Assessing the Assignment Policy for Army Women (2007).
[241] *Id.* at iii.
[242] *Id.* at xiv.
[243] *Id.* at xiv-xvi.
[244] *Id.*
[245] *Id.* at xiv.
[246] *Id.* at 67.
[247] *Id.* at xx-xxi.
[248] MLDC, *supra* note 109.

and assess polices that provide opportunities for the promotion and advancement of military members of the Armed Forces, including minority members who are senior leaders.[249] The final report was submitted to the President and to Congress on March 15, 2011.[250] In the report, the MLDC makes twenty recommendations for improving diversity and opportunities for minorities within the Armed Forces,[251] including eliminating combat exclusion policies for women and removing all barriers and inconsistencies in the current policies.[252]

Foremost, the Commission recommended that DOD adopt a new definition of diversity, to bring consistency across the Services. Recommendation 1 of the Report states:

> The Commission's recommended definition, presented below, brings together DOD's core values and the core values of each Service, it addresses today's unique mission and demographic challenges:
>
> Diversity is all the different characteristics and attributes of individuals that are consistent with Department of Defense core values, integral to overall readiness and mission accomplishment, and reflective of the Nation we serve.
>
> The definition acknowledges that individuals come to the military not only with different cultural backgrounds but also with different skills, experiences, and talents. It also acknowledges that these differences are operationally relevant. With proper leadership, diversity can increase military agility and responsiveness.[253]

The Commission explained that DOD needs to clarify the definition of diversity and develop new policies consistent with today's military operations. The Commission wrote:

> Today's military operations are executed in complex, uncertain, and rapidly changing environments. Men and women representative of the U.S. population and with different skills, experiences, and backgrounds are needed to respond to new and emerging threats. To harness these differences in ways that increase operational

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[249] *Id.* at 5 (citing to the National Defense Authorization Act for Fiscal Year 2009, Public Law 110-417, Section 596 (2009)).
[250] *Id.* at Cover Page.
[251] *Id.* at Appendix C.
[252] Military Leadership Diversity Commission, Executive Summary, From Representation To Inclusion: Diversity Leadership for the 21st-Century Military 13 (Mar. 15, 2011), http://mldc.whs.mil/; see also Andrew Tilghman, Panel: Let women serve in combat roles, Air Force Times, Dec. 10, 2010.
[253] MLDC, *supra* note 109, at 125, Appendix C; MLDC, *supra* note 252, at 9.

> effectiveness, the military must revise and develop policies consistent with the new diversity vision.[254]

The Commission goes on to make several policy recommendations, including a recommendation regarding DOD's Ground Combat Exclusion Policy. Recommendation 9 of the MLDC Final Report states:

> DOD and the Services should eliminate the "combat exclusion policies" for women, including the removal of barriers and inconsistencies, to create a level playing field for all qualified servicemembers. The Commission recommends a time-phased approach:
>
> a. Women in career fields/specialties currently open to them should be immediately able to be assigned to any unit that requires that career field/specialty, consistent with the current operational environment.
>
> b. DOD and the Services should take deliberate steps in a phased approach to open additional career fields and units involved in "direct ground combat" to qualified women.
>
> c. DOD and the Services should report to Congress the process and timeline for removing barriers that inhibit women from achieving senior leadership positions.[255]

The MLDC recommended a phased approach to incorporating women into ground combat roles; suggesting the Services start by assigning women to fields that are already open to them and then later opening additional fields to qualified women.[256] A further suggestion is to start the phased approach by assigning qualified women on a volunteer basis, rather than requiring women to enter these occupations.[257] However, as one of the Commissioner's pointed out, opening all career fields to women does not mean that career fields should lower their standards or create different standards specifically for women.[258] Rather, career fields should adhere to the standards required for the particular career field and simply open the career field to all qualified applicants, regardless of gender or any other factors.[259]

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[254] MLDC, *supra* note 252, at 15.
[255] MLDC, *supra* note 109, at 71-74, 127.
[256] *Id.*
[257] *Id.* at 73; *see also* Interview with John D. Hopper, Jr., Lieutenant General, United States Air Force (Ret.), in Colo. Sprgs., Colo. (Apr. 1, 2011) [hereinafter Interview with Hopper].
[258] MLDC, *supra* note 109, at 71; *see also* Interview with Hopper, *supra* note 257.
[259] Interview with Hopper, *supra* note 257. *Id.*

VII. Common Concerns Raised in Studies about Women Serving in Ground Combat Positions and Responses from the Service Women that Served in Iraq and/or Afghanistan

When asked his opinion about the current use of FETs in Afghanistan, one of the members of the 1992 Presidential Commission on the Assignment of Women in the Armed Forces discussed how there is a slow, steady, and grudging recognition that there is a role for women in combat that people have failed to see.[260] He stated that the roles of women in the military should not be determined by his generation's biases and beliefs, but rather, by what women are capable of doing in today's operations.[261] Below are some of the main arguments raised by studies or articles over the last two decades in support of the existing assignment policies, as well as the corresponding responses from the military members that recently returned from serving on Lioness teams or FETs in Iraq or Afghanistan.

A. No Military Need

One argument against women serving in ground combat positions is that women are not needed because there are an adequate number of men available to serve in these positions. However, in today's contingency operations, the issue is no longer whether there are men available for the job but whether men are the best people for the job. As commanders in the forward operating positions in Iraq quickly realized, they were in a new type of situation that required a creative way of responding to the need at hand.[262] Commanders recognized that they needed female soldiers alongside the all-male units on the missions that interacted with the local population. The female soldiers could conduct the physical searches of local Iraqi women coming through checkpoints. The female soldiers were able search and stay with any women and children encountered during the door-to-door search operations in the towns and villages. The female soldiers could also conduct searches and interact with the local women during various types of town meetings or events. Under the cultural restraints of the region, the male soldiers could not do these jobs and these jobs left undone, were creating great risks and vulnerabilities.

Having female soldiers available to fill these roles reduced security risks. Units found that local national women were concealing all sorts of items that would have been missed had they not been searched, including items commonly used to build improvised explosive devices (IEDs).[263] Unfortunately, women and children could no longer be assumed to be innocent bystanders. Women were strapping suicide belts under their clothes and walking up to checkpoints,[264] women were

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[260] Telephone Interview with Thomas V. Draude, Brigadier General, United States Marine Corps (Ret.) (Mar. 16, 2010).
[261] *Id.*
[262] Malagan, *supra* note 34 (referencing comments made by William Brinkley, Lt Col, Commander of the 1st Engineer Battalion, and Richard Cabrey, Lt Col, Commander of the 1/5 Field Artillery, in the documentary film).
[263] Interview with N, *supra* note 119.
[264] DiNicolo, *supra* note 106, at 91-95.

joining the men and engaging in firefights against coalition forces,[265] men dressed as women were opening fire at coalition forces,[266] children were riding bicycles with bombs on them into the market place,[267] men were dressing as women to smuggle items through security checkpoints,[268] and male detainees were even escaping military compounds dressed as women.[269] With these new types of security risks, it had become essential that everyone, men and women alike, were searched. As such, the female service members became a necessary part of maintaining security by conducting the physical searches of the local women.

As one Lioness member pointed out, by having female soldiers serve in these new roles it also helped show the women of another culture that women can help out too.[270] The Sisters of Fallujah program grew out of the success of the Lioness program. The Sisters of Fallujah program trained local Iraqi women in various police procedures and then these Iraqi women were able to support various operations, like conducting searches at checkpoints.[271] Additionally, the female soldiers supporting the Iraqi women engagement missions were able to interact with the local Iraqi women and listen to their concerns, including their thoughts and fears about security threats in the area. A Marine colonel that served as a Lioness in Iraq stated, with women comprising approximately half of the population, the engagement missions are helping to win the "hearts and minds" of the local people by simply listening to the "unheard voices" of the women in the country.[272] In short, the women are the ones who can win over the hearts and minds of the people.[273]

These viewpoints are not just the opinions of the female soldiers and Marines that served on the Lioness teams or FETs. A male Marine officer that recently returned from Afghanistan stated that if counter-insurgency (COIN) operations are the answer for getting the local population on board for ending the terrorist attacks, then the answer is to engage the female population.[274] He argued that the FETs serving one-year deployments in the same location are the key to engaging and winning the support of the local female population.[275] As a male Marine battalion commander put it, when you talk about COIN operations you have to talk about the FETs.[276] Otherwise, he argued, you are missing half of the population and we must engage the whole population.[277] He said that if we are going to win a COIN engagement, then the FETs are critical. A Marine infantry officer that worked

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[265] Based on the author's personal deployment experience (2008).
[266] The Associated Press, *Taliban Commander killed dressed as woman*, CBC News (Jun. 26, 2010), *available at* http://www.cbc.ca/world/story/2010/06/26/taliban-commander.html
[267] Based on the author's personal deployment experience (2008).
[268] Interview with V, *supra* note 195.
[269] *Id.*
[270] Interview with K, *supra* note 138.
[271] *Id.*; Interview with Y, *supra* note 131.
[272] Interview with U, *supra* note 105.
[273] *Id.*; Interview with P, *supra* note 143.
[274] Interview with H, *supra* note 198.
[275] *Id.*
[276] Interview with B, *supra* note 196.
[277] *Id.*

alongside the FETs in Afghanistan stated simply, "FETs will win this war."[278] Finally, as one FET member that served in Afghanistan explained, the issue is not can women do the job as well as men, but what specialized skill can they bring to the table?[279] In today's contingency operations, the reality is that there is a military need, and possibly even a necessity, for female service members to serve in ground combat positions.

B. Lacks Congressional and Public Support

Another argument against women serving in ground combat roles is that the idea lacks congressional and public support. Public polls on this specific issue have been few and far between over the last decade. However, the polls and surveys that have been conducted suggest that the public is more supportive than the military regarding women serving in various combat positions. As one general officer put it, society doesn't care anymore; rather, the problem is inside our own institutions.[280] The general officer went on to argue that we, the military Services, created a culture of exclusion and we can fix it to create a culture of inclusion.[281] One thing that was clear from the interviewing process is that there are many prejudices that will have to be overcome through leadership and training. As Specialist Ashley Pullen put it, "I can't help but think most Americans think women aren't in combat. We're here and we're right up with the guys."[282]

Additionally, the various Government-sponsored studies conducted within the last five years present a different conclusion. The RAND study conducted in 2007 recommended reevaluating and redrafting the policy to reflect current battlefield conditions of our military operations.[283] The study determined that the DOD and Army assignment policies are not well understood due to words or phrases that are not well defined and do not match the reality of our contingency operations today.[284]

The most recent study, completed by the MLDC in 2011, recommended that the combat exclusion policies be eliminated.[285] As part of the study, the MLDC considered whether the current combat exclusion policies should be rescinded based on the changes in warfare and doctrine that have occurred over the last decade.[286] The MLDC noted that the existing combat exclusion policies are based on standards

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[278] Interview with V, *supra* note 195.
[279] *Id.*
[280] Interview with E, Brigadier General, United States Army (Ret.), at the United States Military Academy, N.Y. (Apr. 23, 2010) [hereinafter Interview with E].
[281] *Id.*
[282] Chris LeCron, *Martha Raddatz Covers U.S. Military Women at War: Female Engagement Teams Critical to Muslim Culture*, Yahoo! Contributor Network (Posted on Oct. 31, 2009), *available at* http://www.associatedcontent.com/article/2344032/martha_raddatz_covers_us_military_women_pg2.html (Specialist Ashley Pullen was awarded a Bronze Star for valor in 2005 for her heroic action in Iraq where she served with a military police unit).
[283] Harrell, *supra* note 240, at xx.
[284] *Id.* at 47-62.
[285] MLDC, *supra* note 109, at 127.
[286] *Id.* at 72.

associated with conventional warfare and well-defined, linear battlefields.[287] It noted, however:

> [T]he current conflicts in Iraq and Afghanistan have been anything but conventional. As a result, some of the female servicemembers deployed to Iraq and Afghanistan have already been engaged in activities that would be considered combat related, including being collocated with combat units and engaging in direct combat for self-defense. (citation omitted) Thus, the combat exclusion policies do not reflect the current operational environment.[288]

The MLDC went on to recommend that the combat exclusion policies be eliminated.[289]

The public polls and recent federal studies suggest that the majority of the public and senior leaders today recognize that the battlefield conditions have changed in our current contingency operations and understand that it is time for policy makers to respond accordingly.

C. Not Supported by Service Women

Another argument against women serving in ground combat roles is that service women do not support having to fill these roles, at least not involuntarily. However, at least based on the Lioness and FET programs, female service members are volunteering to serve in ground combat positions. All of the women interviewed as part of this project volunteered to serve on either the Lioness teams or FETs, in spite of the danger that was involved. The women were all very proud of their contributions to the Lioness and FET programs. Additionally, they pointed out that they were eager to assist and were actively looking for opportunities to get involved outside the wire. As one woman put it, "I wanted to do something important—it was my duty as a Marine."[290]

The women went on to say that serving on the Lioness teams or FETs was the best experience of their military career so far.[291] The majority of the women even said that they would do it on their next deployment if given the opportunity.[292] One Marine that served as a Lioness in Iraq stated, "Never stop this program—it is the best program in a wartime environment."[293] She went on to say that this was the "best experience I've ever had in my time in the Marine Corps and I would

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[287] *Id.*

[288] *Id.* at 72 (citing to a study by the Defense Department Advisory Committee on Women in the Services (2009) and HARRELL, *supra* note 240).

[289] *Id.* at 127.

[290] Interview with W, *supra* note 122.

[291] Interview with K, *supra* note 138; Interview with V, *supra* note 195; Interview with Y, *supra* note 131.

[292] Interview with V, *supra* note 195; Interview with Y, *supra* note 131 (who did go on to serve on the FETs during her next deployment).

[293] Interview with K, *supra* note 138.

love to do it in Afghanistan."[294] Another Lioness said that she would do it again in a heartbeat.[295] Discussing the Iraqi women engagement missions, one woman said that she enjoyed those missions the most.[296] As one FET member that served in Afghanistan put it, "we are invaluable if used properly."[297] Another FET member said that she wished she could go back and do it again on her next deployment.[298]

The women serving in the Lioness program in Iraq acknowledged that some women did not want to volunteer for the program due to safety concerns; especially after attacks specifically targeting the Lionesses.[299] Also, the trainers for these programs pointed out that some women were not selected due to their grades or skill levels that were evaluated during the training programs.[300] When asked specifically whether the infantry should be opened to women, one Marine acknowledged that it wasn't that the female Marines did not want to do the missions, but they did not want to be singled out as the only female assigned to an infantry unit.[301] Further, the women did not want to be the first woman told to enter a new career field and face the glass-bowl effect.[302] Rather, they were more comfortable with the concept of all-female teams that would go out on missions with the all-male units. Several women also proposed the idea of having all-female combat teams,[303] but senior female officers adamantly opposed this idea. One Marine pointed out that her generation worked too hard to be known simply as Marines, to now have the women separated out somehow and be labeled not as Marines but as female Marines.[304]

Only one woman interviewed opposed the concept of voluntary assignments to the FET teams, arguing that every Marine is a rifleman and, if qualified, they should be sent on the missions. She argued that the mission, not the individual, should dictate who goes out on the FET duties.[305] However, the majority of women interviewed agreed that women should be identified for these missions based on their qualifications and should be placed on the teams on a volunteer basis, from the individual's and commander's point of view. All of the women interviewed wanted to volunteer for these missions and the commanders said they didn't have any problems finding volunteers for the FET teams.[306]

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[294] *Id.*
[295] Interview with W, *supra* note 122.
[296] Interview with P, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010).
[297] Interview with Y, *supra* note 131.
[298] Interview with V, *supra* note 195.
[299] Interview with W, *supra* note 122; *see also* Solaro, *supra* note 102, at 85.
[300] Interview with Y, *supra* note 131.
[301] Interview with N, *supra* note 119.
[302] *Id.*
[303] Interviews with P, 1st Lieutenant, and N, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 4, 2010).
[304] Interview with U, *supra* note 105.
[305] Interview with V, *supra* note 195.
[306] Talton, *supra* note 185.

D. Lack Physical Strength or Ability

Another argument against women serving in ground combat roles is that women lack the physical strength or ability to do these jobs. As one USAFA cadet put it, "Let's face it, in the field, there's not going to be a smaller 'female-sized' wall to climb. There's not gonna be a weaker 'female-strength' opponent to engage in hand-to-hand combat with if it came to that—if the job is the same, the standard should be the same."[307] However, as one West Point cadet pointed out, some of the women can beat some of the men in physical qualification tests.[308] A Lioness member that served in Iraq commented that some women are better than men on weapon systems; it depends who you are selecting among the women and the men.[309]

A female Marine who served on both a Lioness team in Iraq and a FET in Afghanistan, pointed out that one problem with comparing male and female physical abilities in the field is that female Marines attached to the all-male infantry units were not given the same training opportunities, or even time, to physically prepare for their duties with the all-male units. Meanwhile, the infantry units were training non-stop for their physically demanding jobs. The women, with varying levels of physical abilities, did their day jobs and then, usually with short-notice, were attached to the infantry units to go on physically demanding missions that they had not been regularly preparing for.[310] For example, one Lioness member talked about having to be prepared to "hump" over fifteen miles with full gear during dismounted patrol duties while attached to an infantry unit.[311] The female Marines wanted to be allowed to do these duties, so that they were not "stuck in the shop" doing their desk job all the time.[312] However, they were only tasked occasionally to do these duties and, thus, were not training regularly, like the infantry members do, to prepare for these rigorous physical duties.

A FET member that served in Afghanistan also pointed out that the females attached to the infantry units had different gear than their male counterparts. The infantry units had newer, light-weight versions of the necessary equipment while the women had the older, heavier versions of the gear. Therefore, the female Marines had to carry heavier equipment than necessary.[313] As several Army officers pointed out, technological advances now make some physical requirements a non-issue, like carrying heavy gear when lighter-weight versions are now available.[314]

However, across the spectrum of USAFA and West Point cadets, female service members, and senior officers who were interviewed as part of this research project, there was a general theme advocating one established set of physical

[307] Hadley, *supra* note 47, at 7-8 (citing to Interview with Cadet B, class of 2012, at USAFA, Colo. (Apr. 27, 2010)).
[308] Interview with J, Cadet, United States Military Academy, at USMA, in N.Y. (Apr. 21, 2010).
[309] Interview with K, *supra* note 138.
[310] Interview with S, *supra* note 125.
[311] Interview with P, *supra* note 143.
[312] Interview with S, *supra* note 125.
[313] Interview with V, *supra* note 195.
[314] Interview with R, Lieutenant Colonel, United States Army, at the United States Military Academy, N.Y. (Apr. 21, 2010); Interview with E, *supra* note 280.

capability standards if ground combat positions were opened to women.[315] One general officer stated, "A trend has arisen in past integrations of women into new career fields. Perception is that these integrations have been accompanied by simultaneous drops in physical standards. This cannot happen if infantry is opened to women."[316]

The general consensus among those interviewed was that each career field should establish a single standard that is appropriate for the duties of that particular career field. The single standard should then apply for any applicant to that career field, meaning to both men and women. Overall, the women that served on the Lioness teams and FETs agreed that there should be high physical standards for those selected to serve in these unique roles but that women could do these jobs and do these jobs well.[317] The consensus among the women responsible for training the Lionesses and FETs, was that if the job is physically demanding, then the people chosen for the jobs should be able to meet the necessary physical standards.[318] They also said that you needed to make sure you were selecting the right people overall, that those selected were motivated to put forth the effort and initiative.[319] Thus, the Marine Lioness training program in Iraq evolved to the point where participants in the training program were graded based on their proficiencies in the trained areas. Women would only be selected to serve on Lioness teams if they passed a certain standard of proficiency in the needed skill areas.[320]

One Marine recruiting officer argued that all career fields should be opened to women, with a set standard for each career field, and then the best of all the applicants should be selected, regardless of gender or other factors not related to the establish standard.[321] The officer argued that by opening up career fields to both genders, you are able to select among the best of the entire population of the United States.[322] The Marine recruiting officer argued that the Services should not limit military jobs to the male population because, while the number of male applicants may be adequate to fill positions, all of the male applicants may not be the best people for all of the jobs. Given today's contingency operations, physical strength is no longer the sole qualifier for combat positions.[323] In some cases, either based on the job-required or the person's abilities, a woman may be the better person for the job.

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[315] Interviews with Cadets, *supra* note 63; Interviews with Cadets, United States Air Force Academy, at USAFA, Colo. (Apr. 2010); Interview with I, Colonel, United States Marine Corps, in San Diego, Cal. (Apr. 17, 2010) [hereinafter Interview with I]; Interview with Hopper, *supra* note 257; Interview with W, *supra* note 122; Interview with Y, *supra* note 131; Interview with E, *supra* note 280.

[316] Hadley, *supra* note 47, at 6-7; Interview with E, *supra* note 280.

[317] Interview with K, *supra* note 138.

[318] Interviews with S, 1st Lieutenant, and Y, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010).

[319] Interview with P, *supra* note 143.

[320] Interview with Y, *supra* note 131.

[321] Interview with I, *supra* note 315; *see also* Heather Hurlburt, *The Feminine Realpolitik*, Foreign Policy, Jul. 18, 2011, http://www.foreignpolicy.com/articles/2011/07/18/the_feminine_realpolitik (making a similar argument).

[322] Interview with I, *supra* note 315.

[323] *Id.*

E. Privacy Issues and Need for Separate Living Accommodations

Another argument against women serving in combat roles is that it will be too complicated and expensive to create separate living accommodations. The Lioness teams often spend long periods of time in the field with the all-male units. When the men set up their field accommodations, the women set up theirs in the same location and usually just sectioned off a small area in the corner.[324] The Lioness teams said that living accommodations were not an issue and privacy was not a problem. The women would work with the person in command to schedule short intervals for shower times every so often, and then block off one shower for their use for about fifteen minutes. Sometimes they would have a designated toilet for their use; other times they would fashion some sort of cover or just ask the men to turn around for a few minutes.[325] The Lionesses also discussed how the Army realized that troops needed training in basic field hygiene practices and would give short training sessions during basic training.[326] They pointed out, that once properly trained, the soldiers, whether male or female, were able to adapt to field conditions. As one Lioness member put it, privacy was the least of my worries while out on missions.[327]

One FET member described her field conditions and said that privacy and living accommodations in the field were not an issue.[328] The women would just sleep in the corner of wherever the unit had set up camp. They would schedule short intervals for shower times, every other day or as they were able to. If they were in remote field conditions, they would just use plastic bags in place of a toilet and then burn the bags. While on their missions, the women would go to the bathroom behind the vehicle and just ask the gunner to turn his head in the other direction for a minute. They would carry bottled water to use for "splash baths" and would take their birth control pills continuously to prevent having any menstrual periods at all while deployed.[329]

A Civil Affairs officer who served in Iraq in 2004 discussed how she shared living quarters with three male soldiers and it was a non-issue.[330] She explained that she was attached to an infantry unit and they would spend long periods of time outside the wire. After spending a month living out of their vehicles in a farmer's fields, everyone had perfected the technique of getting dressed while completely encased in their sleeping bags. Eventually, the unit moved to a small forward operating base where the living quarters consisted of four-soldiers in a bare-bones shipping container. Because containers were few and far between and there was no way she was going to have a container to herself, she stayed with three male soldiers. Compared to sleeping in a Humvee or a field, however, having indoor living

[324] Interview with S, *supra* note 125.
[325] *Id.*
[326] Interviews with P, 1st Lieutenant, and K, Lance Corporal, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 4, 2010).
[327] Interview with P, *supra* note 143.
[328] Interview with V, *supra* note 195.
[329] *Id.*
[330] Catherine Ross, *Home Fires: Women's Work*, Opinionator (last updated Feb. 15, 2010) (a New York Times blog), http://opinionator.blogs.nytimes.com/2010/15/womens-work/?emc+eta1.

quarters was actually a morale booster, and sharing living quarters was certainly a non-issue for everyone.[331]

F. Negative Impact on Unit Cohesion

The MLDC study considered whether the current combat exclusion policies should continue because women will hamper mission effectiveness by hurting unit morale and cohesion.[332] The MLDC explained,

> One frequently cited argument in favor of the current policies is that having women serving in direct combat will hamper mission effectiveness by hurting unit morale and cohesion . . . . To date, there has been little evidence that the integration of women into previously closed units or occupations has had a negative effect on important mission-related performance factors, such as unit cohesion.[333]

Additionally, the MLDC found that a majority of focus group participants felt that women serving in combat in Iraq and Afghanistan had a positive effect on mission accomplishment.[334]

During a panel discussion on this topic at a Commission meeting in September 2010, the counter-argument was made that commanders in Iraq and Afghanistan need to be able to choose from all available talents; that the blanket restriction limits the ability of commanders to pick the most capable person for the job.[335] As Colonel Martha McSally noted, "If you want to have the best fighting force, why would you exclude 51% of your population from even being considered for any particular job?"[336]

A Marine recruiter expressed a similar sentiment, explaining that you should pick the best person for the job, regardless of gender; and then it is up to the leaders to hold everyone accountable to the standards.[337] As the recruiter pointed out, cohesion among troops and implementing standards is a leadership issue—leaders need to set the standards.[338] A Lioness member similarly argued that leaders need to educate the troops on the value and capabilities of all members of the team; the leader sets the tone or atmosphere of dignity and respect among the troops.[339] Finally, it is

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[331] *Id.*
[332] MLDC, *supra* note 109.
[333] *Id.* at 71-72 (citing to a study by the Defense Department Advisory Committee on Women in the Services (2009); HARRELL, *supra* note 240; *see generally* McSally, *supra* note 214.
[334] MLDC, *supra* note 109, at 72.
[335] *Id.*
[336] *Id.*; *see generally* McSally, *supra* note 214.
[337] Interview with I, *supra* note 315.
[338] *Id.*
[339] Interview with K, *supra* note 138.

up to the leaders to enforce and uphold the standards, regardless of gender.[340] The MLDC report also acknowledged this:

> An effective leader promotes fairness and equity in his or her organization or workgroup and knows how to focus a broadly diverse group to use its members' differences in ways that benefit the mission. Getting a diverse group to work together in ways that improve mission capabilities is a learned skill. The Services should provide diversity leadership education and training . . . to servicemembers at every level.[341]

One of the Marine Lionesses said that at first, the infantry units were standoffish because they had been trained to not approach or harass the Lioness teams attached to the unit.[342] However, she said this atmosphere only created division among the troops and made it harder for the infantry troops and Lioness teams to work together until everyone realized why the Lioness teams were there and what they had to offer. Once the men and women started working as teams, they started acting like teams. Then, the infantrymen were great and there were no problems with unit cohesion. If you ask them, most soldiers and Marines that have fought alongside their male counterparts while under fire will tell you that gender on the battlefield just doesn't matter anymore; it is the least of their worries.[343]

Captain Brandon H. Turner, Commander of Golf Company, 2nd Battalion, 6th Marines said, "I didn't know what to do with them, and I was concerned how the company would react. But a few days of seeing what they could do for us in the field erased any doubt. I don't want to go anywhere without them."[344] Another reporter echoed this sentiment:

> Cohesion is what happened when a female medic, Sergeant Misty Frazier of the U.S. Army's 194th Military Police Company. . . ran through enemy fire to treat wounded soldier after wounded soldier on the streets of the Iraqi city of Karbala. While Frazier was treating the wounded, another soldier in her company, Private Teresa Broadwell, covered other soldiers with aimed bursts from her machine gun. Cohesion is what happened when Staff Sergeant Timothy Nein and Sergeant Leigh Ann Hester of the Kentucky National Guard's 617th Military Police Company helped clear a trench of insurgents outside the Iraqi town of Salman Pak, south of Baghdad.[345]

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[340] Interview with I, *supra* note 315.
[341] MLDC, *supra* note 252, at 10.
[342] Interview with K, *supra* note 138.
[343] Interview with P, *supra* note 143.
[344] DiNicolo, *supra* note 106, at 91.
[345] Solaro, *supra* note 102, at 309.

Female service members are out on missions in the general "battlefield" of today's contingency operations and are behaving with valor and heroism alongside their male counterparts. Those interviewed reported that unit cohesion is not a problem in today's operations; rather, it is a matter of leadership and training.

VIII. The Way Ahead: from the Service Members' Perspective

All of the women interviewed as part of this project were proud of serving on Lioness teams or FETs and argued that the program concept should be continued. One Lioness member argued that the program was well-suited for our current contingency operations, was adaptable to new locations and cultures, and should be continued under its current structure.[346] During the interviews, most of the women offered suggestions for ways to improve the existing program and offered their opinions on the current policies regarding women serving in these unique roles.

The officers that were in charge of training the women that served on the Lioness teams and FETs argued for a centralized, well-developed and well-supported training program, which included training on: language and culture, weapons and marksmanship, search techniques, combat profiling, use of metal detectors, convoys and IED identification, vehicles and radios, patrols and crowd control, intelligence collection, and lifesaving skills.[347] They also advocated for beginning training prior to one's scheduled deployment and for including some time to train with the units that the teams would be working with during the deployment.[348] However, as one FET member pointed out, FETs should not train solely with the infantry units because they need to train in the diverse skill set areas needed for their unique roles.[349]

Several officers argued that the women selected to serve on the FETs should deploy solely for these positions, rather than treating the FET duties as an additional duty.[350] They also advocated that the teams should serve long-term (at least one year) deployments in the same location in order to engage and win the support of the local female and male population.[351] One FET member went a step further and argued that these positions should be identified as new "B-Billets," meaning that the women would still have a primary career field but would be assigned to this particular job or career field for the term of their deployment.[352] Upon returning from their deployment, they would go back to their primary career fields.[353]

On the other hand, several FETs suggested having all-female combat teams,[354] similar to Special Forces teams, which could be attached to various units

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[346] Interview with K, *supra* note 138.
[347] Interview with S, *supra* note 125; Interview with Y, *supra* note 131.
[348] Interview with S, *supra* note 125.
[349] *Id.*; *see also* Interview with U, *supra* note 105.
[350] Interview with H, *supra* note 198; Interview with S, 1st Lieutenant, United States Marine Corps, at Camp Lejeune, N.C. (Mar. 5, 2010).
[351] Interview with H, *supra* note 198.
[352] Interview with S, *supra* note 125.
[353] *Id.*
[354] *Id.*; Interview with N, *supra* note 119; Interview with P, *supra* note 143.

in the field.[355] Each individual selected for the team would have a specialized skill-set or position, such as the team leader, linguist, medic, human intelligence officer, security, and so on.[356] Still other FETs proposed the idea of creating an entirely new Military Occupation Specialty (MOS) code for the FET positions, possibly in the intelligence arena. They argued that the job should be treated more like a human intelligence or counter intelligence career field rather than an infantry or artillery position.

One Lioness member pointed out that all-female combat teams were a bad idea because it would just create attention to the team and limit their ability to work discretely in the field.[357] Senior military officers seem to consistently oppose the idea of creating a new MOS specifically for women. One senior Marine officer said that there should not be separate MOSs for these female engagement teams because Marines should not be segregated by gender. She argued that the B-Billet concept is problematic because working in a side-billet for too long could limit promotion opportunities for the women.[358] A battalion commander said he could support either concept, but separate MOSs were not necessary because you could still train teams and support the mission under the current concept of FETs.[359] While an Army lieutenant colonel in the intelligence field argued that FETs are a step in the right direction but they should not be the only consideration or option for the future.[360]

Most of those interviewed agreed that participation on these teams should remain on a voluntary basis. However, one FET member believed that participation should not be optional, if the women were capable and needed for the job, because "Every Marine is a rifleman." She argued that the mission should dictate who will go and when rather than allowing an individual to make that call.[361]

The perspective provided by those who have served on the ground in our current contingency operations in Iraq and Afghanistan demonstrate an openness to greater female participation on the battlefield in roles that may include ground combat. However, it will be up to DOD and the Services to determine whether the current assignment restrictions for women should be readdressed or even repealed in the future.

IX. Impact if Assignment Restrictions are Repealed

It appears that a slow repeal of the assignment restrictions is already in progress. In early 2010, the Navy lifted its restriction from women from being assigned to submarines.[362] In September 2010, Defense Secretary Robert Gates said that he anticipated that more women will serve in military special operations in the

[355] Interview with N, *supra* note 119.
[356] Interview with S, *supra* note 125.
[357] Interview with Y, *supra* note 131.
[358] Interview with U, *supra* note 105.
[359] Interview with B, *supra* note 196.
[360] Interview with R, Lieutenant Colonel, United States Army, at the United States Military Academy, N.Y. (Apr. 21, 2010).
[361] Internal Report submitted by V, *supra* note 181.
[362] BBC News, *supra* note 58.

future. He predicted that the military will probably use the Navy, as it introduces female officers to assignments on submarines, as a guide to any similar changes with the special operations career field.[363]

In early 2010, the Army's Chief of Staff, General George Casey, told lawmakers that it was time to review the current rules, given how women have served in Iraq and Afghanistan.[364] General Casey told Senators, "I believe it's time we take a look at what women are actually doing in Iraq and Afghanistan and to look at our policy."[365]

Additionally, in June of 2011, the Army Special Operations Command openly acknowledged that it deployed nearly thirty female soldiers on "Cultural Support Teams," attached to the Special Forces and Ranger units, to help engage the local female population. In a news article in July 2011, Major General Bennet Sacolick, the commander of the Army's Special Warfare Center and School, was quoted as saying that that the first class of female special operations soldiers "are in Afghanistan right now and the reviews are off the charts. They are doing great."[366] The Army's Special Warfare Center and School runs the training programs for the Cultural Support Teams.[367] Major General Sacolick went on to say, "When I send an [SF team] in to follow up on a Taliban hit . . . wouldn't it be nice to have access to about 50 percent of that target population . . . the women?"[368] While female soldiers and Marines have been doing the female engagement missions for years, under various titles and degrees of acknowledgment, these missions are finally being openly recognized by senior leadership as having a positive mission impact in our current contingency operations. The question is whether DOD or the Services will take the next step and formally change their policies to match the reality on the ground.

If DOD or the various Services determine that it is appropriate to start repealing current assignment restrictions for women, they will have to consider several factors. First, DOD and the Services will have to decide whether to open existing career fields to women or to create new career fields specifically for women. The lower ranks are interested in the concept of creating a new MOS for the FETs, while the higher ranks are worried about women being put into "all-female units" or being treated differently in a way that could hurt their chances of promotion.

Second, once it is determined what career fields should be open to women, the Services will have to determine the process for assigning women to these new positions. The MLDC opined that a phased approach might be best.[369] One

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[363] Donna Miles, *Secretary Gates predicts more women in special operations*, American Forces Press Service (Sep. 30 2010), http://www.af.mil/news/story.asp?id=123224442.

[364] Dan De Luce, *Wars force US military to review ban on women in combat*, AFP, Feb. 28, 2010, http://www.spacewar.com/reports/Wars_force_US_military_to_review_ban_on_women_in_combat_999.html (last visited Jan. 12, 2012).

[365] *Id.*

[366] Hurlburt, *supra* note 321; Christian Lowe, *Female Special Operators Now in Combat*, Military.com, Jun. 29, 2011, http://www.military.com/news/article/female-special-operators-now-in-combat.html.

[367] Lowe, *supra* note 366.

[368] *Id.*

[369] MLDC, *supra* note 109, at 74.

consideration should be whether assignments will occur without the consent of the individual service member or on a voluntary basis only. The majority of those interviewed argued that any integration of women into new career fields should be on a voluntary basis. For example, women should not be automatically assigned to submarine duty or an infantry unit. Another consideration should be the physical standards or requirements for any new job positions. The general consensus is that if women are integrated into new career fields, the physical standards for those career fields should not be changed simply to include more women. Rather, each career field should have a single, established standard for entrance into the career field, and applicants should be selected based on the criteria, regardless of gender.

Third, once the decision has been made on which career fields to open and which women should then be assigned to these new positions, policy makers or the Services should next determine what training model and philosophy is appropriate for the career fields or positions. One consideration should be whether a centralized training program for all Services should be developed, especially if the FETs are the "waves"[370] of the future. Another consideration should be the input from those that have already served in similar roles. For example, the service members that organized the training for the Lioness teams and FETs have developed a highly-specific training model that works for their particular position.

Finally, senior leaders should officially recognize those women that have already served in ground combat and ensure they receive the awards they merited. As reported in January 2011, approximately 255,000 women have served in Iraq and Afghanistan.[371] According to one source, 105 women died in Iraq during Operation Iraqi Freedom (which ended in 31 August 2010), including 62 from hostile fire.[372] As of November 2010, 25 women have died in Afghanistan during Operation Enduring Freedom, including thirteen from hostile fire.[373]

However, it is unclear whether female service members have been appropriately recognized for serving in combat or hostile fire situations and there are reports that women may not have been justly recognized.[374] For example, no one knows whether all the women that have earned the Combat Action Badge have actually received it because there is not a centralized list of women that have received various ribbons, awards, or recognition.[375] Commanders in Iraq and Afghanistan remembered awarding numerous Combat Action Badges to women, but didn't keep track of names.[376] The Defense Manpower Data Center could generate a list of women who have been awarded the Combat Action Badge, but this does not

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[370] Pun on words, referring to the Women Accepted for Volunteer Emergency Service (WAVES) that served in the U.S. Navy, http://www.history.navy.mil/photos/prs-tpic/females/wave-ww2.htm.
[371] Pauline Jelinek, *Military commission: Lift Ban, allow women in combat*, MSNBC.COM, Jan. 14, 2011, http://www.msnbc.msn.com/id/41083172/ns/us_news-life/.
[372] Manning, *supra* note 3, at 3-4.
[373] *Id.*
[374] DiNicolo, *supra* note 106, at 94-95.
[375] Interview with Lory Manning, Capt, United States Navy (Ret.), at the Women's Research and Education Institute in Washington, D.C. (Jun. 8, 2010).
[376] Interview with E, *supra* note 280.

solve the problem.[377] Many women have been attached to units whose members earned the Combat Action Badge; that is, the women served with these units in the field, although they were officially assigned to another unit.[378] Their eligibility for the award depends on there being documentation in their individual service records showing they were attached to the eligible unit at the time of the action for which the badge is awarded and that they participated in the combat action.[379] This documentation is in some records, but not in all of them.[380] Senior leaders should act to ensure the consistent application awards and recognition to all men and women that have served in combat or under hostile fire. As one West Point cadet said, if they are doing the job, give them the title.[381] And, as a general officer explained, it is a leader's responsibility to accurately reflect reality.[382] We should proudly recognize the contributions that female service members have made during the current war on terror, including making the ultimate sacrifice.

X. Conclusion

In order to impact change, female service members need to be vocal about their military experiences, especially concerning the unique roles that they have served in Iraq and Afghanistan. The public needs to know, their fellow service members need to know, and policy makers need to know of the contributions that women have made and will continue to make in today's contingency operations, including in ground combat positions. The only way that policy makers can determine appropriate regulations for today's military is to hear from today's military members. Female service members need to write more notes, responses, articles, and books about their experiences and perspectives—to ensure that their contributions and points of view are accurately portrayed. It is this author's firm belief, after interviewing so many brave women, that greater awareness of how women are serving on the battlefield today will only make our country and our military stronger, and hopefully spur changes in policy to more accurately reflect reality.

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[377] E-mail from Lory Manning, Capt, United States Navy (Ret.), at the Women's Research and Education Institute (Dec. 8, 2011) (on file with author).
[378] *Id.*
[379] *Id.*
[380] *Id.*
[381] Interview with A, Cadet, United States Military Academy, at USMA, N.Y. (Apr. 21, 2010).
[382] Interview with E, *supra* note 280.

CYBER 3.0: THE DEPARTMENT OF DEFENSE STRATEGY FOR OPERATING IN CYBERSPACE AND THE ATTRIBUTION PROBLEM

Major Erik M. Mudrinich[*]

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[A]s nations and peoples harness the networks that are all around us, we have a choice. We can either work together to realize their potential for greater prosperity and security or we can succumb to narrow interests and undue fears that limit progress. Cybersecurity is not an end unto itself; it is instead an obligation that our governments and societies must take on willingly, to ensure that innovation continues to flourish, drive markets and improve lives.[1]
–President Barack Obama

I. Introduction

First I shall proceed from the simple to the complex. But in war more than in any other subject we must begin by looking at the nature of the whole; for here more than elsewhere the part and the whole must always be thought of together.[2]
–Carl von Clausewitz

Zero-Day[3]: June 17, 2010. Sergey Ulasen, the head of the Anti-virus department of VirusBlokAda, a small Belarus IT security firm, uncovered a particularly sophisticated computer worm, one the likes the world had never seen before.[4] A computer worm is malicious software that can self-replicate and can spread itself over a network to cause harm or take control. This particular worm was elaborately designed to spread itself within an operating system and then lay dormant, waiting for a signal to strike. It spread via an infected USB flash drive inserted into a computer's USB port. Once inserted, software on the infected drive covertly uploaded two files into the target computer: a rootkit dropper (which allows the worm to take control of an operating system, manipulating it) and an injector for delivering a "payload" of encrypted code.[5] A "payload" is software code designed within the worm to deliver a specified effect—from deleting critical files, to taking control of a system or installing a backdoor into the network. The worm's name was Stuxnet. Most troubling was the fact that, by design, the Stuxnet worm hid itself as soon as it compromised the host system by using a digital signature—a signature that legitimate programs utilize to demonstrate they are authorized and benign.[6] By the time Stuxnet had been detected it had Iran's nuclear infrastructure in its cross-hairs.

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[1] The White House, International Strategy For Cyberspace, Prosperity, Security and Openness in a Networked World 4 (May 2011), http://www.whitehouse.gov/sites/default/files/rss_viewer/internationalstrategy_cyberspace.pdf.
[2] Carl von Clausewitz, On War: The Complete Edition (2009).
[3] *See* Tony Bradley, *Zero Day Exploits: Holy Grail of the Malicious Hacker*, About.com (2010), http://netsecurity.about.com/od/newsandeditorial1/a/aazeroday.htm. According to Bradley, "The Holy Grail for malicious program and virus writers is the 'zero day exploit.' A zero day exploit is when the exploit for the vulnerability is created before, or on the same day as the vulnerability is learned about by the vendor. By creating a virus or worm that takes advantage of vulnerability the vendor is not yet aware of and for which there is not currently a patch available, the attacker can wreak maximum havoc." *Id.*
[4] *See* Michael Joseph Gross, *Stuxnet Worm: A Declaration of Cyber-War*, Vanity Fair (April 2011), http://www.vanityfair.com/culture/features/2011/04/stuxnet-201104.
[5] *Id.*
[6] *Id.*

Stuxnet was designed not to steal information; rather it was designed to infiltrate Iranian industrial control systems (ICS), closed systems, specifically those that controlled nuclear centrifuges and take control.[7] Once inside the operating system, Stuxnet had the ability to cause nuclear centrifuges to spin out of control by altering their rotational speed and causing the speed to fluctuate wildly. Stuxnet also had the ability to introduce fake data into the system to make it appear that the centrifuges were operating normally, when in fact they were being destroyed from within. Stuxnet has been described by some as "the world's first precision guided cyber-munition" and its creation has far-ranging strategic and security implications.[8] Experts warned:

> [T]he emergence of the Stuxnet worm is the type of risk that threatens to cause harm to many activities deemed critical to the basic functioning of modern society. The Stuxnet worm covertly attempts to identify and exploit equipment that controls a nation's critical infrastructure. A successful attack by a software application such as the Stuxnet worm could result in manipulation of control system code to the point of inoperability or long-term damage . . . . The resulting damage to the nation's critical infrastructure could threaten many aspects of life, including the government's ability to safeguard national security interests.[9]

The advent of worms like Stuxnet has demonstrated that actors within the global digital environment possess the capability to "weaponize" software code. By doing this they can seize control of systems and disrupt their operations throughout the world, unconstrained by political and territorial borders. Nations, their militaries, and their economies are vulnerable to ever sophisticated cyber threats. Cyber threats manipulate, alter, degrade or destroy information systems. A cyber threat can manifest itself in many forms from an attack from a foreign nation to espionage to cyber crime and computer viruses. Malicious cyber activities pose a very real and immediate security threat to national security and commerce. Therefore, an appropriate strategic foundation to counter this emerging threat is needed.

In developing a strategy responsive to the threat, policymakers and military strategists alike have focused on the central characteristics of the growing cyber environment. U.S. Deputy Secretary of Defense William J. Lynn discussed the Pentagon's new strategy for securing cyberspace.[10] He noted that cyber warfare by design is akin to asymmetric warfare, even when prosecuted by superpowers. U.S.

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[7] Nicolas Falliere et al., *W32.Stuxnet Dossier, Version 1.1*, Symantec (October 2010), http://www.symantec.com/content/en/us/enterprise/media/security_response/whitepapers/w32_stuxnet_dossier.pdf.

[8] Hari Sreenivasan, *Hunting an Industrial-Strength Computer Virus Around the Globe*, PBS Newshour, (October 1, 2010), http://www.pbs.org/newshour/bb/science/july-dec10/computervirus_10-01.html.

[9] Paul K. Kerr et al., *The Stuxnet Computer Worm: Harbinger of an Emerging Warfare Capability*, 1 (Washington: Congressional Research Service 7-5700, December 9, 2010).

[10] William J. Lynn III, Deputy Sec'y of Def., Remarks on Cyber at the RSA Conference, (Feb. 15, 2011), http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1535.

policymakers have not adequately addressed this emerging threat environment and adapting a strategic vision to it should be made a top priority.

Crafting the ways and means to achieve the desired security end state, however, is complicated. In the asymmetric environment of cyberspace, there are no simple solutions and there are typically more questions than answers. The late Arthur Cebrowski, retired Admiral, U.S. Navy, and a pioneer in cyber analysis agreed with this assessment when he observed, "There is no technology, government policy, law, treaty or program that can stop the acceleration of competition in cyberspace."[11] Low entry costs, evolving technological capabilities, and ease of attack make operation in the cyber domain a basic capability that can be easily achieved by adversaries. As noted by Deputy Secretary William J. Lynn, "Advances in technology have created a situation in which extremely robust capabilities can be developed at considerably low cost."[12]

The danger and potency of the threat is exacerbated by the very nature of the system one wants to protect. For example, Internet architecture was designed to be open, collaborative, and rapidly expandable to support ease of use, innovation, and continued growth.[13] These built-in dynamics of design allowed for a reliable and efficient means to connect disparate networks into a single global system, a "network of networks." In shaping the system, security and identity management considerations were, and continue to be, low priorities.[14] Confronted with an open architecture, network defenders must guard against all that is thrown against them while aggressors need only discover one breach in the digital armor for their attack to be successful.[15] It is an overwhelming task. It only takes a scant amount of coding for malware to be successful.[16] To defend against malware, anti-virus companies write millions of lines of code, and spend millions of dollars in research, to detect and counteract malicious script. Malware can be written in as little as twenty-five lines and the result can easily remain viable in the digital environment.[17] Another unique feature of cyberspace is that it defies traditional sovereign borders with relative ease.[18] Geographic and political boundaries are of little consequence. Skilled attackers can hold military or national security systems at risk, but their activities can

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[11] Arthur K. Cebrowski, *CNE and CNA in the Network-Centric Battlespace: Challenges for Operators and Lawyers*, in International Law Studies—Naval War College, 76 (2002).

[12] William J. Lynn III, Deputy Sec'y of Def., Presenting at the Security and Defense Agenda (SDA) on Cybersecurity, 3 (Sep. 15, 2010), http://www.isn.ethz.ch/isn/Digital-Library/Publications/Detail/?ots591=0c54e3b3-1e9c-be1e-2c24-a6a8c7060233&lng=en&id=122287.

[13] William J. Lynn III, Deputy Sec'y of Def., Remarks on Cyber at the Council on Foreign Relations in New York City (Sep. 30, 2010), *available at* http://www.defense.gov/Speeches/Speech.aspx?SpeechID=1509. *See also* William J. Lynn III, Deputy Sec'y of Def., *Defending a New Domain—The Pentagon's Cyberstrategy,* Foreign Aff, 99 (Sep-Oct. 2010).

[14] William J. Lynn III, Deputy Sec'y of Def., *Defending a New Domain—The Pentagon's Cyberstrategy,* Foreign Aff, 99 (Sep-Oct. 2010).

[15] "A tier-one hacker's favorite pass time is the discovery of a zero-day exploit, which is defined as finding a vulnerability or flaw in the software that no one else has yet discovered." Jeffery Carr, Inside Cyber Warfare, 40 (2009).

[16] Lynn, *supra* note 10.

[17] *Id.*

[18] Patrick W. Franzese, *Sovereignty in Cyberspace: Can It Exist?*, 64 A.F. L. Rev. 34 (2009).

also threaten large portions of private sector networks, regardless of location.[19] The integration of U.S. military and civilian networks complicates defense efforts for U.S. military planners. U.S. Department of Defense (DOD) networks are largely reliant on networks outside of the .mil domain, to include national critical infrastructure.[20] As Professor Eric Talbot Jensen notes:

> This near-complete intermixing of civilian and military computer infrastructures makes many of those civilian objects and providers legitimate targets under the law of armed conflict. The current integration of U.S. government assets with civilian systems makes segregation impossible and therefore creates a responsibility for the United States to protect those civilian networks, services, and communications.[21]

Cyberspace is a domain where information is created, stored, modified, and exploited via interconnected networks.[22] Since it is relatively easy to seize the initiative and launch an attack against an information system, one can consider cyberspace an opportunistic and offense-dominant environment. In an offense-dominant cyber threat environment, a purely defensive or "bunker mentality" cannot keep pace. Static defenses can always be circumvented by ingenuity, tenacity, and technology—common virtues possessed by most skilled cyber operators. Deputy Secretary Lynn recognized this fact, stating, "A fortress mentality will not work . . . from a defense point of view it is difficult to protect every portal. What is needed is a strategy to deny the benefit to the attackers who need only a single point of entry to disrupt our systems."[23]

Securing the nation's critical infrastructure, its networks and servers, should be an essential consideration of an effective cyber strategy. In order to respond to cyber threats, the DOD developed and announced its first strategy that provides for operational flexibility and adaptability in cyberspace. Released on July 14, 2011, this cyber strategy is entitled "Department of Defense Strategy for Operating in Cyberspace" (hereinafter "Cyber 3.0").[24] Its central focus is one of deterrence by denial. Cyber 3.0 proposes to make U.S. networks and critical infrastructure more robust, resilient, and redundant, thereby denying the benefit of

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[19] Lynn, *supra* note 13.

[20] Lynn, *supra* note 10.

[21] Eric Talbot Jensen, *Cyber Warfare and Precautions Against the Effects of Attacks*, 88 Tex. L. Rev. 1533 (2010).

[22] This article adopts and modifies Dr. Daniel Kuehl's definition of cyberspace, defining it "as an operational domain located simultaneously at logical and physical layers whose unique architecture is framed by the use of electronics and the electromagnetic spectrum to create, store, modify, exchange, and exploit information via interconnected networks." This definition largely draws from the definition presented by Daniel T. Kuehl in his article *From Cyberspace to Cyberpower: Defining the Problem*, *in* Cyberpower and National Security 28 (2009).

[23] Lynn, *supra* note 14, at 99.

[24] The Department of Defense, Department of Defense Strategy for Operating in Cyberspace 1 (July 2011), *available at* http://www.defense.gov/home/features/2011/0411_cyberstrategy/docs/DOD_Strategy_for_Operating_in_Cyberspace_July_2011.pdf.

attack. The strategy aims to mitigate vulnerabilities and acknowledges the growing cyber threat environment: "The Department and nation have vulnerabilities in cyberspace. Our reliance on cyberspace stands in stark contrast to the inadequacy of our cybersecurity—the security of the technologies that we use each day."[25]

Cyber 3.0 proposes to employ five initiatives to secure cyberspace.[26] The first is noteworthy for its recognition of cyberspace as an emergent *war-fighting domain*.[27] As mankind has evolved using first land, then sea, air and space to conduct commerce and compete for resources, conflict has also developed in these domains. As the only man-made and largely privately owned domain, cyberspace is as critical to national security as the other more traditional domains.[28] The first initiative proposes that the military must now be able to defend, deter, and operate within this domain. The second initiative predictably relies on the military developing the ability to respond to cyber attacks as they occur and to employ active defenses before serious damage occurs.[29] The third initiative seeks to ensure that the nation's civilian critical infrastructure is secured and is also able to withstand attacks.[30] Collective defense and deterrence is the fourth initiative. Due to the global and interconnected nature of the Internet, U.S. global allies can offer real-time assistance in detecting, deterring, and responding to attacks.[31] Finally, the fifth initiative proposes to leverage the U.S. technological base, banking on the nation's "geek capital," to assist in the development of cyber defense technologies and training to defeat threats.[32]

While the introductions of the Cyber 3.0 strategic initiatives are a welcome development, they are incomplete. The strategy's overarching thrust is denying the benefit of an attack rather than penalizing attackers. While Cyber 3.0 discusses the role of the traditional instruments of power, it fails to address the DOD's own core competency—direct military action. Simply put, the cyber strategy fails to address the application and appropriate use of force in cyberspace. Therefore, more is needed. To complicate this endeavor, the challenge of successfully attributing the sources of an attack is time-consuming and difficult. The legal and technical requirement of identifying the perpetrator of a cyber attack (attribution) is not addressed in the proffered strategy.

While Cyber 3.0 does much to build the nation's resiliency and survivability from cyber threats, it falls short of providing an actionable framework for response. Attribution technologies and policy must be developed if the U.S. hopes to successfully deter and respond to such attacks. Attribution is a key legal, tactical, and technical requirement, and must be performed before a nation executes active self-defense activities. Attribution is an essential consideration as part of the legal analysis of "armed attack" and "use of force" issues. The absence of an attribution

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[25] *Id.*
[26] *Id.* at 5.
[27] Lynn, *supra* note 14, at 101.
[28] *Id.*
[29] *Id.* at 103.
[30] As Deputy Secretary Lynn noted, "The best-laid defenses on military networks will matter little unless our civilian critical infrastructure is also able to withstand attacks." *Id.* at 104.
[31] *Id.* at 104-105.
[32] *Id.* at 105-106.

capability in Cyber 3.0 is the document's central weakness. Hence, this article proposes that the U.S. pursue a sixth initiative as part of its cyber strategy—develop a framework of attribution capabilities.

After discussing the five strategic initiatives, the current state of international law and the law of war in the context of the cyber domain, this article will explore the capabilities and technical limitations of attribution. Finally, it will discuss how a framework of attribution can be leveraged to provide situational awareness during a cyber attack and assist in framing an appropriate and lawful response.

II. The Five Strategic Initiatives of Cyber 3.0

A. The First Initiative: *Treat Cyberspace as an Operational Domain to Organize, Train, and Equip so that the DOD Can Take Full Advantage of Cyberspace's Potential*

The approaches we develop towards this domain will shape how it interacts with other domains and affects relationships among the other elements and instruments of power, especially how humans and organizations we create use that power. The march of technology and progress guarantees that even while we debate this definition—regardless of exactly how we define it now and refine it in the future—our use of cyberspace has already reached the point where an increasingly wide range of our social, political, economic and military activities are dependent on it and thus vulnerable to both interruption of its use and usurpation of its capabilities.[33]

1. Cyberspace is a Domain?

To begin an analysis of cyberspace, it is important to understand why labeling cyberspace a war-fighting domain is even necessary. Military strategists, policymakers, and innovators have long dealt with the challenges found in the traditional domains of land, air, and sea. The many historical failures and successes in the traditional domains have shaped understanding and strategic vision; doctrine and technologies were then adjusted and developed accordingly. A new and complex domain has arisen—cyberspace. It "presents security challenges that are too novel and too serious for it to be treated as an add-on to our traditional operations on land, at sea, or in the air."[34]

The importance of treating cyberspace as an operational domain cannot be overstated. The DOD recognizes cyberspace as a domain carried forward from the traditional domains for the purposes of organizing, training, and equipping its forces. Air Force Doctrine 3-12, *Cyber Operations* characterizes cyberspace as:

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[33] Kuehl, *supra* note 22, at 24.

[34] *2012 Budget Request From U.S. Cyber Command Before the Subcomm. on Emerging Threats and Capabilities of the H. Comm. on Armed Services*, 112th Cong. 4, (2011) (Statement of Dr. James N. Miller, Principal Deputy Under Secretary of Defense for Policy) (hereinafter 2012 Budget Request), *available at* http://armedservices.house.gov/index.cfm/hearings?ContentRecord_id=79ce7b4c-f88b-40bf-9540-efdb3a2d26b2.

> [A] man-made domain, and is therefore unlike the natural domains of air, land, and maritime. It requires continued attention from humans to persist and encompass the features of specificity, global scope, and emphasis on the electromagnetic spectrum. Cyberspace nodes physically reside in all domains. Activities in cyberspace can enable freedom of action for activities in the other domains, and activities in the other domains can create effects in and through cyberspace.[35]

By treating cyberspace as a war-fighting domain, it establishes the necessary organizational foundation to operate in a degraded cyber environment by setting the stage for DOD to ready its cyber forces accordingly. Cyber 3.0 recognizes that "degraded cyberspace operations for extended periods may be a reality and disruption may occur in the midst of a mission."[36] In the case of a contingency involving network failure or significant compromise, Cyber 3.0 requires the U.S. organize, train, and equip within the domain so that it is "able to remain operationally effective by isolating and neutralizing the impact, using redundant capacity, or shifting its operations from one system to another."[37]

While understanding why labeling cyberspace as an operational domain is important, it is also important to understand the underlying theory, architecture, and typology of cyberspace for a more complete strategic context.

2. Cyberspace Defined

There has been much academic debate on how to define cyberspace as it has evolved into a recognized war-fighting domain. The writer William Gibson originally coined the term "cyberspace" as a term of art in his science fiction novel *Neuromancer*.[38] Since that time, an understanding of the cyber domain has grown, and its definition has evolved. In 2008, the DOD changed its definition of cyberspace to the currently accepted version stating that cyberspace is a "global domain within the information environment consisting of the interdependent network of information technology infrastructures, including the internet, telecommunications networks, computer systems, and embedded processors and controllers."[39] This definition, however, omits a key element—the behavior of the domain itself. That is, it should

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[35] Air Force Doctrine Document 3-12, Cyberspace Operations 2 (Jul. 15, 2010), *available at* http://www.au.af.mil/au/lemay/main.htm.

[36] The Department of Defense, *supra* note 24, at 6.

[37] *Id.*

[38] William Gibson, Neuromancer 31 (1994).

[39] Memorandum from the Deputy Sec'y of Def., *The Definition of Cyberspace*, May 12, 2008 (This definition is consistent with the definition of cyberspace provided in National Security Presidential Directive 54/Homeland Security Presidential Directive 23 (NSPD-54/HSPD-23), which states that cyberspace is "the interdependent network of information technology infrastructures, and includes the Internet, telecommunications networks, computer systems, and embedded processors and controllers in critical industries.")

recognize the means and manner in which networks communicate, not simply provide a description of the physical infrastructure and architecture.

This article offers a definition that builds on the concept of the behavior of the domain and how its distinct architecture makes it unique amongst the war-fighting domains. Cyberspace is:

> An operational domain located simultaneously at logical and physical layers whose unique architecture is framed by the use of electronics and the electromagnetic spectrum to create, store, modify, exchange, and exploit information via interconnected networks which seamlessly intersect other domains as well as geographic and recognized political boundaries.[40]

This definition not only accounts for the architecture of cyberspace as explained in a later section, but also accounts for the way cyberspace disregards traditional geographic and political boundaries. In addition, this definition recognizes the manner cyberspace intersects the traditional domains of land, sea, and air. Now that the domain of cyberspace has been defined, we move to the architecture and typology that make this domain unique.

3. Internet Architecture

A rudimentary understanding of the architecture and the characteristics of the cyber domain are necessary to begin to understand cyberspace's many unique challenges. While the definition of cyberspace has been in state of flux, for the purpose of this article, cyberspace will be examined as if it were analogous to the Internet, a digital core sample of sorts. Certainly, the Internet is only a small part of the whole, as cyberspace encompasses much more than the Internet alone. Internet architecture serves only as a starting point for explaining the complexity of this emergent domain; so an analysis of the Internet should suffice here.[41]

At its most basic level, the Internet can be characterized as an agglomeration of individual computing devices that are networked to one another and to the outside world.[42] The Internet is built out of many components that provide services, and these services are designed so that they can be combined in myriad forms to create ever more complex services.[43] By design the Internet is not meant to support one specific application but rather provides a universal platform for applications and

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[40] This definition largely draws from the definition presented by Dr. Daniel T. Kuehl, *supra* note 22, at 28. I would also like to thank Colonel Guillermo Carranza, Colonel Gary Brown, and Major Steven Smart, USAF, for their insight into the definition of cyberspace as an operational domain.

[41] According to Blumenthal & Clark, "There are many aspects to cyberspace, from the computing and communications infrastructure, through the information that is processed and transported, up to the users that operate in cyberspace." Marjory S. Blumenthal & David D. Clark, *The Future of the Internet and Cyberpower*, *in* Cyberpower and National Security 207 (2009).

[42] Martin C. Libicki, Cyberdeterrence and Cyberwar 6 (2009).

[43] Blumenthal & Clark, *supra* note 41, at 208.

services on top of a variety of networking technologies.[44] The Internet employs a packet-switched network as part of its fundamental architecture. Understanding this packet-switched architecture is vital for further understanding of the foundational workings of the Internet.

In a packet-switched network, data transmitted across the Internet is broken into manageable bits called Internet Protocol, or "IP,"-packets. Each IP-packet contains the data being sent across the network, as well as information on the destination where the data is designated to arrive. Network routers forward these IP-packets so the packets move from router to router until arriving at the final destination. The IP-packets are then reconstituted by various applications upon arrival such as desktop computers or mobile devices.[45] Although IP-packets may originate from the same source, there are many distinct paths they may take to a destination. Each packet can take a random and unique path, which enables the packets to be routed around areas of the network not functioning properly. For example, IP-packets constituting an email take distinct paths through a network before being reconstituted for the end user. This practical design allows the Internet to be resilient and redundant in the face of sporadic outages or failure. This built-in resiliency was part of the original design goals of the Internet to ensure transmission of data regardless of network malfunction.[46] Indeed, in his article, *An E-SOS for Cyberspace,* Professor Duncan B. Hollis describes the Internet as "a network of networks, originally designed with one particular type of security in mind—to ensure communication in the face of an external attack on U.S. infrastructure."[47]

What was left out of the original design of the Internet was an underlying architecture for identity and attribution. The Internet was designed around the core concept of functionality and not based on a design for identification (attribution) and security. It was designed to be collaborative, rapidly expandable, and easily adaptable to technological innovation. "Information flow took precedence over content integrity; identify authentication was less important than connectivity."[48]

The Internet can also be viewed as having three fundamental and distinct layers linked first to data transport (the physical infrastructure), then to application function (the logical layer), and finally to information exchange (the content layer).[49] Each layer is dependent on the other layers to operate; however, each layer can be influenced and affected independently of the other layers.

Physical Layer. According to Lawrence Lessig, "The Internet is a communication system. It consists of three layers. At the bottom, the physical layer, are wires and computers, and wires linking computers."[50] The physical layer

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[44] *Id.*
[45] *Id.*
[46] Duncan B. Hollis, *An e-SoS for Cyberspace*, 52 Harv. Int'l L.J. 374, 397 (2011).
[47] *Id.*
[48] The Department of Defense, *supra* note 24, at 2.
[49] Bernard Benhamou, *Organizing Internet Architecture, ESPRIT* 2 (May 2006), *available at* www.diplomatie.gouv.fr/fr/IMG/pdf/0705-BENHAMOU-EN-2.pdf.
[50] Lawrence Lessig, Lecture given at the inaugural Meredith and Kip Frey Lecture in Intellectual Property at Duke University School of Law, 181 (Mar. 23, 2001), *available at* www.law.duke.edu/pd/papers/lessig.pdf.

of the Internet comprises its hardware, its infrastructure—from the fiber wires, which transmit signals in bursts of light, to routers and the power grid. This physical infrastructure can be subject to control or kinetic attack, destroying or disabling its capacity to function.[51] While the physical layer is the only layer subject to kinetic attack, the other layers, are subject to intrusion, exploitation and control.

Logical Layer. The Internet's basic architecture is one of interchangeability and development. "On top of the physical layer is a logical layer"[52]—the Transmission Control Protocol/Internet Protocol (TCP/IP) that is the foundational language of the internet. TCP/IP ensures a separation of the transport functions and information processing functions. This active separation of packets is one of the basic principles of Internet architecture known as the "end-to-end principle." "At the core of the Internet's design is an ideal called end-to-end."[53] The "end-to-end principle" means the intelligence (applications) resides at the periphery of the network and the network itself remains a mere conduit for IP protocol—as Lessig put it, "simple networks, smart applications."[54] With an end-to-end design, innovation on the Internet doesn't depend upon the evolution of the network itself. The network serves as a universal conduit for IP-packet transit while new content and applications can function whether or not the IP-packets are recognized by the network. The design of the Internet not only determines its functionality, what it is used for, but also determines how and where it can be compromised.

Content Layer. Above the logical layer is a content layer. The content layer is perhaps the most recognizable layer of Internet architecture. The content layer consists of information/content streamed across the network and readily consumed by the end-user. This content can include emails, streaming video, web pages, MP3 files as well as applications (apps) and other programs.[55] This layer is also subject to intrusion, exploitation, and control.

4. The Typology of Cyberspace

The emergence of a new war-fighting domain is a rare event.[56] One of the most significant characteristics of the cyber domain is that it has developed without the luxury of time, theory, and pontification afforded to the other domains.[57] This characteristic, combined with cyberspace's exponential growth, has created a gap between the operation of cyberspace and the policies and laws that are needed to regulate it. Not only does a gap exist between technology and policy, but one also exists between the manner in which defense experts view cyberspace—as

[51] Libicki, *supra* note 42, at 12.
[52] Lessig, *supra* note 50, at 181.
[53] *Id.*
[54] *Id.*
[55] Lawrence Lessig, *The Internet Under Siege*, Foreign Policy 4 (1 Nov. 2001), *available at* http://www.foreignpolicy.com/articles/2001/11/01/the_internet_under_siege.
[56] *See* Rebecca Grant, *Rise of Cyber War*, A Mitchell Institute Special Report 6 (Nov 2008), *available at* www.afa.org/mitchell/reports/1108cyberwar.pdf.
[57] Colonel Michael S. Simpson, *Cyber Domain Evolving in Concept, But Stymied by Slow Implementation,* U.S. Army War College 2 (2010).

a vector for attack—and much of the general public's view of cyberspace as a benign daily companion.[58]

According to Dr. Daniel Kuehl, "In a very real sense cyberspace is a designed environment, created with the very specific intent of facilitating the use and exploitation of information, human interaction and intercommunication."[59] Dr. Martin Libicki, Senior Management Scientist of the RAND Corporation states,

> Cyberspace is a thing of contrasts: It is a space and is thus similar to such other media of contention as the land and sea. It is also a space unlike any other, making it dissimilar. Cyberspace has to be appreciated on its own merits; it is a man-made construct . . . .[60]

Some commentators believe that reengineering the Internet to build in virtual boundaries and identity technologies is the most viable option to securing this domain. In February 2010, Vice Admiral Mike McConnell, former Director the National Security Agency, stated:

> The United States must also translate our intent into capabilities. We need to develop an early-warning system to monitor cyberspace, identify intrusions and locate the source of attacks with a trail of evidence that can support diplomatic, military and legal options—and we must be able to do this in milliseconds. More specifically, we need to reengineer the Internet to make attribution, geolocation, intelligence analysis and impact assessment—who did it, from where, why and what was the result—more manageable. The technologies are already available from public and private sources and can be further developed if we have the will to build them into our systems and to work with our allies and trading partners so they will do the same.[61]

Changing the architecture of the Internet, however, would most likely impact its continued innovation, capabilities and speed of growth—putting unnecessary constraints on an already flourishing environment of commerce and culture. Also, attempting to "fence-off" cyberspace through the creation of virtual/nationalistic boarders would be contrary to the current vision of an open and interoperable global cyber environment.[62]

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[58] David Ignatius, *Pentagon's Cybersecurity Plans have a Cold War Chill,* Wash. Post, Aug 26, 2010, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2010/08/25/AR2010082505962.html.

[59] Kuehl, *supra* note 22, at 29.

[60] Libicki, *supra* note 42, at 11.

[61] Mike McConnell, *Mike McConnell on how to win the cyber-war we're losing*, Wash Post, Feb. 28, 2010, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2010/02/25/AR2010022502493.html.

[62] The White House, *supra* note 1, at 5.

Any understanding of the cyber domain must account for its dynamic design, behavior, and the many technologies which constitute it. Rapid innovation and evolution are the defining characteristics of cyberspace. In his Air War College paper, *A Cyberspace Command and Control Model*, Colonel Joseph Scherrer stated, "It is important to understand that the cyberspace infrastructure, like the information that flows through it, does not remain static. The technologies and architectural approaches that comprise cyberspace will continue to change over time, meaning that the fabric of cyberspace itself will evolve."[63] Cyberspace will continue to evolve in scope and importance. As stated in the Cyber 3.0 strategy, "Our reliance on cyberspace stands in stark contrast to the inadequacy of our cyber security—the security of the technologies that we use each day."[64] Cyberspace will continue to develop at an astounding pace, to be a key enabler of our society, and to be awash in a sea of exploits and malicious actors. The architecture and protocols, which have made cyberspace and the Internet so prolific, are also the source of its greatest vulnerabilities.

5. Implications of Cyberspace as a Domain

Based on its design and functionality (with the Internet being a core sample of the larger domain) one can see that cyberspace does not exist in the same sense as other traditional domains where distinct boundaries can be defined. Cyberspace is amorphous, malleable, and constantly evolving. As one commentator put it, "Every system and every network can hold its own cyberspace—indeed it can hold limitless number of quasi-independent space. Cyberspace can appear in multiple, almost infinite, manifestations and forms."[65] Cyberspace has been fully integrated in all of the traditional domains and the ability to successfully function in them has become wholly dependent on it. A modern society and military cannot effectively operate without cyberspace. If cyber capabilities are denied, we could descend quickly from a digital-age to a dark-age in a matter of moments. Cyber 3.0 recognizes this and attempts to develop a framework based on the unique architecture and challenges presented by the domain.

B. The Second Strategic Initiative: *Employ New Defense Operating Concepts to Protect DOD Networks and Systems*

Protecting networks of such great value requires robust defensive capabilities. The United States will continue to strengthen our network defenses and our ability to withstand and recover from disruptions and other attacks.[66]

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[63] Joseph H. Scherrer & William C. Grund, *A Cyberspace Command and Control Model*, Air War College, Paper No. 47, 9 (Aug. 2009).
[64] The Department of Defense, *supra* note 24, at 1.
[65] Martin C. Libicki, Conquest in Cyberspace—National Security and Information Warfare 5 (2007).
[66] The White House, *supra* note 1, at 13.

In cyberspace, the only "absolute" defense is an unrealistic one: that is, to unplug from networks completely, step out of the matrix, thereby forfeiting the innumerable benefits the cyber domain offers. Based on the widespread dependence on cyberspace, disconnecting or unplugging completely is unrealistic.[67] Passive defenses can be employed, but are largely ineffective. They consist of several categories: controls over system access, controls over data access, security administration, and secure system design.[68] Purely defensive measures concerning access include technologies such as firewalls, encryption, and virus detection. There are several central approaches for cyber security: learn about the threat, harden the target, and respond to the attacks.[69] Passive defenses only harden the target and rarely provide for an adequate mechanism for attack response. Cyber 3.0 recognizes this reality and requires implementation of defenses that are adaptable and dynamic. Cyberspace is an offense dominant environment and therefore active defenses are required to address emerging security concerns.[70]

The DOD's new cyber operating concepts are based on performing four "steps":[71]

> (1) Enhancing cyber hygiene best practices to improve its cyber security;
>
> (2) Detering and mitigating insider threats, strengthening workforce communications, workforce accountability, internal monitoring, and information management capabilities;
>
> (3) Developing new defense operating concepts and computing architectures;

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[67] As the commander of U.S. Cyber Command, General Alexander noted, "There no longer remains the option to unplug from cyberspace as the information it provides has become the lifeblood of our society." *U.S. Cyber Command: Organizing For Cyberspace Operations: Hearing Before H. Comm. on Armed Services*, 111th Cong. H.A.S.C. No. 111-179 (2010) (statement of General Keith B. Alexander, United States Army, Commander United States Cyber Command), *available at* http://www.defense.gov/home/features/2010/0410_cybersec/docs/USCC%20Command%20Posture%20Statement_HASC_22SEP10_FINAL%20_OMB%20Approved_.pdf.

[68] Jay P. Kesan & Carol M. Hayes, *Mitigative Counterstriking: Self-Defense and Deterrence In Cyberspace,* Harv. J.L. & Tech., 33 (forthcoming), *available at* http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1805163.

[69] *Id.*

[70] Active defenses are electronic countermeasures designed to strike attacking computer systems and shut down cyber attacks midstream. They work by placing scanning technology at the interface of military networks and the open Internet to detect and stop malicious code before it passes into military networks. Active defenses now protect all defense and intelligence networks in the ".mil domain." For the most part active defenses are classified though programs that send destructive viruses back to the perpetrator's machine or packet-flood the intruder's machine have entered the public domain. *See* Jeffrey Carr, Inside Cyber Warfare: Mapping the Cyber Underworld 46 (2010). *See also* Lieutenant Commander Matthew J. Skelrov, *Solving the Dilemma of State Responses to Cyberattacks: A Justification for the Use of Active Defenses Against States Who Neglect Their Duty to Prevent*, 201 Mil. L. Rev 1, 2 (2009) (discussing active defenses).

[71] The Department of Defense, *supra* note 24, at 6.

(4) Employing an active cyber defense capability to prevent intrusions onto networks and systems.

To better understand the concept of active defense, it is essential to understand the limitations of passive defense commonly and derisively described as "patch & pray." Passive defense methods such as firewalls, patches, and antivirus software offer measures of security that often fall short as they cannot keep pace with the rapid development and deployment of cyber threats. General Alexander concurs in this assessment, arguing: "We can no longer depend on static defenses."[72] While passive defenses add resiliency to our networks, such defenses offer incomplete protection. Passive defenses alone are ineffectual at best, offering a false sense of security and complacency. Passive defenses lull the end user into thinking that as long as the software is kept up to date and patched, the threat is negated.

Similarly, according to Professors Jay Kesan and Carol Hayes, "Passive defense methods are not used consistently enough to have perfect deterrent effect and are all but useless against attacks utilizing zero-day exploits."[73] The U.S. must now rely on active defense technology to be able to actually respond to a cyber attack rather than merely absorb it. According to Deputy Secretary Lynn, "The United States cannot retreat behind a Maginot Line of firewalls or it will risk being overrun."[74] Active defense then becomes essential to detecting and eradicating threats on our nation's networks. One commentator noted, "In short, the offense is stronger than the defense and that means that U.S. reliance on passive defenses is as doomed as the French were in 1940."[75]

So it is now well established that a fundamental premise of conflict in cyberspace is that in an offense-dominant operational environment a "bunker mentality" does not work.[76] This means static defenses, firewalls, and the engineered security of the network only go so far as no static defense in cyberspace is or ever will be infallible. This basic truism of cyberspace has been demonstrated time and time again. On a regular basis one reads about hackers penetrating firewalls and the passive defenses of private sector and government systems. Hackers exist to circumvent, undermine and breach static digital defenses. To a tenacious hacker, static defenses are viewed as nothing more than a new challenge—a problem to be solved, a trophy to be taken.

Generally, active defenses can be defined as countermeasures, which are employed to detect, neutralize, and mitigate cyber attacks. In their article, *Mitigative Counterstriking: Self-Defense and Deterrence in Cyberspace*, Kesan and Hayes proposed the concept that active defense begins at the detection state and consists of

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[72] Robert Evatt, *NSA director: Defense not enough in cyber security*, Tulsa World (Apr. 26, 2011), *available at* http://www.tulsaworld.com/business/article.aspx?subjectid=52&articleid=20110426_52_E1_CUTLIN111008.

[73] Kesan & Hayes, *supra* note 68, at 34.

[74] *Id.*

[75] Paul Rosenzweig, *10 Conservative Principles for Cybersecurity Policy*, Backgrounder, No. 2513 (2011), *available at* http://www.heritage.org/research/reports/2011/01/10-conservative-principles-for-cybersecurity-policy.

[76] Lynn, *supra* note 13, at 99.

three distinct phases: intrusion detection, traceback, and counterstrike capabilities.[77] IP traceback is a technical/forensic method of tracking an IP packet across the internet, permitting a victim of an attack to follow digital bread crumbs back to the initial attacker. Counterstrike capabilities typically involve disrupting or disabling the attacker by sending countermeasures back to the source of the attack.[78] Active defenses consist of electronic countermeasures that attack an aggressor computer system, disabling or immobilizing that system and thereby stopping the attack.[79] This type of defense includes perimeter defense of the .mil domain as well as "intelligent" automated hunting on government networks searching for anomalies and security risks.[80] Active defense technologies needed to engage in this fight are described by Deputy Secretary Lynn as, "Part sensor, part sentry, part sharpshooter . . . active defenses systems represent a fundamental shift in the U.S. approach to network defense."[81]

The development and utilization of active defenses is vital to securing the nation's military networks and in the near future, the nation's commercial networks as well. It is important to note that the majority of government network traffic travels over commercial networks. "Many of DOD's critical functions and operations rely on commercial assets, including Internet Service Providers (ISPs) and global supply chains, over, which DOD has no direct authority to mitigate risk."[82] With this in mind, active defenses deployed over .mil networks only protect a small fraction of government and critical networks. "As a corollary to the idea of active defenses (and to the conception that the cyber domain is pervasive) any policy needs to recognize that huge swaths of essential government activity involve communications via networks that are predominantly operated by the private sector."[83] Simply put, for active defenses to be effective, such defenses must be deployed on commercial networks in addition to government networks. This is a controversial proposition, as the private sector is concerned about further government intrusion, regulation and interference.

Clearly, the imposition and use of active defenses create numerous legal, technical, and political implications that need to be adequately addressed before wide-scale implementation. First among them is the issue of adequate attribution, which will be discussed at length in section III of this article.

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[77] Kesan & Hayes, *supra* note 68, at 35.

[78] *Id.*

[79] David E. Graham, *Cyber Threats and the Law of War*, 4. J. Nat'l Security L. & Policy 87, 92 (2010).

[80] Einstein 3 is an automated US-CERT program that once implemented will prevent cyber attacks by "shoot[ing] down an attack before it hits its target." It has been asserted that to operate effectively as an active defense asset, Einstein 3 will have to operate in the private sector as well monitoring traffic for anomalies indicative of a cyber attack. *Homeland Security seeks cyber counterattack system* (CNN television broadcast Oct. 4, 2008).

[81] Lynn, *supra* note 14, at 103.

[82] The Department of Defense, *supra* note 24, at 8.

[83] Rosenzweig, *supra* note 75.

C. The Third Strategic Initiative: *Partner with Other U.S. Government Departments and Agencies and the Private Sector to Enable a Whole-of-Government Cybersecurity Strategy*

A robust, defensible infrastructure will depend on shaping the technologies employed, the obligations of operators of key networks and infrastructures, and the ability to coordinate government-private sector investment and response to attacks.[84]

The cyber domain poses asymmetric and evolving threats to both the military and private sectors. According to Cyber 3.0, "The challenges of cyberspace cross sectors, industries, and U.S. government departments and agencies; they extend across national boundaries and through multiple components of the global economy."[85] To meet this asymmetric threat, the DOD created its third strategic initiative in an attempt to create a unified and collective approach to cyber security. Deputy Secretary Lynn contends that the DOD must develop a common operational picture, a shared intelligence process and establish collaborative bonds across the .mil, .gov and .com domains.[86] This is easier said than done, since a large majority of the critical cyber infrastructure is in the hands of the private sector. The federal government, including the DOD, depends on this critical infrastructure to operate. Emphasizing this point, Mr. Riley Repko, a senior adviser in Cyber Operations and Transformation with the United States Air Force, observes: "The private sector influences the composition and operation of cyberspace more than it influences any other war-fighting domain. The military and federal mission in cyberspace is inextricably linked to private and commercial technology stakeholders."[87] No matter how secure or resilient military networks are, it will matter little if private networks are left vulnerable to attack. "Due to the shared risk and mutual vulnerability for both the private and public sectors in cyberspace, the private sector must be an integral partner in any response."[88]

The Department of Homeland Security (DHS) has been charged with securing the .com and .gov domains while the DOD secures the .mil domain.[89] To allow DHS to draw upon the NSA's cyber capabilities in securing these domains, a memorandum of agreement (MOA) was created in September 2010 establishing a framework for cooperation. Under this MOA, the DHS and DOD each provide personnel, equipment, and facilities in order to increase interdepartmental collaboration, as well as to provide for mutual support in the area of cybersecurity capabilities.[90] This MOA is a step in the right direction but much more has to be

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[84] Gregory J. Rattray, *An Environmental Approach to Understanding Cyberpower*, *in* Cyberpower and National Security, 273 (2009).

[85] The Department of Defense, *supra* note 24, at 8.

[86] Riley Repko, *The Collaboration Imperative for Cyberspace Stakeholders, in* Cyber Innovation Center 1, 2, *available at* http://it-aac.org/images/RepkoCollaboration_White_Paper_HAF_A3_5_Riley_Repko.pdf.

[87] *Id.* at 4.

[88] *Id.* at 3.

[89] Lynn, *supra* note 14, at 104.

[90] The Department of Homeland Security, Memorandum of Agreement between the Department of

done in terms of cooperation and collaboration. A collaborative industry-government framework must be put in place where private sector strengths (such as innovation and new technologies) are also drawn upon during times of attack.[91]

Traditionally, government responses to cyber threats depend on where the threat originates and the sector that is being targeted. These responder, threat source, and target ambiguities are often difficult to delineate in the cyber domain. FBI Director Robert Muller stated,

> The problem from our perspective is we tend to think of it (attack) in particular categories—crime vesus government involvement— and yet at the outset you do not know whether it may be a state actor, a group of individuals operating at the behest of a state actor, or a high school kid across the street.[92]

Government agencies need a collaborative framework to determine the nature of the threat, from where the threat originated and who inevitably directed the attack, so an appropriate response can be formulated.[93] Distinct lines of responsibility are not only imperative for a timely government response, but such lines also need to be drawn demarking the responsibility between the government and the private sector. Currently, clear delineation of responsibility between the military and the private sector is lacking.[94]

The question then becomes how to facilitate collaboration and delineation of responsibility. How much overlap between the government and the private sector is required for an effective policy? "The U.S. government has only begun to broach the larger question of whether it is necessary and appropriate to use national resources, such as the defenses that now guard military networks, to protect civilian infrastructure."[95] How should this partnership be structured? Where should the boundaries between government and the private sector be drawn to not only protect our critical infrastructure but also protect our civil liberties? While outside the scope of this article, developing complete answers to these questions are at the forefront of policymaking concerns.

Homeland Security and the Department of Defense Regarding Cyber Security (Sep. 27, 2010), *available at* www.dhs.gov/xlibrary/assets/20101013-DOD-dhs-cyber-moa.pdf.

[91] Lynn, *supra* note 14, at 107.

[92] *Worldwide Threat Assessment*, *Before the H. Permanent Select Comm. on Intelligence, H. Intelligence Comm.*, HVC-201 (2010) (statement of Robert Mueller, Director of the FBI), *available at* http://cspan.org/Events/Terror-Still-Top-Threat-to-United-States/10737419479-1/ or http://intelligence.house.gov/hearing/full-committee-world-wide-threats-hearing.

[93] Kate Brannen, *Jurisdiction Issues Snarl DOD Cybersecurity Role*, Def. News, (Feb. 11, 2011), *available at* http://www.defensenews.com/story.php?i=5687520.

[94] Lynn, *supra* note 13, at 107.

[95] *Id.* at 104.

D. The Fourth Strategic Initiative: *Build Robust Relationships with U.S. Allies and International Partners to Strengthen Collective Cybersecurity*

Cybersecurity cannot be achieved by any one nation alone, and greater levels of international cooperation are needed to confront those actors who would seek to disrupt and exploit our networks.[96]

Cyberspace exists on an integrated and global scale. It does not simply reside within the confines of U.S. borders or national sovereignty. Almost a third of the world's population uses the Internet and there are more than four billion digital wireless devices in the world.[97] According to Cyber 3.0, "Given the dynamism of cyberspace, nations must work together to defend their common interests and promote security."[98] Because cyberspace has the ability to permeate international borders, a collective defense is needed to secure it. "The Internet is a network of networks comprised of thousands of Internet Service Providers (ISPs) and billions of end users across the globe. No single state or agency can maintain effective cyber defenses on its own."[99]

Building a collective defense with our allies and international partners in the area of cybersecurity facilitates information sharing, response to, and the tracking of cyber threats. In cyberspace, as in any domain, operational situational awareness is indispensable. To gain situational awareness in this complex environment, the implementation of collective defenses with U.S. allies is essential. Cyber 3.0 provides that the " . . . DOD will seek increasingly robust international relationships to reflect our core commitments and common interests in cyberspace. The development of international shared situational awareness and warning capabilities will enable collective self-defense and collective deterrence."[100] By sharing information, intelligence, and cyber capabilities with our allies, the U.S. will be better equipped to mitigate cyber threats and respond to cyber attacks in real time. By fostering partnerships and collaboration on a global scale, a global forensics capability to identify those responsible for attacks can be developed.[101] Establishing some measure of accountability in addition to developing the resiliency of national networks requires international cooperation.

Distributed systems require distributed action.[102] This reflects the reality that no single institution or government is capable to meet the needs of the networked world.[103] Just as cyberspace can seamlessly flow across national boundaries, so must the situational awareness and capabilities garnered from implementation of collective defenses with U.S. allies. In addition to providing better tracking capabilities of

[96] The White House, *supra* note 1, at 21.
[97] *Id.* at 3.
[98] The Department of Defense, *supra* note 24, at 2.
[99] Miller, *supra* note 34, at 7.
[100] The Department of Defense, *supra* note 24, at 9.
[101] *Id.* at 7.
[102] The White House, *supra* note 1, at 11.
[103] *Id.*

threats, collective defenses may also be employed to create a cyber threat early warning system which will allow member states to alert one another to cross-border cyber threats.[104] Some commentators have recommended that a duty to assist (akin to a maritime SOS) be created to foster a more immediate and directed response to cyber attacks.[105] Despite the many benefits of international collaboration, collective defenses or the possibility of an international duty to assist, responding to a cyber attack still requires some level of attribution.

E. The Fifth Strategic Initiative: *Leverage the Nation's Ingenuity Through an Exceptional Cyber Workforce and Rapid Technological Innovation*

The nation's people, technology and dynamism provide the DOD with a strong foundation on which to build its military and civilian workforce and advance its technological capabilities.[106]

The United States enjoys unparalleled technological resources, which may be brought to bear on the issues of cybersecurity and cyber warfare, by leveraging the nation's human technological base—the nation's "geek capital."[107] The DOD is aware of this fact and is taking steps to explore how U.S. companies and innovators can help mitigate the cyber threat.[108] According to Cyber 3.0 strategy, "The defense of U.S. national security interests in cyberspace depends on the talent and ingenuity of the American people. DOD will catalyze U.S. scientific, academic and economic resources to build a pool of talented civilian and military personnel to operate in cyberspace and achieve DOD objectives."[109] The strategy recognizes the fact that the United States did much of the ground-breaking research and development in the creation of the Internet and its foundational protocols. A combination of technological innovation, trained cyber personnel, and ingenuity must be leveraged in the cyber domain. According to General Alexander:

> Purely technological advantages are likely to be fewer and less lasting in our networked world. Our advantage has to lie in how we put these tools together in systems, especially systems of people, protocols and machines that can operate reliably together at high speeds to identify vulnerabilities, share information, assess risks, devise countermeasures and apply new solutions.[110]

Not only does the fifth initiative focus on the development of specialized personnel to lead in the areas of cyber innovation and cyber security, it also focuses

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[104] *Id.* at 13.
[105] Hollis, *supra* note 46.
[106] The Department of Defense, *supra note* 24, at 12.
[107] Lynn, supra note 14, at 105.
[108] *Id.* at 104-107.
[109] The Department of Defense, *supra* note 24, at 12.
[110] Alexander, *supra* note 67, at 8.

on developing a streamlined acquisition process to keep pace with the racing life cycle of technological development. "It currently takes the Department of Defense approximately eighty-one months to make new computing systems operational. This means that, by the time Department of Defense has fielded its computing systems, they are already three to four generations behind state of the art."[111]

A cumbersome and bureaucratic acquisition process not only fails to work in this dynamic environment, but it severely limits the nation's ability to respond to emerging cyber threats. The Department struggles with its acquisition systems. According to Miller, "In a field as dynamic and fluid as cyberspace . . . we need a much more responsive approach, one that will allow for modular, adaptive investments and technological enhancements."[112] The development and education of skilled cyber operators, as well as a streamlined government acquisition process, is central for the future of national cyber security.

It has been effectively argued that insights from other complex systems may serve as guiding principles when dealing with an adaptive response to cyber threats. One commentator suggested that we can best learn from the insights offered from adaption in the field of biology, stating, "The lesson of biology is that survival is not necessarily the reward for the biggest, strongest, or meanest but rather for the most adaptable. The ability to learn, to cooperate when fruitful, and to compete when necessary, will provide the fundamental strengths of those actors seeking cyber power."[113] From this lesson of biology, it becomes clear that the ability to adapt in the cyber domain is central to the ability to operate effectively. Technology alone does not carry the day, rather, the development and education of highly trained cyber operators will allow competitive edge to be maintained.[114] Leveraging the nation's "geek capital" is where this ability to adapt in this ever-changing environment begins. Other nations, to include China and Iran, have realized this fact and have already begun the race to educate, train and equip their cyber operators. The United States should be doing the same with a renewed sense of urgency and vigor.

III. A Sixth Strategic Initiative: *Develop an Operational Framework for Attribution and Response (Proposed)*

To exercise its right of self-defense against a hostile actor, the United States must attribute the attack to that hostile actor. This ability to detect, and thus attribute, an attack is critical for both the operational response to the attack and in dealing with the diplomatic and legal fallout.[115]

The five strategic initiatives of Cyber 3.0 make clear that cyberspace is the emerging threat environment of the 21st century. Its five initiatives lend much

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[111] *2012 Budget Request*, *supra* note 34, at 9.
[112] *Id.* at 10.
[113] Rattray, *supra* note 84, at 274.
[114] The Department of Defense, *supra* note 24, at 11.
[115] Darren C. Huskisson, *Protecting the Space Network and the Future of Self-Defense*, *5* Astropolitics 123 (2007).

to increasing the security, flexibility, and resilience of U.S. digital infrastructure. But what the strategy does not offer is a sound foundation for deterrence through retaliation or a clearly stated strategic intention to change an attacker's cost/benefit analysis before launching an attack. According to Dr. Libecki,

> Deterrence consists of essentially two basic components: first, the expressed intention to defend a certain interest; secondly, the demonstrated capability actually to achieve the defense of the interest in question, or to inflict such a cost on the attacker that, even if he should be able to gain his end, the undertaking would not seem worth the effort to him.[116]

A narrower definition of deterrence is the ability to persuade others not to attack you because doing so would result in retaliation.[117] This article refers to this traditional model of deterrence as "deterrence by threat of retaliation."

While deterrence through denial or "peace through preventive defense" is the cornerstone of the Cyber 3.0 strategy,[118] deterrence by threat of retaliation must not be left out of the strategic picture. General James Cartwright, Vice Chairman of the Joint Chiefs of Staff agrees with this criticism and has even commented that the new strategy is "way too predictable."[119] He went on to say, "It's purely defensive. There is no penalty for attacking us now. We've got to figure out a way to change that."[120] Stewart Baker, former National Security Agency general counsel, went a step further, offering his critique: "This is at best a partial strategy. The plan as described fails to engage on the hard issues, such as offense and attribution and, well, winning."[121]

Deterrence by threat of retaliation, while difficult to implement in the cyber domain, remains a useful and necessary part of the U.S. national cyber strategy. According to the White House's *International Strategy for Cyberspace*, released in May 2011:

> When warranted, the United States will respond to hostile acts in cyberspace as we would to any other threat to our country. All states possess an inherent right to self-defense . . . We reserve the right to use all necessary means—diplomatic, informational, military and economic—as appropriate and consistent with applicable

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[116] W.W. Kaufmann, The Evolution of Deterrence 1945-1958 (1958); Martin C. Libicki, *Deterrence in Cyberspace*, High Frontier, Vol. 5., No. 3, 16 (May 2009), *available at* www.afspc.af.mil/shared/media/document/AFD-090519-102.pdf.

[117] Libicki, *supra* note 116, at 16.

[118] William J. Lynn III, Deputy Sec'y of Def., *The Pentagon's Cyberstrategy, One Year Later—Defending Against the Next Cyberattack,* Foreign Aff. (Sept. 28, 2011).

[119] Ellen Nakashima, *U.S. cyber approach 'too predictable' for one top general*, Wash. Post (July 14, 2011), *available at* http://www.washingtonpost.com/national/national-security/us-cyber-approach-too-predictable-for-one-top-general/2011/07/14/gIQAYJC6EI_story.html.

[120] *Id.*

[121] *Id.*

> international law in order to defend our nation, our allies, our partners, and our interests.[122]

Deputy Secretary Lynn reinforced the President's points in September 2011:

> It should come as no surprise that the United States is prepared to defend itself in all domains. It would be irresponsible, and a failure of the Defense Department's mission, to leave the nation vulnerable to a known threat. Just as the military defends against hostile acts from land, air, and sea it must also be prepared to respond to hostile acts in cyberspace. Accordingly, the United States reserves the right, under the law of armed conflict, to respond to serious cyberattacks with appropriate, proportional, and justified military response.[123]

Unfortunately, without the capabilities of attribution, the threat of effective retaliation in the cyber domain is an empty one. Without solid attribution, those who would attack us suffer little fear of reprisal and will continue to declare open season on the testing, breaching and compromise of U.S. networks. The ability to respond in cyberspace, through conventional or nonconventional means, however, does not precisely fall in the traditional deterrence framework of having an easily identifiable adversary. As Steiner put it, "If one is to retaliate against a cyberspace actor in the physical domain—where retaliatory options historically lie—by legal, political, economic or military means, one must first establish connections between the cyberspace actor and his or her physical-world counterpart."[124]

Attribution is important for other strategic reasons. The *International Strategy for Cyberspace,* recognizes this by stating that "[t]he United States will ensure the risks associated with attacking or exploiting our networks vastly outweigh the potential benefits."[125] To accomplish this, deterrence by retaliation must become a realistic option. The challenge becomes as General Hayden, former Director of the National Security Agency, put it, "How do we deal with the unprecedented?"[126] Hayden explains, "Part of our cyber policy is that its newness and our familiar experience in physical space do not easily transfer to cyberspace. Casually applying well-known concepts from physical space like deterrence, where attribution is assumed, to cyberspace where attribution is frequently the problem, is a recipe for failure."[127]

The traditional construct of deterrence, the promise of assured retaliation, for all intents and purposes has been rendered conceptually ineffectual in Cyber 3.0.

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[122] The White House, *supra* note 1, at 14.
[123] Lynn, *supra* note 118.
[124] Eric Sterner, *Retaliatory Deterrence in Cyberspace,* Strategic Studies Quarterly (SSQ), AU Press. 62, 66, (Spring 2011), *available at* www.au.af.mil/au/ssq/2011/spring/sterner.pdf.
[125] The White House, *supra* note 1, at 13.
[126] General Michael V. Hayden, *The Future of Things Cyber,* Strategic Studies Quarterly 1, 3 (2011), *available at* www.au.af.mil/au/ssq/2011/spring/hayden.pdf.
[127] *Id.* at 4.

By its very design, the Internet allows cyber aggressors to undertake belligerent and destructive conduct in a relative cloak of anonymity and obfuscation. Despite the difficulty in effectively identifying an attacker, it is clear that the current administration does not intend to abandon this traditional model of deterrence completely. A lack of adequate attribution, however, could be the Achilles heel of Cyber 3.0. While Cyber 3.0 is a step in the right direction by recognizing the many challenges of cyberspace and its continuing evolution, it must also confront the technical limitations of attribution and embrace the value of developing a framework for threat response. Following this notion, a *sixth strategic initiative*, one grounded on a viable framework of attribution and response, is a logical addition to the Cyber 3.0 strategy.

A. Attribution and the Law of War

The Law of Armed Conflict (LOAC), various U.N. Treaties, and customary international law provide much of the legal constraints on the use of active defense and offensive cyber operations. Before discussing the law that applies to active defense and offensive cyber operations, it is important to understand the basic international norms that apply to the use of force.

The United Nations Charter provides the framework for the use of force under international law. Specifically Article 2(4) states "all members shall refrain in their international relations from the threat or use of force against the territorial integrity or political independence of any state."[128] Article 2(4) is viewed as a basic principle from which states are not allowed to deviate with two exceptions. The Charter authorizes the use of force in situations set out in Article 42, which states, "If peaceful means have not succeeded in obtaining adherence to Security Council decisions, the Security Council may take such action . . . as may be necessary to maintain or restore international peace and security."[129] Article 51 is the second exception to Article 2(4)'s prohibition on the threat or use of force, codifying the customary international right to use force in self-defence. Article 51 provides that "[n]othing contained in the present Charter shall impair the inherent right of individual or collective self-defense if an armed attack occurs against a Member of the United Nations, until the Security Council has taken the measures necessary to maintain international peace and security."[130] Through this language, Article 51 preserves the long-standing principle that a nation has the inherent right to defend itself. The key question then becomes what is considered an "armed attack" in the cyber domain and how is this conduct delineated from other conduct which falls below the use of force threshold?

Central to the question of how a nation can respond to an attack is whether the intrusion constitutes a "use of force." Typically, a computer network attack (CNA) can be characterized in three ways: "First, as an action which falls below the threshold of use of force; second, as conduct that is equivalent to a use of force

[128] U.N. Charter art. 2(4).
[129] U.N. Charter art. 42.
[130] U.N. Charter art. 51.

but is short of an armed attack; or third, as conduct which equates to an armed attack."[131] There is general consensus among legal and military scholars that, for a cyber attack to be considered an armed attack, the consequences of the conduct must be equivalent to the results of a traditional kinetic attack—typically death, destruction, or injury. According to Professor Michael Schmitt, "There is little debate that conduct which specifically intends to cause physical damage/destruction to tangible property or injury or death to human beings is reasonably characterized as a use of armed force."[132] This approach is known as an "instrument-based approach."[133] Under this model, an assessment is made as to whether the damage caused by the attack is comparable to damage which previously could have only been achieved through kinetic attack.[134] Walker Gary Sharp, Sr. argues for an even broader standard stating, "Any computer network attack that intentionally causes any destructive effect within the sovereign territory of another state is an unlawful use of force that may constitute an armed attack prompting the right to self-defense."[135]

The true dilemma, however, is how to characterize conduct which does not cause physical damage or injury, and how to respond to such conduct. An analytical model which attempts to answer this question was developed by Professor Schmitt and is known as the "effects-based" or "consequence-based" approach.[136] Schmitt focuses on the consequences of an attack rather than the target or the intentions of the attacker. Under this approach, no attempt is made to assess whether the damage caused by the attack is akin to damage caused by a kinetic use of force.[137] Here, the consideration is placed on the overall effect of the attack on the victim state. Schmitt believes that a use of force is not confined to traditional "physical or kinetic force applied by conventional weapons."[138] In attempting to delineate the level of an attack in the space and cyber domains, the "Schmitt Test" as outlined in Schmitt's article on computer network attack is particularly relevant. In his article, Schmitt puts forth six criteria to delimit conduct which does not rise to the use of armed force.[139] These criteria are:

> (1) Severity: Armed attacks threaten physical injury or destruction of property to a much greater degree than other forms of coercion.
>
> (2) Immediacy: The negative consequences of armed coercion, or threat thereof, usually occur with great immediacy, while those of other forms of coercion develop more slowly.

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[131] Eric Talbot Jensen, *Computer Attacks on Critical National Infrastructure: A Use of Force Invoking the Right of Self-Defense,* 38 Stan. J. Int. L. 207 (2002).
[132] Michael Schmitt, *Computer Network Attack and the Use of Force in International Law: Thoughts on a Normative Framework*, 37 Colum. J. Transnat'l L. 885 (1999).
[133] Graham, *supra* note 79, at 91.
[134] *Id.*
[135] Walter Gary Sharp, Sr., *Cyberspace and the Use of Force*, Aegis Research Corp (Feb. 1, 1999).
[136] Schmitt, *supra* note 132, at 914-16.
[137] Graham, *supra note* 79, at 91.
[138] Schmitt, *supra* note 132, at 914-16.
[139] *Id.*

(3) Directness: The consequences of armed coercion are more directly tied to the actus reus than in other forms of coercion, which often depend on numerous contributory factors to operate.

(4) Invasiveness: In armed coercion, the act causing the harm usually crosses into the target state, whereas in economic warfare the acts generally occur beyond the target's borders. As a result, even though armed and economic acts may have roughly similar consequences, the former represents a greater intrusion on the rights of the target state and, therefore, is more likely to disrupt international stability.

(5) Measurability: While the consequences of armed coercion are usually easy to ascertain (e.g., a certain level of destruction), the actual negative consequences of other forms of coercion are harder to measure.

(6) Presumptive Legitimacy: In most cases, whether under domestic or international law, the application of violence is deemed illegitimate absent some specific exception such as self-defense.

By applying this "consequence-based" approach to conduct in the cyber domain, it allows the military to identify conduct that would constitute an armed attack.

The final analytical model is one based on the notion of "strict liability" which would automatically label any cyber attack against critical national infrastructure to be an armed attack based on the dire consequences such an attack would have.[140] For instance a cyber attack launched against the nation's power grid, crippling it, would be considered an armed attack based on the damage/national paralysis it would cause. Under the "strict liability" analytical model, this category of cyber attack would automatically constitute an armed attack.

Once conduct has been found to constitute an armed attack, the next step in the analysis is to determine whether the attack can be attributed to the appropriate actor. Establishing another state's responsibility is a critical next step to enable the victim state to use force to respond to a cyber attack as a legitimate exercise of its right to self-defense under the U.N. Charter.[141]

What limitations apply to the implementation and use of active defense or to the use of force to respond to cyber attacks? First, states must not launch retaliatory actions that qualify as a use of force absent U.N. Security Council authorization unless it is exercising its inherent right of self-defense in response to an armed attack.[142] Typically, active defenses and cyber counterstrikes are predicated on the principle of self-defense under Article 51. Second, states must not deploy active

[140] Graham, *supra* note 79, at 91.
[141] *Id.* at 92.
[142] U.N. Charter arts. 2(4), 42, 51.

defenses or cyber counterstrikes that violate the laws of war. It is important to note that cyber attacks can be routed through third parties or neutral states, which may be harmed by a counterstrike running though their systems.[143] This implicates well-known legal principles of war such as necessity, distinction, and proportionality. Military necessity authorizes the use of force required to accomplish the mission. Distinction requires that military combatants and targets be distinguished from protected civilian parties and property. The concept of proportionality, under the law of war, dictates that the damage inflicted while responding to an attack must not be excessive in relation to the military objective or advantage.

These key principles of the law of war apply to active defense and cyber counterstrikes just as they would to more traditional forms of combat. In sum, states must avoid cyber operations which target civilians, cause indiscriminate harm, or violate the neutrality of neutral states.[144] Finally, states must respect the sovereignty of other states in responding to cyber attacks that do not constitute a use of force or do not constitute an armed attack.[145]

Before a victim state may legitimately use force the state must possess the ability to adequately attribute responsibility for such attack to another state or group of actors. A victim state cannot lawfully launch a response without knowing the identity of the attacker. The response cannot be indiscriminate. If the appropriate framework of attribution and response is not in place, those who aim to attack the U.S. may act with impunity and with little fear of reprisal.

The problem then becomes the capability to attribute the original cyber attack directly and conclusively to another state or agents under that state's direct control. This attribution would be viewed as a precursor to any sort of cyber counterstrike in order to avoid collateral damage or injury of innocents/neutrals. Given the inherent anonymity of the technology involved, attribution of a cyber attack can be time-consuming and difficult to conclusively identify the entity initiating or directing the attack.

One potential solution to the attribution problem is the use of imputed state responsibility. Imputed attribution can be used against states that harbor or allow attacks from within their borders.[146] The concept of imputed state responsibility for cyber attacks is based on a state's violation of what is viewed as an established duty to prevent one's territory from being used as a haven or sanctuary for those launching terrorist or cyber attacks.[147] Consistent with this approach, a state is said to have breached this duty when it consistently fails to undertake measures to prevent or legally respond to these attacks.[148] Regardless, however, of what level

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[143] Kesan & Hayes, *supra* note 68, at 35-39.
[144] Hollis, *supra* note 46. *See also* Lieutenant Colonel Joshua E. Kastenberg, *Non-Intervention and Neutrality in Cyberspace: An Emerging Principle in the National Practice of International Law*, 43 A.F. L. Rev. 64 (2009).
[145] Hollis, *supra* note 46, at 394.
[146] Graham, *supra* note 79, at 92; *see also* Skelrov, *supra* note 70, at 2 (discussing imputed state responsibility).
[147] Graham, *supra* note 79, at 93-95.
[148] *Id.*

of attribution or responsibility is prescribed (conclusive or imputed), attribution remains a critical piece to the response framework, one that cannot be disregarded.

The problem of attribution in cyberspace serves as a significant technical and legal pitfall when dealing with the deterrence of cyber attacks. According to Libecki, "The medium is fraught with ambiguities about who attacked and why, about what they achieved and whether they can do it again."[149] It has been stated that attributing cyber attacks is untenable and because of this fact, deterrence by threat of response in the cyber domain is unrealistic. According to Commander Todd Huntley, "Cyberattacks are not accompanied by calling cards. Perhaps the single greatest challenge to the application of the law of armed conflict to cyber activity is the challenge of attribution."[150] For this reason it has been suggested that the thorn of attribution should be left to fester. It has been further argued that developing a solution to the attribution problem is just a waste of time and resources—instead, the nation should focus on network resiliency and redundancy. By accepting this shortsighted approach, however, national cyber defenses remain exposed, and operators can only determine how many direct hits our networks can absorb before slipping under the vast sea of ones and zeros. As Eric Sterner, a fellow at the George C. Marshall Institute put it, "Left with few retaliatory options, the defender can only hope to ensure that its defenses are better than the challenger's offenses and take steps to manage the risks and consequences of losing the offense-defense equation."[151] Secretary Lynn has defended the deterrence by denial approach:

> Our strategy's overriding emphasis is on denying the benefits of an attack. Rather than rely on the threat of retaliation alone to deter attacks in cyberspace, we aim to change our adversaries' incentives in a more fundamental way. If an attack will not have its intended effect, those who would wish us harm will have less reason to target us thorough cyberspace in the first place.[152]

While deterrence by denial is the primary strategy of deterrence considered by Cyber 3.0, it should not be the only one. Sterner posits, "In the end, risk management and consequence-management policies will help allocate resources . . . nevertheless, their limitation lies in the fact that they divorce cybersecurity from cyber conflict and the attack from the attacker."[153] In determining whether the U.S. can employ active defense technology and cyber counterstrikes to neutralize cyber threats, the concept of attribution remains central to the response equation. If the U.S. desires the ability to respond to a cyber attack with retaliatory or employ

[149] Libicki, *supra* note 42, at Preface.
[150] Commander Todd C. Huntley, *Controlling The Use of Force in Cyberspace: The Application of the Law of Armed Conflict During a Time of Fundamental Change in the Nature of Warfare*, 60 Naval L. Rev. 34 (2010).
[151] Sterner, *supra* note 124, at 67.
[152] William J. Lynn III, Deputy Secretary of Defense, Remarks on the Department of Defense Cyber Strategy, Presenting at the National Defense University in Washington, D.C. (July 14, 2011), *available at* http://www.defense.gov/speeches/speech.aspx?speechid=1593.
[153] Sterner, *supra* note 124, at 67.

counterstrike operations it must as a prerequisite first be able to prove who initiated the attack.[154]

Going back to the distinct architecture of the Internet and the ease with which data crosses traditional boundaries, responding to a cyber attack is fraught with difficulty and technical nuances. First and foremost, there is architectural anonymity in cyberspace.[155] The Internet lacks a solid identity system, demonstrating that an attacker may easily spoof their IP address or obfuscate their identity. IP address spoofing software is readily available to even amateur users of the Internet and novice hackers.[156] One can only imagine the level of sophisticated techniques and technologies that can be employed by state-sponsored operators. These techniques and technologies not only cloak attackers in a veil of anonymity but also add a virtual distance between the victim of an attack and the perpetrator of the attack. This virtual distance, coupled with the ability to cloak one's identity, makes cyberspace a digital proving ground for new technologies of intrusion, exploitation and attack. Second, neutral, third-party, or compromised intermediary systems are often left to blame while the original attackers remain unknown and untouched.

Despite its many difficulties, ascertaining the nature (target) of an attack, along with the source of the attack should be part of the equation in the formulation of an appropriate response. Without this initial undertaking of attribution, deterrence by threat of retaliation is left impotent. "Attribution is necessary before a group can take any action including offensive computer attacks, arrests, lawsuits or kinetic attack."[157] Unfortunately, cyber attacks, like the Internet packets that carry them, easily cross jurisdictional lines. When this happens, successful attribution becomes dependent not only on the available technology and forensic digital evidence left behind from an attack, but also upon international cooperation between allies. "Cyber attackers are taking advantage of the fact that routing an attack through countries that are not on the best of terms with the target country will effectively conceal their identity and location."[158]

While development of new technologies or inference from the target/nature of the attack may narrow the field of usual suspects, it is also likely that a technologically-savvy adversary will be able to cloak its attack as coming from a

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[154] Attribution can be direct or indirect, however, the governing principle of state responsibility under international law has been that the conduct of private actors is not attributable to the state unless the state has directly and explicitly delegated a part of its tasks and functions to the private entity. For a further discussion of this issue, refer to Jeffery Carr's outstanding book, Mapping the Cyber Underworld, *supra* note 70.

[155] *See also* Tim Wu, *Application-centered Internet Analysis*, 85 VA. L. Rev. 1163 (1999) (discussing the Architecture of the Internet).

[156] *See, e.g.*, *Anonomizer.com and the Tor Project* at *Torproject.org*; *see also* Bruce Schneier, *The Internet is Anonymous Forever*, Forbes, (May 5, 2010), *available at* http://www.forbes.com/2010/05/12/privacy-hackers-internet-technology-security-anonymity.html.

[157] David A. Wheeler, *Techniques for Cyber Attack Attribution,* Institute for Defense Analyses (2003), http://www.dtic.mil/cgi-bin/GetTRDoc?AD=ADA468859&Location=U2&doc=GetTRDoc.pdf.

[158] The Technolytics Institute Cyber Warfare Center, *Cyber Commander's eHandbook: The Weaponry and Strategies of Digital Conflict*, 10-13 (Jan. 2010), *available at* http://www.technolytics.com/CyberWarfare.asp.

third party or neutral source.[159] According to David E. Graham, former Chief of the International/Operations Division of the Judge Advocate General of the Army, given the difficulties raised by the traditional requirement to attribute attacks conclusively and directly to a state, there has been a growing effort to formulate acceptable legal alternatives to the notion of "conclusive attribution."[160]

One such alternative, as previously mentioned, is imputing state responsibility for cyber attacks.[161] What becomes apparent, however, is that some level of attribution remains central to our capability to respond, even with the option of imputing state responsibility. Having a framework of attribution in place, based on foresight and preparation, will provide the necessary situational awareness to determine a legal and appropriate course of action.

Situational awareness in cyberspace begins with being aware that an attack is occurring, which systems are being attacked, and what options are available to marshal an appropriate response. In order to accomplish sufficient attribution, the U.S. must depend on technological innovation, better intelligence, and international cooperation. If attribution is to have any value in the deterrence process, the intelligence and situational awareness it provides must be accurate, timely, and actionable. It also must be made clear to the attacker that they have been exposed to have any deterrent effect. This can be accomplished by establishing clear and unambiguous response policies. Implementing these policies puts attackers on notice that there will be serious consequences for their conduct. Having unambiguous policies of threat response makes it apparent to those who attempt to attack the U.S., or to states harboring those who would attack the U.S., that they will be held responsible for conduct arising from within their borders or sphere of control. To do this effectively, attribution technologies must be able to peel back the digital layers of obfuscation to hone in on attackers, and must be able to do so in an efficient manner. While Cyber 3.0 deals with making U.S. networks and critical infrastructure more resilient to attacks, it also must recognize the value of situational awareness provided by the often-maligned concept of attribution.

B. Proposed Attribution Framework

It is largely agreed upon that attribution in cyberspace is not a perfect science nor is it a minor undertaking. After all, a measure of anonymity is inherent in the basic structure of the Internet. The Internet was originally designed to ensure communication lines remained open despite a kinetic (read: nuclear) attack on U.S. Infrastructure. The Internet's original design did not account for the asymmetric cyber attacks that are being utilized today nor was it designed to make attribution and identification a priority. According to Paul Rosenzweig, a visiting fellow at Heritage Foundation, "As originally conceived, the cyber domain serves simply as a giant switching system, routing data around the globe using general internet protocols. It embeds no other function (like identity or verification of delivery)

[159] Huntley, *supra* note 150, at 38.
[160] Graham, *supra* note 79, at 93.
[161] Skelrov, *supra* note 70, at 1; David E. Graham, *supra* note 79, at 92.

into the protocols."[162] Despite these architectural conundrums, attribution remains an important part of the national response framework.

While attribution and response are not warranted for every level of cyber incursion (to do so would be ineffective and inefficient) such concepts should be utilized for cyber attacks that pose significant threat or cause significant harm. Attribution is necessary in these cases as a response to a cyber attack is often contingent on the nature of the attack and the attacker. For instance, the response would be different in scope and execution if the attack came from a terrorist group, or a foreign national power, than if it came from a teenage hacker in a darkened basement.[163]

On June 14, 2011, the Wall Street Journal reported that the United States Senate's website, Senate.gov, was hacked by a group calling themselves "LulzSec."[164] The LulzSec hackers posted a configuration file for the Senate's website online. Interestingly, the hackers stated in a news release, "This is a small, just-for-kicks release of some internal data from Senate.gov. Is this an act of war, gentlemen?"[165] Certainly, this "just-for-kicks" release of data would not rise to an act of war and would likely only necessitate a criminal investigation. In this example, the who—LulzSec—and the what—hacked Senate.gov—are clear. Unfortunately, in the cyber domain this is not always the case. This is why the concept of attribution is important to the response equation.

Determining the original source of the attack, while not a critical factor in the success of passive defenses, is central to determining if a retaliatory response is possible. Attribution also identifies the appropriate entity to respond to an attack. The roles, combinations, and responsibilities of government agencies, and the private sector need to be defined. To do this attribution must be made a part of the deliberative process. If deterrence by retaliation is to be a part of the nation's cyber security strategy, several key issues must be addressed:[166] These key issues include: What level of certainty/attribution is required to respond to an attack? What are the practical and technical limitations of attribution? And how can deterrence by retaliation be effective in cyberspace? To answer these questions, a realistic framework for attribution needs to be developed and implemented.

To understand how a framework for attribution would be useful as a *sixth initiative* of Cyber 3.0, we must first note the different kinds of environments where attack attribution can be made and then discuss the different technical levels of attribution that are required in each given situation. The first and most prevalent

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[162] Rosenzweig, *supra* note 75 at 31.

[163] Katherine Stephens, *Cyberspace National Policy Considerations*, National Security Cyberspace Institute (Nov. 16, 2010), *available at* http://www.nsci-va.org/WhitePapers.htm.

[164] Andrew Morse & Ian Sherr, *Senate Website Gets Hacked,* Wall St. J., June 14, 2011, *available at* http://online.wsj.com/article/SB10001424052702303848104576383970053018848.html.

[165] *Id.*

[166] *Untangling Attribution: Moving to Accountability In Cyberspace, Hearing on Planning for the Future of Cyber Attack Before the Subcomm. on Technology and Innovation of the Comm. on Science & Technology*, 111th Cong. 2 (2010) (statement of Robert K. Knake, International Affairs Fellow in Residence, the Council on Foreign Relations), *available at* http://www.cfr.org/united-states/untangling-attribution-moving-accountability-cyberspace/p22630.

attribution problem deals with tracing attacks carried out over the Internet and its associated networks.[167] A traceback approach, where the attack sequence is traced to its source, is typically applied to such situations. Traceback, however, is often difficult to achieve due to the underlying architecture of the Internet, use of anonymity technologies, obfuscation, and the use of multi-stage attacks. "Cyberattacks are frequently conducted though intermediate computer systems to disguise the true identity of an attacker."[168] For example, Iranian nationalistic hackers may route their attack through intermediate servers in Hong Kong making it appear that the attack originated from Hong Kong rather than Tehran.

The second attribution problem deals with cyberattacks that are not carried out via the Internet. Rather, the attacks are carried out against networks which exist independently (air-gapped) by infiltrating these networks using a removable device such as a USB flash drive.[169] This variety of attack bridges the "air-gap" of secure systems and compromises them. An "air-gapped" network is a measure undertaken to create a secure computer network by isolating it from insecure networks (such as the public internet) both physically and electromagnetically.[170] Classified networks are often "air-gapped" to prevent malicious software from spreading. An example of this sort of attack on an "air-gapped" network occurred in 2008 when the DOD suffered a significant compromise of its classified military computer networks.[171] An infected USB flash drive was inserted into a U.S. military laptop, which delivered malicious code placed there by a foreign intelligence agency. The malicious code then uploaded itself onto a secure network managed by U.S. Central Command (CENTCOM). The Pentagon's operation to counter this effective attack was known as "Operation Buckshot Yankee."[172] For attacks such as the Buckshot Yankee incident, attribution takes on the guise of a criminal computer forensic criminal case, using digital and real-world evidence to build a case against a particular perpetrator. In cases where malicious code is introduced into secure or classified networks, computer forensic techniques, criminal investigative techniques, and intelligence-gathering techniques can be used to traceback the origin of the attack.[173]

Finally, there is the problem of attribution for the introduction of malicious code via the material supply chain where "back-doors" are built into the system via hardware and software applications that we utilize to construct our networks.[174] For instance, malicious code pre-loaded in computer hardware or memory. While outside of the scope of this article, these problems of attribution can be resolved

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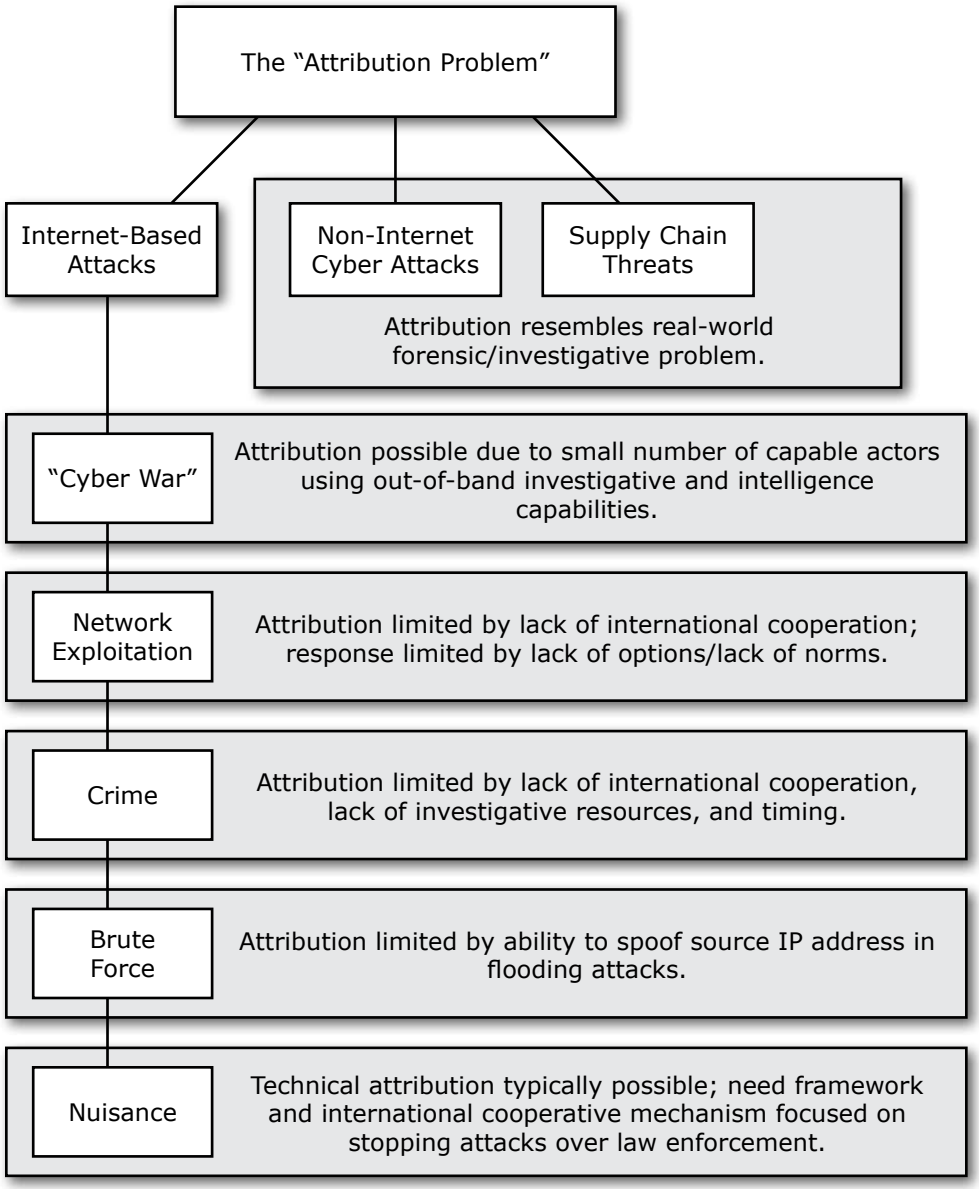
[167] *Id.* at 2.
[168] Skelrov, *supra* note 70, at 77-78.
[169] Knake, *supra* note 166, at 2.
[170] Robert Lemos, *NSA Attempting to Design Crack-Proof Computer,* ZDNET NEWS (1 Feb 2001), *available at* http://www.zdnet.com/news/nsa-attempting-to-design-crack-proof-computer/114035; *see also* Oliver Rist, *Hack Tales: Air-gap Networking for the Price of a Pair of Sneakers*, Infoworld (29 May 2006), *available at* http://www.infoworld.com/d/networking/hack-tales-air-gap-networking-price-pair-sneakers-610.
[171] Lynn, *supra* note 14, at 97.
[172] *Id.*
[173] Knake, *supra* note 166, at 2-3.
[174] *Id.* at 3.

by a more robust and secure acquisition process coupled with traditional criminal investigative techniques. For a visual depiction of the attribution problem refer to (Figure 1: "The Attribution Problem").[175]



(Figure 1: The "Attribution Problem")

[175] *Id.*

Attribution on the Internet can be broken down into three distinct technological and practical levels. The first level of attribution is determining the physical location of the machine which is transmitting the attack.[176] This typically entails identification/location of the offending IP address. The second level of attribution on the Internet is determining the owner of the machine as opposed to the actual operator responsible for the attack.[177] It is important to note that the owner of the machine may not be the individual or entities originating the attack as attacks are often routed though neutral or innocent compromised systems. Finally, the third level of attribution on the Internet, and the most technologically challenging level of attribution, is attempting to determine the original individual or entity that is responsible for launching the attack.[178]

Understanding the various levels of attribution and their intrinsic values is the initial step in constructing a response framework. Once the technical level of attribution has been settled, it must be determined what sort of attribution is required based on the nature of the intrusion or attack. To accomplish this, it must be determined what sort of cyber threat is being encountered and what aspects of attribution are required to adequately address each threat.

Academics in the area have proposed attributing responsibility for an attack based on various factors including (1) the type of the attack used, (2) the target of the attack, or (3) the country of origin.[179] However, none of these are dependable indicators for sourcing an attack. The fact that an attack has occurred often reveals little about its creators or their motivations.[180] Other commentators, however, have noted that for the most serious of cyber threats, the "Cyber Pearl Harbors," the technical attribution problem at this time is largely overstated.[181] According to Robert Knake, former International Affairs Fellow in Residence at the Council on Foreign Relations,

> As with other Internet-based attacks, technical attribution may be difficult and the forensic work will take time, but at present there are a limited number of actors that are capable of carrying out such attacks. Moreover, the resources, planning, and timeline for such attacks would provide many opportunities to identify and disrupt such attacks.[182]

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[176] *See* David D. Clark and Susan Landau, *Untangling Attribution*, *in* Proceedings of A Workshop on Deterring Cyberattacks, Informing Strategies and Developing Options for U.S. Policy 25, The National Academies Press (2010); David D. Clark and Susan Landau, *Untangling Attribution,* Harv. Nat. Sec. J., Vol. 2. Issue 2, (2011) *available at* http://harvardnsj.com/2011/03/untangling-attribution-2/.

[177] *Id.*

[178] *Id.*

[179] Hollis, *supra* note 46, at 400.

[180] *Id.*

[181] Knake, *supra* note 166, at 5.

[182] *Id.*

This attack capability, however, will not remain static, as more and more actors will develop ever more sophisticated attack capabilities. The continued development of sophisticated attack capabilities demonstrates the need for an attribution framework and application of the appropriate technical level of attribution to a particular threat category.

In addition to the technical levels of attribution, there are distinct threat categories that require different applications of attribution. Threats can be divided into the following categories: cyber warfare, cyber espionage, brute force attacks, cyber crime, and cyber nuisance.[183] In their article, *Untangling Attribution*, David D. Clark and Susan Landau submit that different types of cyber attacks and cyber exploitations raise different options for prevention and deterrence.[184] Clark and Landau aptly apply four aspects of attribution to determine what technical level of attribution is required. These aspects include attribution *type*, *timing/immediacy*, *investigation* and *jurisdiction*.[185] Application of these four aspects of attribution provides a sound foundation for a framework of attribution.

Type. The most typical form of attribution is IP identification, which is identifying the IP address of the offending machine. While this form of attribution is readily available and provides some measure of identification, it is useful only for a topical level of identifying the machine that is transmitting malicious code.[186] This level of attribution is useful for an emergent or immediate response—for example, blocking a machine from further access to the network—but does little in providing a legal basis for a retaliatory response. "During an attack, when the goal is mitigation, it is not generally useful to identify the responsible person; what is needed is to deal with the machines that are the source of the attack. This sort of attribution is usually associated with IP address."[187] In order for attribution to lend itself to the concept of deterrence by retaliation, this initial level of attribution—that of machine level attribution is of little assistance.

Certainly the aggressor in the cyber domain carries the tactical advantage of speed, surprise, and anonymity. This capability is in large part due to the architecture of the Internet and its transmission protocols.[188] A cyber attacker can launch a

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[183] *Id.*

[184] Clark & Landau, *supra* note 176, at 32.

[185] *Id.*

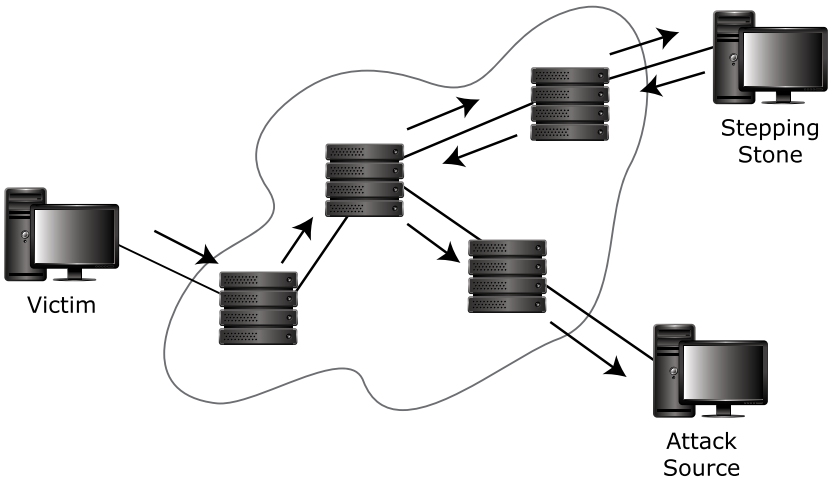
[186] *Id.* at 33-34.

[187] *Id.* at 37.

[188] "Attributing an attack to a particular source or set of sources requires understanding what can happen to the packets used to perpetuate the attack as they traverse the network. The IP routing infrastructure is stateless and based largely on destination addresses; the source address plays virtually no role in the forwarding of a packet to its destination other than providing a return address in the case of bidirectional communication. In this respect, IP packets are essentially fire-and-forget types of delivery mechanisms; once a packet is introduced into the network, there is no need for the packet to maintain any relationship with its source. The source IP address carries no semantic of trust, but it is the only clue built into the network infrastructure as to the proper source. Attackers take advantage of this property of the IP protocol by manipulating—either directly or indirectly—the source address of attack packets to obscure their true origin." W. Timothy Strayer et al., *An Integrated Architecture for Attack Attribution,* BNN Technologies 1 (Dec. 31 2003), *available at* http://www.ir.bbn.com/documents/techreports/TR8384.ps.

new attack from the safety of an anonymous computer system from thousands of miles away with devastating effect. This combination of anonymity and distance makes attack via the Internet a lucrative and low-risk environment to conduct cyber operations.

One of the most effective ways to remain anonymous on the Internet during an attack is to obfuscate the original source of the attack by routing the attack through neutral or innocent intermediaries creating a "multi-stage" or "extended-connection" attack.[189] These intermediaries who constitute a multi-state attack are typically called "stepping stones" as demonstrated below in Figure 2.[190]



(Figure 2: Multi-stage Attack)

Sophisticated multi-stage attacks do not lend themselves to attribution and remain a substantial obstacle to the ability to respond directly against an attacker and impart any sort of deterrent effect. Despite these difficulties, attribution at the identity level is necessary to respond to, rather than merely defend against, cyber attacks.[191] The continued evolution of the threat environment not only mandates that we ensure the resilience and defense of critical defense systems, but it also means the nation must continue to develop functional attribution technologies, policies, and strategies to deal with this challenge. According to Knake,

> As the relevant technologies continue to evolve, it is important that the difficulty in carrying out significant attacks also increases. Our critical industries, military, and government agencies must

[189] *Id.*
[190] *Id.* at 6.
[191] Clark & Landau, *supra* note 176, at 37.

> continue to raise their defense levels in order to keep the ability to cause destruction in the hands of a limited number of state actors.[192]

Other key elements in determining what technical level of attribution is required in any given situation are the concepts of *timing/immediacy*, *investigation* and *jurisdiction*.[193]

Timing/Immediacy. The timing/immediacy of a threat also influences what level of technical attribution is required. Timing can be broken down into four categories:[194] (1) Before the fact: prevention or degradation; (2) During the fact: mitigation; (3) After the fact: retribution and retaliation; and (4) Ongoing: attribution as part of routine activity. Deterrence by denial typically does not require attribution to a particular malicious actor.[195] Rather, these defenses rely on passive defense, network hygiene, and computer security. It is important to note, however, that by relying on only a risk-management or deterrence by denial framework, the initiative is always ceded to an attacker.[196] "Without imposing the consequences of a counterattack— strategic, operational, or tactical—on an attacker, the defender is merely taking a beating."[197] This purely defensive posture is not optimal in the cyber domain.

Attribution at the machine level is typically required during a cyber attack. During a cyber attack, the primary objective is to stop or mitigate the attack through the use of active defense technology.[198] In this situation, attribution is focused on the immediate threat to the system, the machine attacking, or point of network vulnerability. Knowing who directed the attack is not as important at this stage. After the attack is complete, however, technical attribution takes on a critical role.[199] When retribution or deterrence by retaliation is desired, it is important to take the time, intention, and due diligence to ensure the correct actor has been identified and targeted. This level of attribution is by far the most technically complicated and convoluted due to the dynamics of multi-stage attacks as previously discussed. According to Clark and Landau, attribution in this area should be a primary focus of the research community and military strategists.[200] Finally, a measure of attribution may be required for the normal operation of secure networks.[201] This level of attribution is usually based on identification/authentication of users and technologies on a given network and ensures conduct can be logged and traced on that network.[202]

Investigation. When dealing with an attribution framework it is also important to be able to identify what type of threat has presented itself, who will be investigating the incident, and who has jurisdiction. Being able to distinguish between

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[192] Knake, *supra* note 166, at 5.
[193] Clark & Landau, *supra* note 176, at 32.
[194] *Id.* at 34-35.
[195] Sterner, *supra* note 124, at 67.
[196] *Id.* at 69.
[197] *Id.*
[198] Clark & Landau, *supra* note 176, at 34.
[199] *Id.* at 35.
[200] *Id.* at 39.
[201] *Id.* at 25.
[202] *Id.* at 35.

attacks on critical infrastructure versus espionage versus criminal misconduct, drives what technical level of attribution is required and sophistication of the response. "There are various sorts of deterrence that might be imagined; these have different implications for the needed quality and precision of the attribution. Different actors—police, intelligence services, and the military will benefit from different sorts of attribution."[203] For example, in the area of cyber crime, attribution is utilized to aid in criminal investigation and prosecution. In criminal investigations, attribution needs only to rise to the level of "probable cause" to initiate the investigation and would likely begin at the machine level.[204]

Jurisdiction. A determination of who has jurisdiction also implicates what level of attribution is required. The architecture and the infrastructure of the Internet do not reside in one locale, one territory, or one jurisdiction, nor does the data that flows across its networks. As noted in Section II, cyberspace "seamlessly intersects other domains as well as geographic and recognized political boundaries." Jurisdictional issues abound in cyberspace and with these issues arise numerous technical and legal implications. "Different parts of the Internet operate within different jurisdictions, different countries, different legal systems, and (within these jurisdictions) both as public and as private-sector activities. Any discussion of attribution must consider jurisdictional issues."[205]

A framework of attribution must be malleable enough to provide a legal basis when needed, technological certainty when required, and reliable evidence when warranted. There is no comparable "silver-bullet" when applying the concept and constraints of attribution to cyberspace. There is, however, the fundamental notion that attribution should not be abandoned because of the many challenges it presents. Certainly the problems and complexities of attribution are many. By recognizing its relevance in the context of Cyber 3.0, the U.S. can continue to develop its capability to respond to future cyber threats.

While deterrence by retaliation should not be the U.S.'s primary means of securing its networks (making systems more resilient to attack is more feasible) it should become a part of the response equation. According to Eric Sterner, "It will take a series of visible retaliatory actions—political, economic, military, and cyber—over time to create a reasonable, if not certain, expectation of the risk of punishment for potential attackers."[206] The key here is to understand the strategic benefits and technical limitations of attribution as outlined in this article and move beyond the quest for absolute or perfect attribution. As Sterner further notes,

> Given the stakes involved for the United States, policymakers must explore all measures available to improve US security. Attribution and deterrence in cyberspace will not become a first, second, or even third line of defense. Risk and consequence management and the improvement of defenses at the point of attack are likely

[203] *Id.*
[204] Knake, *supra* note 166, at 6.
[205] Clark & Landau, *supra* note 176, at 35.
[206] Sterner, *supra* note 124, at 62, 76.

> to long dominate US security in cyberspace. But, deterrence may yet contribute to security by helping contain the severity and frequency of attacks and focusing attention on cyber conflict as the interaction of conscious actors whose decision-making processes can be influenced.[207]

While attribution at its best should positively identify an attacker (state or state agent), a more realistic approach is that a reasonable technical level of attribution is obtained, for example, identification of the location of an attacking server or machine. Once identified, countermeasures and active defense could be employed to interrupt or counter the malicious signal in real time, providing for an immediate response. If further, more aggressive response is required, more complete technical/forensic attribution can then be pursued. A recent DOD report to Congress provides that the Department recognizes that deterring malicious actors is complicated by the difficulty of verifying the location from which an attack is launched and by the need to identify the attacker among many potential actors.[208] Taking this into consideration, the DOD is actively seeking to increase its attribution capabilities by supporting research and development in both the DOD and private sector. According to the report, this research focuses on two primary areas: developing new trace capabilities and utilization of behavior-based algorithms to assist in identifying attackers.[209] Both initiatives are based on further technological innovation to improve cyber forensic capabilities.

It is important to note, however, that pure technological innovation alone is ineffectual. While technology may be developed to increase domain situational awareness to assist in the attribution of an attack, it is also likely that other technologies will also be developed by our adversaries to cloak their activities and counter this situational awareness. Policy, law, and strategy then dictate how a response to an attack will be justified and what level of attribution is required. As stated before, applying old modalities and antiquated strategy from the traditional domains does not translate well in the cyber domain.[210] Therefore, a balance of technology, law, and policy is required to facilitate not only security in the cyber domain but also continued growth, innovation, and freedom.

IV. Conclusion

We must prepare. We must recognize the interconnectedness of cyber. And we must be mindful of the many ways cyberspace is used—as a peaceful instrument of

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[207] *Id.* at 77.

[208] The Department of Defense, Department of Defense Cyberspace Policy Report: A Report to Congress Pursuant to the National Defense Authorization Act for Fiscal Year 2011, Section 934, at 4 (Nov. 2011).

[209] *Id.*

[210] Huntley, *supra* note 150, at 40. As Huntley notes, "The continued application of a law of armed conflict paradigm to modern conflict, one which is fundamentally different than that by which it was formed, will not only fail to protect the national security of the United States, but will also fail to protect the very interests it was designed to protect."

global communications, as a tool of economic growth—and also as an instrument to threaten and sometimes cause harm. Given this broad landscape of activity in cyberspace, we must both protect its peaceful, shared uses as well as prepare for hostile cyber acts that threaten our national security.[211]

Developing a workable framework of attribution and response should be considered in the Cyber 3.0 strategy as a sixth strategic initiative. This recommended framework of attribution both recognizes the technological, legal, and practical limitations of attribution in cyberspace while at the same time demonstrates that attribution and deterrence by retaliation should remain important elements of the U.S.'s cybersecurity vision. It is clear that national security is being redefined by cyberspace and that Cyber 3.0's five strategic initiatives provide a road map for DOD to operate effectively in cyberspace, defend national interests, and achieve national security objectives.[212]

There remain, however, significant technological barriers to overcome and complex issues to be resolved. First among them is the problem of attribution. This is why a sixth strategic initiative dealing with attribution is necessary. As one cybersecurity expert put it, "The threat of cyber war is like any great security problem; the key is not to either overreact or under react but to have a calibrated response based on the knowledge we hold."[213] Developing a calibrated response is crucial to ensure that the measures the U.S. implements to prevent hostile actions do not negate the very benefits we seek to protect.[214] A calibrated and calculated response must include a framework for attribution. Cyber 3.0 is an important first step in securing the nation's cyber domain, one that will continue to evolve in innovation, importance, and complexity. As stated in the strategy "How the Department leverages the opportunities of cyberspace while managing the inherent uncertainties and reducing vulnerabilities will significantly impact U.S. defensive readiness and national security for years to come."[215] In other words, the stakes are high and the time to act is now. One thing is for certain, reliance on cyberspace will not lessen, nor will the complexities of defending the nation's freedom to operate in this dynamic domain.

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[211] Lynn, *supra* note 152.
[212] The Department of Defense, *supra* note 24, at 6.
[213] Larry Greenemeier, The Fog of Cyberwar: What are the Rules of Engagement (2011).
[214] Lynn, *supra* note 152.
[215] The Department of Defense, *supra* note 24, at 1.

EVIDENCE OBTAINED BY FOREIGN POLICE: ADMISSIBILITY AND THE ROLE OF FOREIGN LAW

*Captain Jacob A. Ramer**

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I. Introduction

For military service members, being stationed abroad provides exciting opportunities for extensive experience with and exposure to foreign cultures and people. However, these opportunities do not come without some risk: U.S. military personnel are not only subject to the Uniform Code of Military Justice (UCMJ) wherever they go, they must also obey the laws of the host nation where they are stationed, or any other country where they might travel for personal reasons.[1] Service members must comply with local law and are subject to arrest by foreign law enforcement. Ignorance of a host country's law provides no relief, no more so than in the U.S.

The criminal offenses allegedly committed by service members outside installations located in other countries frequently attract high public interest and involvement by foreign law enforcement.[2] Foreign police investigations of U.S. military service members often feature timely coordination with U.S. military law enforcement authorities. However, in some cases, foreign police conduct a wholly independent investigation. In both situations, they gather evidence using procedures similar to their U.S. counterparts, i.e., obtaining statements from suspects and witnesses, and performing searches and seizures of suspected physical and forensic evidence. Determinations of whether such evidence obtained by foreign law enforcement may be admitted in a military court-martial or other military justice proceeding require application of standards which may differ substantially from the rules applicable to evidence gathered by military or U.S. civilian investigators.

This article analyzes the admissibility of evidence obtained by foreign law enforcement in U.S. military courts-martial and examines the applicability of foreign law factors in this analysis. It begins with an overview of the level of participation by U.S. law enforcement that courts have ruled sufficient to afford an accused constitutional and statutory protections under U.S. law. Second, this article discusses the admissibility at courts-martial of statements by an accused to foreign law enforcement. This section focuses particularly on admissibility of such

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[1] *See generally* Major Steven J. Lepper, *A Primer on Foreign Criminal Jurisdiction*, 37 A.F. L. Rev. 169 (1994); Colonel (Ret.) Richard J. Erickson, *Status of Forces Agreements: A Sharing of Sovereign Prerogative*, 37 A.F. L. Rev. 137 (1994); Jamie M. Gher, *Status of Forces Agreements: Tools to Further Effective Foreign Policy and Lessons To Be Learned From the United States-Japan Agreement*, 37 U.S.F. L. Rev. 227 (2002); Youngjin Jung and Jun-Shik Hwang, *Where Does Inequality Come From? An Analysis of the Korea-United States Status of Forces Agreement*, 18 Am. U. Int'l L. Rev. 1103 (2003); John W. Egan, *The Future of Criminal Jurisdiction Over the Deployed American Soldier: Four Major Trends in Bilateral U.S. Status of Forces Agreements*, 20 Emory Int'l L. Rev. 291 (2006).

[2] *See, e.g.*, Kaho Shimizu, *Okinawa rape case sparks resentment*, The Japan Times Online (Feb. 13, 2008), http://www.japantimes.co.jp/text/nn20080213a1.html (last visited Feb. 1, 2012). The alleged rape of a 14-year old Japanese girl by a U.S. Marine in Okinawa in 2008 led high-level Government of Japan officials to compare it publicly to an earlier incident also in Okinawa in 1995, in which three U.S. servicemen raped a 12-year old Japanese girl. The 1995 incident caused widespread protests, and eventually contributed to negotiation of a 1996 U.S.-Japan agreement to relocate U.S. bases in Okinawa. Opponents of the United States' permanent base presence in Japan still often cite the 1995 incident, along with other crimes committed by U.S. service members.

statements obtained by foreign law enforcement in Japan—the situs for much of the relevant case law on this subject due to the United States' long history of military personnel stationed there.[3] Third, this article addresses admissibility at courts-martial of evidence obtained during searches by foreign law enforcement. Lastly, this article suggests reframing the role of foreign law in military courts' analysis of foreign-obtained evidence, by focusing on foreign law views of the voluntariness and reasonableness of such evidence and how it was obtained.

II. Participation by U.S. Law Enforcement

Assessing admissibility of foreign-obtained evidence at a court-martial focuses first on whether U.S. personnel participated in the investigation, and if so, whether that participation complied with the UCMJ and the U.S. Constitution, both of which apply to U.S. service members and U.S. military investigators regardless of location. If U.S. military investigators are intimately involved or actively participate in the foreign investigation, they must advise a service member, who is suspected based on probable cause of having committed a criminal offense, of his rights pursuant to Article 31, UCMJ. In addition, any search must also comply with the standards set forth in the UCMJ and U.S. constitutional law interpreting the Fourth Amendment.[4] However, where U.S. investigators had no involvement at all, evidence obtained by foreign law enforcement will generally be admissible at court-martial. This will hold true regardless of whether such evidence derived from a foreign interrogation or search that would otherwise violate U.S. law (including the UCMJ). Resolution of these questions depends on the definition and application of the concept of "participation."

A. "Participation" in Foreign Interrogations

The Military Rules of Evidence (MRE) provide that a rights advisement under the UCMJ and the U.S. Constitution are not "required during an interrogation conducted abroad by officials of a foreign government or their agents *unless* such interrogation is conducted, instigated, or participated in by military personnel or their agents" or by certain federal or state agents.[5] The rule is simple: no direct involvement or participation, no rights advisement necessary. Conducting and instigating are fairly clear words of action, but the vagueness of "participation" provides greater opportunity for debate and litigation. The question then becomes: what is "participation?"

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[3] There are currently 38,000 U.S. service members from all four branches of the military stationed ashore in Japan and another 11,000 afloat, dispersed throughout the country at 85 facilities, including seven main bases. U.S. Forces Japan, http://www.usfj.mil/Welcome.html (last visited Feb. 1, 2012).
[4] Manual for Courts-Martial, United States, Mil. R. Evid. 305(h) and 311(c) (2008) [hereinafter MCM].
[5] MCM, *supra* note 4, Mil. R. Evid. 305(h)(2) (emphasis added).

Shortly following the implementation of the UMCJ in 1951, the courts held that mere presence of U.S. officials did not, by itself, constitute "participation"[6] triggering Article 31 requirements.[7] The 1980 amendment to MRE 305(h)(2) explicitly incorporated this interpretation.[8] However, rather than positively clarify what does amount to "participation," MRE 305 now provides three negative examples of what does not, by themself, constitute "participation" in a foreign interrogation: (1) mere presence by American authorities, (2) interpretation performed by American authorities, and (3) attempts to mitigate damage to property or person.[9]

Subsequent judicial decisions have continued to refine the definition of "participation" in foreign interrogations. The military courts have held the following do not constitute participation for purposes of MRE 305: escorting foreign police onto a U.S. military base and to the accused, coupled with the presence of U.S. military personnel during questioning of the accused by the foreign police;[10] facilitating communication of information between foreign law enforcement;[11] and providing a room for interrogation of the accused by foreign agents.[12] Any involvement by U.S. authorities, though, triggers close examination, focusing on "whether the foreign police agent is a mere instrumentality of American authorities and, therefore, the interrogation is, in essence, an American interrogation."[13]

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[6] The UCMJ was passed by Congress on May 5, 1950, signed into law by President Harry S. Truman, and became effective on May 31, 1951. Prior to the implementation of the UCMJ, there was no universal system of military justice laws applicable to all services.

[7] *See* United States v. Grisham, 16 C.M.R. 268, 270-271 (C.M.A. 1954). In *Grisham*, the court had the first opportunity, post-1951 Manual for Courts-Martial, to address whether Article 31(b) had any impact on foreign interrogations in a case where U.S. military policemen and a military-employed interpreter were present during an interrogation by French authorities but did not participate in the questioning. The court took the literal approach in applying the UMCJ, which stated "No person subject to this code shall interrogate . . . without first informing him [of his rights]" and held that Article 31(b) rights advisement was not required because French officials are not "subject" to the UMCJ. *See also* United States v. Swift, 38 C.M.R. 25, 29-30 (C.M.A. 1967) (held that mere presence of U.S. military investigator during interrogation by independently acting German police did not require Article 31(b) rights advisement from the military investigator or warnings from the German police that would satisfy the requirements under Article 31(b)).

[8] The amendment to Mil. R. Evid. 305(h)(2), Manual for Courts-Martial, United States, 1969 (revised edition), provided: "An interrogation is not 'participated in' by military personnel or their agents or by the officials or agents [of a state or the federal government] merely because they were present at an interrogation conducted in a foreign nation by officials of a foreign government or their agents, or because they took steps to mitigate damage to property or physical harm during the foreign interrogation." 45 FR 16932, Exec. Order No. 12198, 1980 WL 356243 (March 12, 1980).

[9] MCM, *supra* note 4, MIL. R. EVID. 305(h)(2).

[10] United States v. French, 38 M.J. 420, 427 (C.M.A. 1993).

[11] United States v. Koch, 15 M.J. 847, 849 (A.F.C.M.R. 1983).

[12] United States v. Jones, 6 M.J. 226, 230 (C.M.A. 1979).

[13] *Id.* at 229. *See also Grisham*, 16 C.M.R. at 270 (holding foreign agents not required to provide service members with any Article 31-type rights advisement, but added sharp cautionary comment: "[T]o make crystal clear that which must be implicit in the view expressed here, we need only observe that 'person[s] subject to this code' may not, in the course of an investigation, evade by subterfuge the duty imposed by this Article. If one so 'subject' were to utilize the services of a person not subject to the Code as an instrument for eliciting disclosures without warning, we would, without hesitation, deal sternly with such a disregard of a salutary feature of the legislation.").

Knowledge by military authorities that a suspect service member has invoked his or her rights under foreign law also does not amount to "participation." Remaining silent and requesting an attorney, when foreign law affords such rights, may forestall further interrogation by foreign police; however, exercising those rights does not preclude military officials from later questioning the service member.[14] In *United States v. Vidal*, German police apprehended a soldier suspected of kidnapping.[15] When advised of his right to remain silent and to request counsel, the soldier asserted both rights.[16] A special agent with the Criminal Investigation Command later arrived and advised the soldier of his right to remain silent under the UCMJ. The soldier waived his right and provided an inculpatory statement. Even though the agent was unaware of the soldier's request for counsel made to the German police, the court stated that it did not matter.[17] Had the agent known of the request, he still would not have been constrained by the service member's earlier invocation of rights to foreign police.[18] As long as U.S. military officials do nothing to actively participate in the investigation, nothing will be imputed to them.[19]

B. "Participation" in Foreign Searches

The Military Rules of Evidence address participation in foreign searches in a similar manner as participation in foreign interrogations. Pursuant to MRE 311(c), any search or seizure that is "conducted, instigated, or participated in" by military personnel or their agents, whether initiated or led by foreign agents or

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[14] *See* United States v. Vidal, 23 M.J. 319 (C.M.A. 1987). In Edwards v. Arizona, 451 U.S. 477 (1981), the Supreme Court held that an investigator may not continue custodial interrogation if the suspect requests counsel.

[15] *Id.* at 320-21.

[16] *Id.* at 321. Interestingly, the German police form, written in English, advised a suspect of his right to remain silent and that any statement may be used against him, his right to counsel, and inexplicably that: "If I am subject to the Uniform Code of Military Justice, appointed counsel may be military counsel of my own choice if he is reasonably available."

[17] *Id.* at 323. The court stated that "a request for counsel made in connection with a foreign investigation may result only from the American suspect's unfamiliarity with the foreign legal system and does not necessarily mean that the suspect is unwilling to talk to an American investigator until he has been provided counsel. The suspect is adequately protected if he is warned of his rights under American law when first questioned by American officials."

[18] *Id.* The court stated: "Generally, the actions and the knowledge of officials of a foreign nation are not imputed to American authorities in connection with the application of American constitutional guarantees." This rule is distinct from those investigations carried out by separate military personnel. Once a service member has requested counsel to any military person in any investigative chain, all questioning must cease unless the service member re-initiates the interrogation. *See, e.g.*, United States v. Goodson, 22 M.J. 22, 23 (C.M.A. 1986) (request for counsel made to military policeman who apprehended suspect was imputed to military police investigator); United States v. Reeves, 20 M.J. 234, 236 (C.M.A. 1985) (earlier request for counsel to military investigator was imputed to company commander's later questioning).

[19] *Vidal*, 23 M.J. at 323; *see also* United States v. Dock, 40 M.J. 112, 115 (C.M.A. 1994) (referring to this rule as the "overseas exception" to *Edwards*, 451 U.S. 477, for the military); United States v. Coleman, 26 M.J. 451, 452 (C.M.A. 1988) (Army investigator's knowledge that suspect had refused to make statement to German police did not prohibit questioning by the military after proper Article 31 rights advisement); United States v. Hinojosa, 33 M.J. 353, 355 (C.M.A. 1991).

not, must comply with the U.S. Constitution and federal law, including the UCMJ and the Military Rules of Evidence, in order for evidence derived therefrom to be admissible at court-martial.[20] MRE 311(c)(3) mirrors the same three examples of non-participation specified in MRE 305(h)(2)—presence, interpretation, and attempts to mitigate damage or harm.[21] Foreign interrogations without any participation by American authorities are exempt from U.S. constitutional or statutory requirements.[22]

Although the Military Rule of Evidence now provides that presence does not equal participation in searches, this was not always the case. Military courts' decisions have varied over the years on the question of whether mere presence by U.S. authorities at foreign searches triggers constitutional protections. In 1954, the Court of Military Appeals[23] held that mere presence by military investigators during a search by foreign agents was not enough to invoke constitutional safeguards.[24] Then in 1976, the court reversed its position, stating that "whenever American officials are present at the scene of a foreign search . . . the search must satisfy the Fourth Amendment."[25] Three years later, the court revisited the issue and swung the pendulum back to requiring something more than mere presence before constitutional protections attach to foreign searches.[26] This is where the law currently stands.

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[20] MCM, *supra* note 4, MIL. R. EVID. 311(c).

[21] MCM, *supra* note 4, MIL. R. EVID. 311(C)(3) ("A search or seizure is not 'participated in' merely because a person is present at a search or seizure conducted in a foreign nation by officials of a foreign government or their agents, or because a person acted as an interpreter or took steps to mitigate damage to property or physical harm during the foreign search or seizure.")

[22] *See* MCM, *supra* note 4, MIL. R. EVID. 305(h)(2).

[23] In 1968, Congress redesignated the court as the United States Court of Military Appeals. In 1994, Congress redesignated the court as the U.S. Court of Appeals for the Armed Forces.

[24] United States v. DeLeo, 17 C.M.R. 148, 156 (C.M.A. 1954).

[25] United States v. Jordan, 1 M.J. 334, 337-338 (C.M.A. 1976) ("[W]henever American officials are present at the scene of a foreign search, or even though not present, provide any information or assistance, directive or request, which sets in motion, aids or otherwise furthers the objectives of a foreign search, the search must satisfy the Fourth Amendment as applied in the military community before fruits of the search may be admitted into evidence in a trial by court-martial"). This opinion was a reconsideration of the court's earlier decision in the same case, *see* United States v. Jordan, 1 M.J. 145 (C.M.A. 1975).

[26] United States v. Jones, *supra* note 12, 6 M.J. at 230. In *Jones*, the court characterized certain language in *Jordan* as dictum, and then indicated that the operative language of "sets in motion, aids, or otherwise furthers the objectives of a foreign search" not only applied to searches where American personnel are not present, but also those searches where American personnel are present. The reversal can also be explained by the drafter of the opinion. In the reconsideration opinion for *Jordan*, Chief Judge Fletcher wrote the opinion, with Judge Cook strongly dissenting. Judge Cook wrote that foreign governments are like private persons, thereby not subject to the prohibitions of the Constitution, and that mere presence of American officials is not enough to require that foreign police adhere to constitutional principles against unreasonable search and seizures. In *Jones*, Judge Cook wrote the majority opinion. Chief Judge Fletcher filed a concurring opinion, stating that he "agree[d] with the lead opinion" that *Jordan* was "inapplicable" to the case at bar, thereby arguing, in effect, that *Jordan* was not being overruled. *See also* United States v. Morrison, 12 M.J. 272, 279 (C.M.A. 1982) (The court held that "the rule of *Jordan* should no longer be applied" such that mere presence, by itself, was not enough to constitute "participation" by U.S. authorities).

III. Statements Obtained by Foreign Law Enforcement

Popular culture, not least including television crime shows, has largely made common knowledge those rights which the Supreme Court announced in *Miranda v. Arizona*,[27] i.e., the rights of a criminal suspect under apprehension by law enforcement to be informed of certain constitutional and statutory rights prior to custodial interrogation.[28] Article 31 of the UCMJ provides even greater protections to accused service members than *Miranda* requires. Specifically, it affirmatively requires rights advisement of military members suspected of a criminal offense, at the moment of apprehension or any earlier point when suspicion is based upon probable cause—and not merely prior to custodial interrogation.[29] In general, no person subject to the UCMJ may compel another person to incriminate himself.[30] Article 31 also requires military authorities to inform the accused service member—before any questioning—of the nature of the suspected offense, that he does not have to make any statement, and that any statement made by him may be used as evidence against him in a court-martial.[31]

As an evidentiary matter, the remedy for noncompliance with Article 31, UCMJ, in the military is the same as for violation of the Fourth Amendment and the rights advisement requirement of *Miranda*—a judicial exclusionary rule that bars admission of evidence produced or derived from the event.[32] Foreign law enforcement authorities, however, are not bound by the rigid constraints imposed by Article 31 and *Miranda*.

Just as military personnel must obey state and local laws outside (and, sometimes, on) U.S. bases, and anywhere else they might travel within the United States, foreign laws apply to members stationed in host nations, enforced by those nations' authorities.[33] Upon apprehension or questioning by civilian state, county, or city police officers or federal law enforcement agents in the United States, U.S. residents (including service members) normally expect those familiar *Miranda*

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[27] Miranda v. Arizona, 384 U.S. 436 (1966). In *Miranda*, the Court held that "the prosecution may not use statements . . . stemming from custodial interrogation of the defendant unless it demonstrates the use of procedural safeguards effective to secure the privilege against self-incrimination" found in the Fifth Amendment of the U.S. Constitution. The Court spelled out in detail what form those safeguards would take: "Prior to any questioning, the person must be warned that he has a right to remain silent, that any statement he does make may be used as evidence against him, and that he has a right to the presence of an attorney . . . ." *Miranda*, 384 U.S. at 444.

[28] In fact, the popular conception of *Miranda* rights ("you have the right to remain silent," etc., as the suspect is handcuffed) is legally inaccurate. Police are not constitutionally required to provide a criminal rights advisement immediately upon arrest/apprehension, only prior to custodial interrogation/questioning.

[29] UCMJ art. 31(a).

[30] *Id.*

[31] UCMJ art. 31(b). For an excellent discussion on the historical development of Article 31(b), *see* Captain Manuel E. F. Supervielle, *Article 31(b): Who Should be Required to Give Warnings?*, 123 Mil. L. Rev. 151 (1989).

[32] UCMJ art. 31(d) ("No statement obtained from any person in violation of this article, or through the use of coercion, unlawful influence, or unlawful inducement may be received in evidence against him in a trial by court-martial.").

[33] *See generally* Lepper, *supra* note 1; Egan, *supra* note 1.

warnings. The analogous experience in foreign countries differs widely. Foreign criminal laws regarding interrogating suspects vary widely within each country which hosts U.S. military personnel.[34] In Japan, for example, a suspect's invocation of his or her right to remain silent under Japanese law only applies to the preceding question, thus allowing the Japanese National Police to continue subsequent questioning.[35] Foreign law enforcement interrogation tactics also vary in important ways. Japanese police will commonly question a suspect numerous times over the course of several days, and in some cases, several weeks or months.[36] By contrast, many countries, like the United States, afford far broader protections to criminal suspects, namely, the right to remain silent and the right to legal counsel.[37] What happens, then, when foreign law enforcement interrogation of a military member does not comply with U.S. constitutional protections, or even directly contravenes the rights advisement requirements under Article 31 of the UCMJ?

A. Foreign Interrogations and Advisement of Rights

In several decisions, the U.S. Court of Appeals for the Armed Forces[38] has addressed the interplay between rights advisements and statements procured by foreign law enforcement. The court has consistently held that foreign law enforcement authorities acting alone are not required to advise an accused U.S. service member of his Article 31 rights (or its functional equivalent) as a condition of admissibility of evidence gathered by those foreign authorities at the accused's subsequent court-martial.[39] An accused therefore cannot seek to suppress admission of his own statements during a foreign interrogation based on lack of a rights advisement. This rule mirrors U.S. federal courts' jurisprudence regarding the admissibility of statements by U.S. civilians interrogated by foreign police agents.[40]

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[34] *See* Stephen C. Thaman, *Miranda in Comparative Law*, 45 St. Louis U. L.J. 581 (2001); Craig M. Bradley, *Interrogation and Silence: A Comparative Study*, 27 Wisc. Int'l L.J. 271 (2009).

[35] *See* United States Forces-Japan, Instr. 31-203, Law Enforcement Procedures in Japan [hereinafter USFJ Instr. 31-203], Attachment 4, para. 3(e).

[36] As Chief of Military Justice in the 35th Fighter Wing, Office of the Staff Judge Advocate, and as Area Defense Counsel at Misawa Air Base, Japan, this author observed numerous cases between 2009-2011 in which the local Japanese police repeatedly questioned an American service member over the course of many days. The tactic is presumably meant to confirm a suspect's story and to ensure that the police "nail down" the facts before sending the case to the regional prosecution.

[37] *See* Thaman, *supra* note 34; Bradley, *supra* note 34.

[38] *See supra* note 23.

[39] *See, e.g.*, Swift, 38 C.M.R. at 29 ("An independent investigation by a foreign police officer is . . . not subject to the Uniform Code."); Grisham, 16 C.M.R. at 270-271.

[40] *See, e.g.*, United States v. Yousef, 327 F.3d 56, 145-146 (2d Cir. 2003) (statements taken by foreign interrogators without the active participation of U.S. law enforcement and not obtained under circumstances that "shock the judicial conscience" are admissible if those statements were voluntary despite the absence of *Miranda* warnings); United States v. Wolf, 813 F.2d 970, 975 (9th Cir. 1987) (lack of rights advisement by foreign interrogators, without more, does not prevent admissibility of statement); United States v. Abu Ali, 528 F.3d 210, 227 (4th Cir. 2008) (voluntary statements obtained by foreign law enforcement officers, even without *Miranda* warnings, generally are admissible).

Apart from the issue of rights advisement, an accused's statement must also have been voluntary to permit its admission at a court-martial.[41] Courts must analyze whether a foreign-procured statement was voluntary.[42] The Military Rules of Evidence provide that statements obtained "in violation of the self-incrimination privilege or due process clause of the Fifth Amendment to the Constitution of the United States, Article 31, or through the use of coercion, unlawful influence, or unlawful inducement" are involuntary and therefore inadmissible.[43] Because foreign interrogators are not required to provide a rights advisement akin to *Miranda* or Article 31, military courts need only assess whether the statement involved "coercion, unlawful influence, or unlawful inducement."[44]

A voluntary confession must be "the product of an essentially free and unconstrained choice by its maker."[45] Courts look to "the totality of all the surrounding circumstances—both the characteristics of the accused and the details of the interrogation" in determining a statement's voluntariness.[46] In particular, courts consider the accused's age, education, intelligence, notification of constitutional rights, as well as the length and nature of questioning or detention.[47]

The same standard of voluntariness applies equally to statements obtained by U.S. law enforcement or foreign law enforcement acting alone.[48] Whether the statement meets any voluntariness standard under foreign law is irrelevant.[49] Foreign-procured statements are bound only by the latter provisions of Article 31(d) that prohibits admission of coerced and improperly influenced or induced statements, and not by the sovereign law of the law enforcement agents who obtained the statements.[50] It does not matter if the statement would have been inadmissible in that foreign court, in application of that country's own criminal law.[51] The Air Force Court of Military Review[52] observed that a mandatory examination of voluntariness

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[41] *See, e.g.*, United States v. Murphy, 18 M.J. 220, 223 (C.M.A. 1984).

[42] *Id.*

[43] MCM, *supra* note 4, Mil. R. Evid. 304(c)(3); *see* UCMJ art 31(d).

[44] *See* MCM, *supra* note 4, Mil. R. Evid. 305(h) Analysis, at A22-16 (2008).

[45] United States v. Bubonics, 45 M.J. 93, 95 (C.A.A.F. 1996); *see also* United States v. Dalrymple, 34 C.M.R. 87, 90 (C.M.A. 1963) ("The question of voluntariness is one of fact and a confession must be the product of free choice—of a will not encumbered or burdened by threats, promises, inducements, or physical or mental abuse." (quotation and citation omitted)).

[46] *Bubonics*, 45 M.J. at 95.

[47] United States v. Freeman, 65 M.J. 451, 453 (C.A.A.F. 2008) (citations omitted).

[48] United States v. Jourdan, 1 M.J. 482, 485 (A.F.C.M.R. 1975).

[49] *Id.*

[50] *Id.* ("Although the statements in question were taken by foreign authorities acting on their own, such does not alter the fact that the standard for measuring voluntariness is controlled by the provisions of Article 31(d) . . . and not by foreign law."); *see also* United States v. Dial, 26 C.M.R. 480, 483 (C.M.A. 1958) ("[N]or need we decide whether the instant confession would, in fact, have been inadmissible in the Texas court. Military courts may convene in all States and foreign countries, and we are not disposed to have military law vary according to the laws of each jurisdiction . . . . [Article 31] can be applied equally in all jurisdictions, and we prefer not to warp its provisions to comply with local law.").

[51] *See* MCM, *supra* note 4, Mil. R. Evid. 305(h) Analysis, at A22-16 (2008) ("The only test to be applied . . . is that of common law voluntariness . . .[,]" specifically omitting any reference to consideration of foreign law.).

[52] In 1994, Congress redesignated the Courts of Military Review as their respective service branches'

under foreign law might result in applying "a particular foreign standard [that is] repugnant to the principles of military justice."[53]

B. Advisement of Rights and Voluntariness in Japan

Throughout the long history of U.S. military personnel stationed in Japan, Japanese law enforcement investigators have investigated and interrogated numerous service members. Although the Government of Japan has primary jurisdiction over certain offenses allegedly committed by an American service member,[54] Japanese authorities commonly waive that jurisdiction and thereby permit military prosecution of the member pursuant to the UCMJ. Waivers sometimes follow investigation by the local Japanese police and prosecutor, the extent of which can range from quite minimal to significant.[55] U.S. military investigators typically request to obtain evidence collected by Japanese authorities in the course of their investigation.[56] Upon referral of the case to trial by court-martial, the prosecution seeks to introduce that evidence.[57] The military appellate courts have reviewed numerous such cases involving Japan-based accuseds. Those cases illustrate the flexibility that foreign (particularly Japanese) law enforcement authorities may exercise in conducting a criminal investigation according to their sovereign law. They also frame the analysis of admissibility of foreign-procured evidence in courts-martial.

In *United States v. Murphy*, a Marine was apprehended by Naval Criminal Investigative Service agents for selling illicit drugs.[58] The Government of Japan

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Courts of Criminal Appeals. Thus, the Air Force Court of Military Review was redesignated as the Air Force Court of Criminal Appeals.

[53] *Jourdan*, 1 M.J. at 485.

[54] Agreement Under Article VI of the Treaty of Mutual Cooperation and Security Between the United States of America and Japan, Regarding Facilities and Areas and the Status of United States Armed Forces in Japan, Jan. 19, 1960, 11 U.S.T. 1652, T.I.A.S. 4510, 373 U.N.T.S. 248 [hereinafter "Status of Forces Agreement" or "SOFA"]. *See* Article XVII, paragraph 1(a): "the military authorities of the United States shall have the right to exercise within Japan all criminal and disciplinary jurisdiction conferred on them by the law of the United States over all persons subject to the military law of the United States"; paragraph 1(b): "the authorities of Japan shall have jurisdiction over the members of the United States armed forces . . . with respect to offenses committed within the territory of Japan and punishable by the law of Japan."

[55] At Misawa Air Base, Japan in 2009, during the author's service as Chief of Military Justice, Office of the Staff Judge Advocate, 35th Fighter Wing, Japanese police and prosecutors repeatedly interrogated three Airmen over the course of a couple weeks, in connection with several incidents of off-base vandalism and theft. During the investigation, the U.S. Government never relinquished custody over the Airmen. The Japanese authorities obtained numerous statements from each of the Airmen. Each of the Airmen ultimately made "gomen nasai" (apology) payments to the Japanese victims. Two months after the alleged offenses, the Government of Japan officially waived jurisdiction and did not prosecute them. Afterwards the U.S. Air Force obtained all of the Airmen's statements to the Japanese investigators and used them as evidence in their subsequent prosecutions by courts-martial. Pursuant to Article 66(b)(1), UCMJ, the Air Force Court of Criminal Appeals has reviewed at least one of these cases; *see* United States v. Holt, 2010 WL 2266251 (A.F.Ct.Crim.App. 2010) (court approved findings and sentence with no discussion).

[56] *See, e.g.*, *id.*

[57] *See, e.g.*, *id.*

[58] *Murphy*, 18 M.J. at 220.

asserted jurisdiction over the alleged offense and the Marines released the accused to Japanese police custody. The accused refused to make a statement to the Japanese police.[59] Approximately five weeks later, a local judge advocate—who served as the resident trial counsel (prosecutor) for the installation to which the accused was assigned—met with the accused and advised him of his rights under the Status of Forces Agreement ("SOFA") between the U.S. and Japan.[60] The judge advocate informed the accused that he could not act as his attorney in the matter or discuss the alleged acts under investigation.[61] Rather, he explained:

> [U]nder our system a person has an absolute right to remain silent and that nothing adverse can be taken from his right to remain silent under our system . . . [but that] the Japanese system differs a little bit, in that should the case go to court and should the individual be convicted, the judge takes into consideration whether the individual has cooperated with the various investigating agencies and whether he has told the truth to those agencies.[62]

The judge advocate told the accused that the United States defers when the Japanese prosecute a case.[63] At trial, the accused testified that he understood from this that the military would only prosecute him if the Japanese did not.[64]

One month later, the Japanese police again attempted to question the accused, who this time made an inculpatory statement during a two-hour interview.[65] In accordance with the SOFA, before the interrogation, the Japanese police, advised him of rights afforded him under Japanese law, which included a statement on the right to remain silent.[66] During this rights advisement, the interpreter also mentioned that a failure to confess and cooperate could be held against an accused and could result in a harsher sentence in Japanese court.[67] The Japanese indicted the accused, and ultimately imposed a suspended sentence for violating Japanese drug laws. Less than a week after the Japanese indictment, the military preferred charges of conspiracy against the accused, of which he was convicted at a court-martial.[68]

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[59] *Id.* at 222.

[60] *Id.* Service members who are apprehended or in custody of the Japanese police are entitled to receive a "SOFA briefing" detailing the rights provided to them under the SOFA. Generally, the SOFA briefing is given by a judge advocate from the base legal office. *See supra* note 54.

[61] *Id.*

[62] *Murphy*, 18 M.J. at 222.

[63] *Id.* In accordance with his practice, the judge advocate stated,"I typically tell the individuals that if the Japanese prosecute the case the Americans will not."

[64] *Id.* at 222-23.

[65] *Id.* at 222.

[66] *Id.* at 223; *see* Agreed Minutes to the Agreement Under Article VI of the Treaty of Mutual Cooperation and Security Between the United States of America and Japan, Regarding Facilities and Areas and the Status of United States Armed Forces in Japan, Jan. 19, 1960, 11 U.S.T. 1652, T.I.A.S. 4510, 373 U.N.T.S. 248, art. XVII, re para. 9.

[67] *Murphy*, 18 M.J. at 222.

[68] *Id.* at 223.

On appeal, the accused attacked admission of his statements to the Japanese, arguing they were involuntary. The court acknowledged he could have interpreted the judge advocate's statement to him to mean that the military would not use any statement he made to the Japanese police.[69] The court further acknowledged that the rights advisement by the Japanese interrogators did not satisfy the requirements of Article 31, which is inapplicable to foreign interrogators.[70] Since the UCMJ does not apply to investigations by foreign police officers,[71] foreign police do not have to advise an accused of Article 31 rights prior to interrogation. The court reiterated the problem faced by military members serving in foreign countries:

> [W]e perceive practical difficulties in implementing such a rule where a foreign interrogation is involved. Initially, we note that such advice may be inconsistent with the law of the foreign country involved. Furthermore, government counsel has asserted in the present case . . . that the law of the Federal Republic of Germany would permit adverse comment upon the silence of an accused. Thus, an accused can actually be harmed if he is tried by a foreign court and attempts to assert his rights consistently with American law.[72]

An accused service member outside the United States should know his UCMJ and U.S. constitutional rights, but must also learn the rights afforded him by the host country and understand any apparent inconsistency between the two systems. The difficulty of reconciling two legal systems clearly increases the likelihood of confusion to the accused's detriment.[73]

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[69] *Id.* at 224.
[70] *Id.* at 223.
[71] *Id.* (citing *Swift*, 38 C.M.R. at 29).
[72] *Id.* (quoting *Jones*, 6 M.J. at 228).
[73] U.S. service members in Japan face such a difficulty. If arrested by Japanese officials, they receive a SOFA briefing, *see supra* note 60, as follows: "Japanese custom dictates that certain procedures be followed in the event of death, serious injury, or damage to property. Condolence or apology visits should be made by the person who is the immediately cause of the injury, death, or damage and demonstrate sincere regret, regardless of who is ultimately responsible for the mishap. Whether or not a visit is conducted with sincerity, may, in many cases, make the difference between a heavy, light, or suspended sentence, or a waiver of jurisdiction and dismissal of the case." USFJ INSTR. 31-203, *supra* note 35, ATTACHMENT 4, para. 6. Accused servicememembers who receive this briefing also acknowledge receiving the following "advice": "Unlike under the laws of the United States, I understand that a Japanese prosecutor may use my refusal to speak, and any other refusal deemed to be uncooperative, against me at trial. I understand that the Japanese authorities are usually favorably influenced by a cooperative attitude, but that anything I say may be used either for or against me." *Id.*, para. 4. An accused therefore faces a dilemma. To influence Japanese authorities' disposition of his case, he must "apologize," though to do so effectively admits guilt. To "cooperate" with the Japanese, he must make a statement, which may influence the Japanese to not prosecute him but will also be used as evidence against him at a court-martial. If he does not cooperate with the Japanese, they will most likely prosecute him. His silence, used against him at a Japanese trial, will increase the chances of his conviction.

The *Murphy* court examined trial court's admission of the accused's statement to the foreign interrogator, focusing on whether it was voluntary.[74] The court found that the local judge advocate's standard advice to the accused, consistent with similar advice provided to all service members suspected of offenses under Japanese law, did not suggest anything of a coercive nature.[75] The court also held that the Japanese police did not coerce the accused by informing him that cooperation with Japanese interrogators may result in a more lenient sentence and that failing to cooperate will not result in a harsher sentence.[76] Despite the negative inferences under Japanese law that may arise from failing to cooperate—by remaining silent—the court found no impairment of the accused's ability to exercise free will.[77] The collective advice the accused received from both sides simply permitted him to make an "an informed and intelligent appraisal of the risks involved."[78] The court acknowledged that that advice may have "prompted" the accused to make an incriminating statement, but nevertheless ultimately held that it did not constitute an unlawful inducement to make an incriminating statement.[79] Accordingly, the court held that the accused's statement was voluntary and properly admitted as evidence.[80]

Lower appellate cases provide further guidance on the use of statements procured through foreign interrogations. In *United States v. Frostell*, Japanese authorities arrested the accused Marine on suspicion of alleged drug offenses.[81] Within hours of the arrest, the local judge advocate briefed him on his rights under the SOFA, including the right to remain silent, and further informed him that if found guilty at trial, the Japanese judge would consider his cooperation in fashioning a sentence.[82] The judge advocate told the accused that the military would not try the accused for the same offense tried by the Japanese, which—similar to *Murphy*—the accused broadly understood to mean that that the military would not prosecute at all if the Japanese prosecuted.[83]

For several days following his apprehension, the accused maintained his silence.[84] During that time, the Japanese police informed him of the potential benefits of cooperation. According to the accused, the police told him that a Japanese judge considers an accused's cooperation when deliberating on a sentence and that failure to cooperate could result in a harsh sentence of ten years and involuntary employment

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[74] *Murphy*, 18 M.J. at 223-226.
[75] *Id.* at 226.
[76] *Id.* at 227.
[77] *Id.*; *see also* United States v. Pinson, 56 M.J. 489, 493-495 (C.A.A.F. 2002) (statements made by member being held by Icelandic law enforcement, who had been advised by Icelandic authorities of his right to remain silent and right to counsel under Icelandic law, and who had been informed by an Icelandic attorney of the negative inference that could be drawn by invoking the right to remain silent, were voluntary).
[78] *Murphy*, 18 M.J. at 227 (citation omitted).
[79] *Id.*
[80] *Id.*
[81] United States v. Frostell, 13 M.J. 680 (N.M.C.M.R. 1982).
[82] *Id.* at 682-683.
[83] *Id.*
[84] *Id.* at 683.

of a lie detector in court.[85] The accused subsequently provided inculpatory statements on seven days over the span of twenty-two days. Prior to each statement, the Japanese police advised him of his right to remain silent and of the suspected offense.[86]

The *Frostell* court concluded that the interviews, which lasted no more than two hours, did not overwhelm the accused and permitted him the "necessary physical comforts."[87] The court opined that the police merely informed the accused of the relative advantages of cooperation and the potential disadvantages of non-cooperation.[88] The court allowed that the Japanese interrogator's alleged statement suggesting a possible sentence of ten years' imprisonment "might represent a threat sufficiently coercive to render a statement involuntary."[89] However, the court observed that each statement signed by the accused contained corrections and modifications over his signature, and each contained an acknowledgement by the accused that the statement had been made voluntarily.[90] Accordingly, the court affirmed the trial court's admission of the statements.[91]

Another case involving an Army accused illustrates military appellate courts' reluctance to find statements procured by Japanese investigators involuntary. In *United States v. Talavera*, the Japanese interrogated the accused—who was arrested on suspicion of having committed felony murder incident to a robbery with a Japanese accomplice—over 11-12 days, four to six hours each day, with an hour for lunch and a 20-30 minute afternoon recess.[92] Prior to interrogation, the Japanese police informed the accused of his right to remain silent and right to counsel. The accused declined both and chose to speak, and the trial court ruled his statements voluntary and therefore admissable at his subsequent court-martial. Even had the accused invoked either right, though, the court acknowledged that Japanese law does not require the police to stop the interrogation or allow an accused to have an attorney actually present during the interrogation.[93] The court found all of the accused's statements to be voluntary and properly admitted in evidence at his court-martial.[94]

The court examined the advice provided to the accused or lack thereof, the conditions of restraint, the accused's physical and mental condition, and the number, length and nature of the questioning sessions.[95] The court found no coercion inherent in the circumstances, conduct, and tactics of the interrogation.[96] The court

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[85] *Id.*
[86] *Id.*
[87] *Id.* at 684.
[88] *Id.*
[89] *Id.*
[90] *Id.* The court gave considerable weight to what is a standard line at the end of sworn admissions, which provides that the statement was the product of free will and not coerced. The court failed to mention that it is common practice within law enforcement, including within U.S. Air Force investigative agencies, to request that those lines be placed at the end of sworn statements.
[91] *Id.*
[92] United States v. Talavera, 2 M.J. 799, 801 (A.C.M.R. 1976).
[93] *Id.* at 802.
[94] *Id.* at 803.
[95] *Id.* at 802 (court must look to "all the facts and circumstances surrounding the taking of the statement" when determining voluntariness) (citing United States v. O'Such, 37 C.M.R. 157 (1967)).
[96] *Id.* at 801-803; *compare*, *with O'Such*, 37 C.M.R. at 164 (statement found involuntary where

did recognize that the interrogation sessions were longer than normal military investigations, but noted this was necessitated by the use of an interpreter.[97] In fact, the court surmised that the lag in time resulting from the translation may have actually benefitted the accused.[98] The court focused instead on numerous other hallmarks of voluntariness concerning the accused's statements: that he confessed initially and in his own handwriting only two days after his arrest, and stated he would have done so sooner but for his fear of reprisal from his accomplice; that his subsequent statements merely expanded and added details to the original confession, placing primary blame on his accomplice in the obvious hope of gaining leniency for himself.[99]

A recent unpublished opinion by the Navy-Marine Court of Criminal Appeals illustrates a contrary application of Article 31(d) to analysis of foreign-procured statements. In *United States v. Kofford*, the accused was placed in military pretrial confinement[100] after waiving his right to counsel—despite an initial request for counsel—and admitting to receiving a large amount of illegal drugs through the mail.[101] His commander placed him in pretrial confinement "solely for the Japanese" under the SOFA, despite that the Japanese had made no such request.[102] At the confinement review hearing five days later, an appointed attorney assisted the accused but they did not form an attorney-client relationship.[103]

The foreign criminal jurisdiction officer (a Major)[104] met with the accused in pretrial confinement and told him that he should fully cooperate with the Japanese investigation because it would benefit him in the Japanese courts. The officer also stated that the Marine Corps would only administratively separate rather than court-martial the accused if he was convicted and sentenced in a Japanese court.[105] A noncommissioned officer also gave the accused a SOFA briefing in which the NCO reiterated that cooperation with the Japanese was in the accused's best interests.[106] After 29 days' confinement, the military escorted the accused back and forth to Japanese investigators for a series of 20 interrogations over the next 72 days, resulting in ten written confessions in total.[107]

"accused was questioned all night; subjected to criminological tests and processing all the following day; flung into solitary confinement without even the solace of light; harassed at night with flashlight checks every five minutes; not allowed even to lie down in the daytime; furnished with only a plank and pallet on which to lie at night; and finally, brought forth on [a later evening] to be again subjected to hours of interrogation").

[97] *Talavera*, 2 M.J. at 803.

[98] *Id.* (time lag "lessened the likelihood of intense questioning and gave the appellant time to think before responding").

[99] *Id.*

[100] *See* MCM, *supra* note 4, R.C.M. 305(d). A service member may be ordered into pretrial confinement when there is "reasonable belief" that the person committed an offense under the UCMJ and that confinement is "required by the circumstances."

[101] United States v. Kofford, 2006 WL 4571895 (N-M. Ct. Crim. App. Dec. 12, 2006).

[102] *Id.* at *1.

[103] *Id.*

[104] Apparently a field grade officer judge advocate, although it is not clear from the opinion.

[105] *Kofford*, 2006 WL 4571895 at *2.

[106] *Id.*

[107] Such repeated and lengthy questioning over the course of many days is not uncommon by Japanese

During that entire time, the accused was not provided with either an appointed military defense counsel or a Japanese attorney.[108] The court discussed in detail how the SOFA and the Japanese Penal Code, and the military's and Government of Japan's interpretation of such, worked against the accused in this case, resulting in his apparent legal limbo.[109] He was never provided a U.S. Government-appointed Japanese lawyer because the Japanese had not officially charged the accused, and he was never provided military defense counsel because no court-martial charges had been preferred.[110] Regardless of the reasons, the accused spent almost four months in confinement before receiving access to a lawyer.

Although the accused did not raise the issue at trial, the court assessed whether the officer's advice to him granted de facto immunity.[111] The court answered this question in the negative, finding that the officer had not made any *quid pro quo* or actual promise of immunity.[112] But the officer's comments did affect and influence the accused:[113] he was told that cooperation with the Japanese could result in a better outcome in the Japanese courts, that his cooperation would make a Japanese conviction more probable, and that a Japanese conviction would result in his administrative discharge from the military.[114] Importantly, though, it was unclear whether he was aware that his confessions to the Japanese could be used

police when interrogating U.S. military members. *See supra* note 55.

[108] *Kofford*, 2006 WL 4571895 at *7.

[109] *Id.* at 6-7. *See* U.S.-Japan SOFA, *supra* note 54. Under the SOFA, the U.S. Government retains primary jurisdiction over military-specific offenses and those offenses where the victim is an American; the Government of Japan ("GOJ") has primary jurisdiction over all other offenses, which includes cases involving controlled substances that are prohibited under Japanese law. The SOFA provides that the U.S. Government must "notify" the GOJ when a crime has been committed in which the U.S. does not have primary jurisdiction. Japan then has 20 days to indict the service member. The Japanese Penal Code provides that an individual may only be confined for 23 days without indictment. The court in *Kofford* made findings of fact regarding the practice of the military to orally notify (rather than providing "formal notice") the GOJ and place service members in military pretrial confinement so that the Japanese could continue their investigation free of this 23-day restrictive period. Similarly, this practice also avoided running the "speedy trial clock" whereby Rule for Courts-Martial 707(a) requires that an accused be brought to trial within 120 days of preferral of charges or imposition of restraint.

[110] *Id.* The opinion does not mention whether the accused requested counsel at any point during his confinement, after he had waived his right to counsel on the first day he was questioned. The opinion also states that an accused is not "entitled" to a military defense counsel prior to preferral of charges pursuant to Rule for Courts-Martial 307. The accused was in pretrial confinement for several months; it is unclear why the court stated the accused did not have a right to counsel, even prior to preferral of charges.

[111] *See* MCM, *supra* note 4, R.C.M. 704(a)(1), 704(a)(2). Transactional immunity provides protection against trial by court-martial for an offense punishable under the UMCJ, whereas testimonial immunity protects against the use of testimony or any derivative evidence from being used against that person at a later court-martial.

[112] *Kofford*, 2006 WL 4571895 at *4. The other two elements required for *de facto* immunity to exist are that the accused reasonably believed that the person had authority to grant immunity and that the accused actually relied upon that promise to his detriment.

[113] *Id.* at *2. The officer had told the accused "that dependent on the outcome of his Japanese trial and if he was convicted and sentenced in the Japanese trial and had some punishment, likely, they would just [administratively separate] him while he was in Japanese confinement."

[114] *Id.* at *5.

against him at court-martial.[115] Without that knowledge, his decision whether to cooperate with the Japanese was "uninformed."[116]

The court held that the accused's confinement without access to legal counsel during the course of more than 20 interrogations, preceded by certain "advice and assurances" made by the officer and noncommissioned officer, amounted to "unlawful influence" or "unlawful inducement" within the meaning of Article 31(d), UCMJ.[117] The court therefore ruled the accused's statements involuntary and inadmissible at his court-martial.[118]

The cases discussed above demonstrate the wide latitude concerning foreign law enforcement practices in U.S. military courts. In general, military courts will admit foreign-procured evidence absent particularly egregious conduct by foreign investigators. The courts' assessment of that conduct focuses only on the voluntariness of the accused's statement according to the legal standards prescribed by U.S. common law. The result is often to the disadvantage of the service member.

IV. Searches Conducted by Foreign Law Enforcement

Admission at a court-martial of evidence seized by U.S. law enforcement requires compliance with the UCMJ in particular and the U.S. Constitution in general.[119] As noted above, military judicial evaluation of an investigation by foreign law enforcement with participation by U.S. investigators applies the same standards as for an investigation conducted solely by U.S. personnel.[120] If U.S. assistance to the investigation amounts to "participation," then the search must comply with the Fourth Amendment (and the UCMJ) for evidence to be admissible.[121] An accused may object to the introduction of evidence obtained in violation of his constitutional rights against unlawful search and seizure.[122] Operation of the exclusionary rule encourages American civilian and military investigators to conduct their activities in accordance with statutory and constitutional law.[123] But what about searches carried out exclusively by foreign officials?

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[115] *Id.*

[116] *Id.*

[117] *Id.* at *2. Regarding the issue of improper inducement, *see* United States v. Carmichael, 45 C.M.R. 304, 305-307 (C.M.A. 1972). In *Carmichael*, the military investigator told the accused that his commanding officer would not understand the unwillingness to confess and that a confession might result in being prosecuted at a military court-martial rather than in a Chinese court. The court found that such comments did not, as a matter of law, amount to an improper inducement, requiring exclusion of the accused's subsequent statements.

[118] *Kofford*, 2006 WL 4571895 at *7.

[119] MCM, *supra* note 4, Mil. R. Evid. 311(c).

[120] *Id.*

[121] *Id.*

[122] MCM, *supra* note 4, Mil. R. Evid. 311(a)(1).

[123] *See, e.g.*, United States v. Calandra, 414 U.S. 338, 347 (1975) (the "prime purpose" of the exclusionary rule "is to deter future unlawful police conduct and thereby effectuate the guarantee of the Fourth Amendment against unreasonable searches and seizures"); Hudson v. Michigan, 547 U.S. 586, 596 (2006) ("the value of deterrence [of police misconduct] depends upon the strength of the incentive to commit the forbidden act.").

In 1975, the Court of Military Appeals squarely addressed that issue. In *United States v. Jordan*, British police stopped the accused's car because it matched the description of one possibly involved in a spate of off-base burglaries.[124] The officer took the accused into custody, interrogated him, informed him that the officer wished to search the accused's house, and asked if the accused objected to it.[125] The accused relented but never expressly "agreed" to the search.[126] He simply replied "with nothing more than a statement that he was powerless to prevent it . . . [which was] no more than acquiescence to police authority."[127]

The court determined that the accused had not voluntarily consented to the search, and therefore, the evidence was seized in violation of the Fourth Amendment.[128] The Government argued that according to a 1954 case,[129] federal courts may use evidence obtained in an illegal search by foreign police.[130] The court found the holding in that case did not survive the Supreme Court's 1961 landmark decision in *Mapp v. Ohio*,[131] which announced the modern exclusionary rule.[132] In no uncertain terms, the court held that for purpose of determining the admissibility of evidence in military courts-martial, the Fourth Amendment directly applied to the foreign police actions involving U.S. military personnel.[133]

Less than a year later, on petition for reconsideration of the initial opinion, and after permitting input from all service branches, the court modified its conclusion.[134]

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[124] *Jordan*, 1 M.J. 147 (C.M.A. 1975).

[125] *Id.* at 147. Participation by military officials did not concern the court. After British police had obtained keys to teh accused's on-base room, the police went to the base police office "out of courtesy." Two military police then accompanied the British officers to the accused's room. The military police did not participate in the search other than unlocking the accused's locker and looking around the room.

[126] *Id.* When the British officer had "asked [the accused] if he minded if I went and had a look," the accused replied, "Yes, I can't really stop you."

[127] *Id.*

[128] *Id.*

[129] *DeLeo*, 17 C.M.R. 148. The court stated: "[I]f the search with which we are concerned in the case at bar is to be treated exclusively as a French one, it is not essential for the present purpose to inquire how and on what basis it was conducted. It is a well-established rule of Federal law that the Government may use evidence obtained through an illegal search effected by American state or by foreign police—unless Federal agents participated through some recognizable extent therein."

[130] *Jordan*, 1 M.J. at 148 (C.M.A. 1975).

[131] Mapp v. Ohio, 367 U.S. 643 (1961) (held that the exclusionary rule that prohibits admission of evidence at federal trials obtained in violation the Fourth Amendment applies to state prosecutions through the operation of the Due Process Clause of the Fourteenth Amendment).

[132] *Jordan*, 1 M.J. at 148 (C.M.A. 1975).

[133] *Id.* at 149. The court stated, ". . . [W]e hold that evidence obtained by search and seizure in a foreign country must meet Fourth Amendment standards in order to be admitted in evidence in a trial by court-martial, regardless of whether it is obtained by foreign police acting on their own or in conjunction with American authorities. The extent of an American's constitutional protections in an American court should not be lessened or removed by virtue of the fact that he is ordered to an overseas post for service. It is American judicial power that is being exerted against him and in such a case, it is by American constitutional standards that he should be adjudged." Chief Judge Fletcher wrote the opinion for the majority, with Senior Judge Ferguson concurring. Judge Cook strongly dissented, likening foreign actors to private persons, and arguing that the Fourth Amendment and Fourteenth Amendment apply only to Federal and State action, not private persons. *Id.* at 149-150.

[134] *Jordan*, 1 M.J. 334 (C.M.A. 1976). Chief Judge Fletcher again wrote the opinion for the majority,

The court distinguished searches conducted solely by foreign authorities from those conducted with participation by U.S. officials.[135] The court no longer required that foreign searches—carried out with no American participation—adhere to Fourth Amendment standards.[136]

The court did, however, require the government to show a search by foreign officials complied with "the law of their sovereign," as a prerequisite for admission of resulting evidence.[137] This rule had little, if any, support from prior precedent in military justice law. Post-*Jordan*, courts-martial had to consider and apply foreign law to determine admissibility of evidence seized during foreign-initiated searches.

The court added that such a search must not "shock the conscience of the court."[138] Prior to *Jordan*, the exclusionary rule did not apply to "illegal" evidence seized by foreign (or state) agents.[139]

The court in *Jordan* reasoned that foreign investigators might follow their own law (or lack thereof) during a search, but might still engage in a practice directly contrary to U.S. law. Under *Jordan*'s two-prong test, a court could still exclude certain evidence seized outside the bounds of basic decency. The second prong preserved the relevance and primacy of U.S. law over foreign law in such cases.

The *Jordan* test generated opposition from the Joint Service Committee on Military Justice in its 1980 Analysis accompanying MRE 311(c):

> After careful analysis, a majority of the Committee concluded that that portion of the *Jordan* opinion which purported to require that such foreign searches be shown to have complied with foreign law is dicta and lacks any specific legal authority to support it. Further the Committee noted the fact that most foreign nations lack any law of search and seizure and that in some cases, e.g., Germany, such law as may exist is purely theoretical and not subject to determination. The *Jordan* requirement thus unduly complicates trial without supplying any protection to the accused. Consequently, the Rule omits the requirement in favor of a basic due process test.[140]

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with Senior Judge Ferguson concurring. Judge Cook again dissented. *See supra* note 133.

[135] *Id.* at 336.

[136] *Id.* at 337-338. The court stated: "While we still believe that American scrutiny of foreign searches is desirable where American servicemen are involved, no longer are we willing to exact Fourth Amendment protections as the price for such presence." *Id.* at 337. The court attributed its about-face regarding the role that "participation" plays in the analysis, to a "re-examination of the underlying purpose of the exclusionary rule." *Id.* at 336.

[137] *Id.* at 338.

[138] *Id.*; *see also* United States v. Morrow, 537 F.2d 120 (5th Cir. 1976) (stating that the exclusionary rule does not apply to searches by foreign authorities except when the circumstances of the search is so extreme that they "shock the judicial conscience" or when there is participation by American law enforcement officials).

[139] *See DeLeo*, 17 C.M.R. at 155 ("It is a well-established rule of Federal law that the Government may use evidence obtained through an illegal search effected by American state or by foreign police—unless Federal agents participated to some recognizable extent therein.")

[140] MCM, *supra* note 4, MIL. R. EVID. 311(c)(3) Analysis, at A22-18.

Thus, the Analysis effectively overruled *Jordan* and negated analysis of foreign law regarding evidence produced during foreign searches.[141]

Shortly after the revised Analysis, two subsequent opinions from the Court of Military Appeals on the same day seemed to reach conflicting conclusions whether the *Jordan* requirement was dicta or not.[142] One concurred with the Committee's Analysis while the other appeared to suggest that the foreign law requirement still applied. In *United States v. Bunkley*, the court found that the surrounding facts and circumstances of an investigation in Germany did not transform "the search into a 'foreign search,' which, under *United States v. Jordan*, would render the admissibility of evidence obtained in the search subject to 'prerequisite' proof 'that the search . . . was lawful, applying the law of . . . [the foreign] sovereign."[143] In *United States v. Morrison*, the court stated that the pronouncement in *Jordan* "was not required by the facts of the case" due to U.S. participation in the search, thus making any discussion of foreign-only searches dicta.[144] The contradiction can perhaps be attributed to the fact that the opinions were written by different judges: Judge Cook wrote the opinion in *Bunkley*;[145] Judge Everett wrote *Morrison*.[146] Although the opinions appear to conflict, leaving some uncertainty as to the state of the law, the Committee's Analysis clearly states that foreign law is not to be consulted when determining admissibility of evidence resulting from a foreign search.

Military case law has made clear that military courts will not apply U.S. constitutional law and the UCMJ to a search conducted solely by foreign law enforcement.[147] In fact, no prescribed law or standards exist by which to analyze the

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[141] *Id.*; *see also Morrison*, 12 M.J. at 277 n.4 (stating that MRE 311(c) "dispenses" with "*Jordan*'s requirement" that a foreign search be conducted in accordance with that sovereign law).

[142] Both opinions were issued on 18 January 1982.

[143] United States v. Bunkley, 12 M.J. 240, 248 (C.M.A. 1982) (quoting *Jordan*, 1 M.J. at 338 (C.M.A. 1976)). Chief Judge Fletcher filed an opinion concurring in the result, and cited *Jordan*, 1 M.J. 334, 338 (C.M.A. 1976), stating: "I also believe this foreign search, requested by American military police, met fourth amendment standards."

[144] *Morrison*, 12 M.J. at 278.

[145] Interestingly, in writing *Bunkley*, Judge Cook cited *Morrison* immediately after the quoted language in the text accompanying *supra note* 143, by using the introductory signal "*See*" rather than a signal indicating contradiction, such as "*But see*" or "*Contra*," therefore indicating that Judge Cook did not perceive an inherent conflict between the two cases. Judge Cook dissented in the original opinion issued in *Jordan*, 1 M.J. 145 (C.M.A. 1975), and in the second opinion on reconsideration, *Jordan*, 1 M.J. 334 (C.M.A. 1976). *See supra* notes 133 and 134 and accompanying text.

[146] Judge Fletcher, who wrote the majority opinion in *Jordan*, 1 M.J. 334 (C.M.A. 1976), filed an opinion concurring in the result, "not to defend this Court's decision in [*Jordan*] but to explain it." He then acknowledged that "[t]he majority opinion correctly states that the latter part of the rule in *Jordan* is dicta [i.e., "If the Government seeks to use evidence obtained either directly or indirectly from a search conducted solely by foreign authorities, a showing by the prosecution that the search by foreign officials was lawful, applying the law of their sovereign, shall be a prerequisite for its admission in evidence upon motion of the defense."], and was so recognized by those who worked in the committee which complied the Military Rules of Evidence." Judge Fletcher wrote that *Jordan* simply "announced an exclusionary rule," much in the same way that Military Rule of Evidence 311 (c)(1) later announced an exclusionary rule. He did not state whether he supported the aspect of the majority opinion that directly overruled *Jordan*'s foreign-law analysis requirement. *See supra* notes 133, 134, and 145, and accompanying text.

[147] MCM, *supra* note 4, MIL. R. EVID. 311(c)(3).

legality of a foreign search. Nevertheless, some foreign-obtained evidence may not be admissible in a court-martial. Military courts must hold inadmissible evidence produced by a foreign search or seizure which subjected the accused to "gross and brutal maltreatment."[148] But few decisions have ever cited that rule and applied that standard to the particular facts of the case.[149] To date, no court has further clarified or explained what actually constitutes "gross and brutal maltreatment."[150] This suggests that military courts neglect a key aspect of the evidentiary rules applied to foreign searches. By comparison, several federal court decisions have addressed the relevance of foreign law to admissibility of evidence obtained through foreign searches. In determining whether a foreign search was reasonable and did not "shock the judicial conscience," the U.S. Court of Appeals for the Ninth Circuit in *United States v. Barona* considered whether the foreign wiretap violated that foreign law itself.[151] To do so, the court obviously had to review that country's law.[152] The court appeared to suggest that if a search is unlawful under foreign sovereign law, it might indicate that the search was so unreasonable that it shocks the judicial conscience, thereby rendering any evidence obtained inadmissible.[153] Prior to *Barona*, the Ninth Circuit had affirmed admission of evidence secured in violation of the foreign sovereign's wiretap law.[154]

In cases where U.S. agents work together in a joint venture with foreign agents, the Ninth Circuit still considers an analysis of foreign law relevant to determining the admissibility of resulting evidence. In these cases, the court has held that "the law of the foreign country must be consulted at the outset as part of the determination whether or not the search was reasonable."[155] If foreign law enforcement—acting in tandem with U.S. law enforcement—violates its own law,

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[148] *Id.*

[149] The court in *United States v. Pereira* stated that the search in question was "not offensive to United States constitutional standards," which does little to define or further illustrate the "gross and brutal maltreatment" standard. 13 M.J. 632, 635 (A.F.C.M.R. 1982). *See also* United States v. French, 36 M.J. 589, 592 (A.F.C.M.R. 1992) (stating there was no evidence of any "gross and brutal maltreatment" with further application); *Koch*, 15 M.J. at 849 (mentioning Military Rule of Evidence 311(c)(3) but not discussing "gross and brutal maltreatment"); United States v. Baker, 16 M.J. 689, 690 (A.C.M.R. 1983) (stating that Military Rule of Evidence 311(c) disallows evidence seized through gross or brutal maltreatment").

[150] *See id.*

[151] United States v. Barona, 56 F.3d 1087, 1091 (9th Cir. 1995). *See also Morrow*, 537 F.2d at 139 (exclusion of evidence is warranted if circumstances of foreign search are so extreme that they "shock the judicial conscience"); United States v. Behety, 32 F.3d 503, 510 (11th Cir. 1994) (citing exception for searches that "shock the judicial conscience"); United States v. Rosenthal, 793 F.2d 1214, 1230-1231 (11th Cir. 1986) (framing exception as "the conduct of the foreign officers shocks the conscience of the American court"); United States v. Hensel, 699 F.2d 18, 25 (1st Cir. 1983) (same); United States v. Angulo-Hurtado, 165 F.Supp.2d 1363, 1370 (N.D.Ga. 2001) (same).

[152] *Barona*, 56 F.3d at 1091 (court held that it would review de novo the finding that the wiretaps were lawful under that nation's sovereign law).

[153] *Id.* ("The wiretaps at issue cannot be said to shock the conscience. Even when no authorization for a foreign wiretap was secured in violation of the foreign law itself, we have not excluded the evidence under this rationale . . . nor should we.").

[154] United States v. Peterson, 812 F.2d 486, 491 (9th Cir. 1987).

[155] *Barona*, 56 F.3d at 1091 (quoting *Peterson*, 812 F.2d at 490).

the search may be found unreasonable.[156] If the court concludes that a search violated foreign law, the Ninth Circuit then considers application of the good faith exception to the exclusionary rule.[157] According to the Ninth Circuit, this "exception is grounded in the realization that the exclusionary rule does not function as a deterrent in cases in which the law enforcement officers acted on a reasonable belief that their conduct was legal."[158] The Ninth Circuit applied this principle to foreign searches.[159] As such, if U.S. agents relied in good faith upon the foreign agents' assertions that the search was legally valid under that foreign law, then the search would be considered reasonable for purposes of admitting any seized evidence at a U.S. criminal trial.[160] Other federal courts have followed the Ninth Circuit's application of foreign law.[161]

When considering admissibility of evidence obtained through a foreign search, military courts lack clear guidance. With foreign-obtained statements, the courts examine voluntariness according to well-established standards employed by U.S. federal district courts and U.S. military appellate courts. By contrast, evidence from foreign searches will be admitted absent "gross and brutal maltreatment"—without any examination of compliance with foreign law, and without further guidance or interpretation applying that quite vague standard.

V. Re-Assessing the Role of Foreign Law in Foreign-Obtained Evidence

The final section of this article advocates modification of existing jurisprudence: military courts *should* consider foreign law to assess admissibility of foreign-obtained evidence. While foreign law cannot be the sole or dispositive factor, it should be *one* factor contributing to the analysis of the voluntariness of a statement and/or the reasonableness of a search.

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[156] *Id.*

[157] *Id.* at 1093 (citing *Peterson*, 812 F.2d at 492). For an in-depth analysis of the good faith exception to the exclusionary rule, *see* United States v. Leon, 468 U.S. 897 (1984).

[158] *Barona*, 56 F.3d at 1093 (quoting *Peterson*, 812 F.2d at 490).

[159] *Peterson*, 812 F.2d at 492.

[160] *Barona*, 56 F.3d at 1094. The court in *Barona* ultimately found that the foreign agents had complied with their own law, and therefore the court did not discuss the validity and good faith of U.S. agents' reliance on foreign agents' assertions were following their own law even though they were not. *See also Peterson*, 812 F.2d at 492, stating that "objectively unreasonable reliance" will not "cloak the search with immunity from the exclusionary rule." Furthermore, "permitting reasonable reliance on representations about foreign law is a rational accommodation to the exigencies of foreign investigations."

[161] *See, e.g.*, United States v. Stokes, 710 F.Supp.2d 689, 697 (N.D.Ill. 2009) (citing *Barona* and the good faith exception to foreign searches); United States v. Matthias, 2008 WL 2389081 (D.Virgin Islands 2008) (citing *Peterson* and *Barona*); United States v. Ramcharan, 2008 WL 170377 (S.D.Fla. 2008) (same); United States v. Ferguson, 508 F.Supp.2d 1 (D.D.C. 2007) (same); United States v. Juan Vincent Gomez Castrillon, 2007 WL 2398810 (S.D.N.Y. 2007) (same).

A. Statements and Foreign Law

Current case law completely disregards foreign law in analyzing statements obtained by foreign law enforcement. It ignores whether foreign agents act in accordance with or fall well outside the bounds of their own law. Although relatively simple to apply—in that courts need not attempt to analyze unfamiliar foreign law—current jurisprudence insufficiently protects fundamental fairness and potentially encourages improper collusion between U.S. military authorities and foreign law enforcement to the detriment of military accuseds' UCMJ and U.S. constitutional rights.

Consider that all statements obtained by foreign law enforcement ultimately fall into one of the following four categories:[162]

> (1) Involuntary statement made after rights advisement provided pursuant to foreign law. Example: Country X requires advisement of two rights, and the foreign interrogator properly advises accused of both rights. Nevertheless, the military court rules the statement inadmissible as involuntary due to surrounding circumstances.
>
> (2) Involuntary statement made after rights advisement which does not comply with foreign law requirements. Example: Country X requires advisement of two rights, and the foreign interrogator advises accused of only one right. The military court rules the statement inadmissible as involuntary due to surrounding circumstances.
>
> (3) Voluntary statement made after rights advisement provided pursuant to foreign law. Example: Country X requires advisement of two rights, and the foreign interrogator properly advises accused of both rights. The military court rules the statement admissible as voluntary, based on surrounding circumstances.
>
> (4) Voluntary statement made after rights advisement, which does not comply with foreign law requirements. Example: Country X requires advisement of two rights, and the foreign interrogator advises accused of only one right. The military court rules the statement admissible as voluntary, despite apparent procedural violation of foreign sovereign law.

Categories 1, 2, and 3 are not unfavorable or unduly unfair to an accused and are not at issue. In Category 1, the statement is admissible under foreign law

[162] This model assumes that every sovereign law has some version of rights advisement, however rich or undeveloped it may be. Assume further that the "involuntary" and "voluntary" descriptors are an after-the-fact determination made by the military judge based solely on U.S. law concerning voluntariness.

due to a proper rights advisement beforehand. Despite the foreign law, however, the statement is ruled involuntary and therefore inadmissible by a military judge due to the surrounding circumstances, such as a lengthy detention or interrogation. In this case, the accused benefitted according to his rights under the foreign law, and received the further protection under U.S. law.

In Category 2, the military judge rules the accused's statement involuntary and therefore inadmissible, where it would also have been inadmissible according to application of foreign law due to an improper rights advisement. In this instance, the military court can be said to have effectuated the purpose of foreign law, consistent with like decisions of the foreign country's courts and furthering the influence of legal decisions on law enforcement procedure and conduct. The accused benefits from the foreign sovereign following its law and the additional protections under U.S. law.

In Category 3, the statement is found to be voluntary and admissible, and that it followed a proper rights advisement under the foreign sovereign's law. Fairness to the accused is assessed according to his rights under both foreign and U.S. law.

Category 4 presents the troubling situation which leaves an accused in a legal no-man's land without protection under foreign sovereign law or U.S. law. In this category, the accused's statements obtained unlawfully (in violation of foreign law) may still be admitted and used against him in a court-martial. This result makes the U.S. an agent of the foreign sovereign's violation of its own law. To further illustrate, imagine foreign law enforcement purposefully or through gross negligence fails to advise a service member of his rights as required by that sovereign's law. Aware of the illegal questioning and the inadmissibility of the accused's statement in the foreign courts, foreign authorities decline to prosecute and waive jurisdiction. U.S. military authorities prosecute the accused under the UCMJ and seek to introduce the statement at his court-martial. The military judge admits the statement into evidence based on the assessment of voluntariness, irrespective of the foreign rights advisement violation.

Foreign law enforcement investigators, who often work closely with their U.S. military counterparts, could thus circumvent an accused's rights in order to procure incriminating statements. A service member with little understanding of his rights under foreign law may experience a severe disadvantage upon interrogation by foreign investigators, who may purposefully not advise him of his rights in order to enhance the likelihood of obtaining incriminating information from him. Upon receipt of such evidence, the U.S. military may rely upon it to prosecute the accused in a court-martial, subject to admission of that evidence according to the voluntariness test. But was such a statement truly voluntary? If local law enforcement knowingly evaded a required rights advisement with the intention of providing the evidence to the military for its use, was that statement truly voluntary? What about any false representations by foreign law enforcement to the accused? Should we reward improper practices of local law enforcement?

Any test for voluntariness should consider foreign law and whether foreign law enforcement followed its own law in pursuing and obtaining a statement. An accused with complete information and understanding of his rights—both pursuant

to foreign and U.S. law—can make a voluntary statement. An accused without such information and understanding cannot.

As stated above, this article does not suggest that foreign law should be solely dispositive when analyzing the admissibility of statements obtained by foreign law enforcement. Adopting such a standard would result in inconsistent decisions regarding admissibility. To illustrate, consider a statutorily-required rights advisement in Country X that informs an accused of two rights (right to silence and right to counsel), as compared to the rights advisement in Country Y which informs an accused of only one right (right to silence). If only foreign sovereign law controlled the admissibility of an accused foreign-procured statement in a military court, differences between the foreign laws in Country X versus Country Y would cause different decisions despite identical factual circumstances. That would work unacceptable unfairness and therefore cannot be the appropriate analysis.

The potential for unfair and inconsistent application does not, however, rule out all consideration of foreign law. There is an added benefit to analyzing a statement within the context of the foreign law in which it was obtained, in addition to and also as part of the assessment of voluntariness. Some consideration of foreign law can inform the voluntariness inquiry. Consideration of foreign law may also deter any possible collusion between local foreign police and their military counterparts. Just as U.S. military and constitutional law operates to restrict law enforcement procedure to ensure against violations of accused's rights, so should foreign law operate to constrain the activities of foreign investigators. Admitting evidence against accuseds in courts-martial obtained in violation of foreign law undermines the foreign nation's sovereignty. It may even create a perverse incentive for foreign investigators to avoid compliance with foreign law in order to facilitate U.S. military prosecution—making the U.S. the agent of such malfeasance. Admitting evidence otherwise inadmissible if obtained by U.S. military authorities permits prosecution of an accused where such prosecution would not otherwise have been possible by either party without the other's role. Foreign police could passively collude to procure a statement that neither foreign prosecutors nor the U.S. military could use independently. We can characterize this potential as the danger of improper "wink wink" investigations and prosecutions.

Such consequences would effectively contravene fundamental rights afforded to service members under the UCMJ. As stated above, under the U.S.-Japan SOFA, for example, the Japanese must allow U.S. service members to receive a SOFA briefing prior to all interviews and interrogations.[163] That briefing informs the member of a multitude of rights, some arising from the Constitution of Japan and others arising from the Japanese Code of Civil Procedure.[164] The United States deems this rights advisement critical to service members' decisions when facing potential prosecution for criminal offenses in Japan.[165] It should follow that military

[163] *See supra* notes 60 and 73.

[164] USFJ Instr. 31-203, *supra* note 35, Attachment 4, para. 3.

[165] *But see Bunkley*, 12 M.J. at 245 (holding that a violation of a contracting party to a provision of an article of the NATO SOFA "confers no right upon an individual servicemen to object, on that ground, to the admission of evidence obtained in a search of his off-base private dwelling that was conducted

courts' disregard of violations of those rights necessarily conflicts with the purpose and intent of the SOFA provisions concerning jurisdiction over and procedure regarding alleged criminal offenses committed by U.S. service members in Japan.

B. MRE 311(c) and the Future of Foreign Searches

As with statements produced by foreign interrogations, analysis of evidence obtained during foreign searches ignores any application of foreign law. This position apparently originated in the 1980 Analysis to the Military Rules of Evidence by the Joint Service Committee on Military Justice. Unfortunately, the Committee's Analysis remains incomplete and was not the appropriate vehicle to dispense with the requirement, regardless of whether it originated in dicta in the *Jordan* decision. In effect, the Committee "legislatively" overruled *Jordan*, improperly exceeding its authority and responsibility to effectuate congressional intent.[166]

The following scenario demonstrates the enhanced protection of an accused's rights that results if admissibility requires foreign law enforcement must comply with their own law. A foreign law enforcement agency has a good working relationship with its counterparts on a local U.S. military base. They regularly coordinate with their American counterparts, although they do not always engage in joint investigations. The foreign agents suspect an American service member of off-base illegal drug offenses—violations of both local and U.S. military law. Initially, the foreign agents do not notify U.S. personnel of the investigation, which might also involve local nationals. Contrary to their own country's law, the foreign agents intentionally and wrongfully intercept the service member's communications, fully aware of the illegality of such investigative procedures. Nevertheless, the evidence thus gathered substantiates the service member's alleged crimes. The foreign agents conclude that the evidence was collected through unlawful means and will be inadmissible in any effort to prosecute the accused under local law. So, they provide the illegally procured evidence to U.S. military authorities and waive jurisdiction. As the law stands today, a court-martial would likely rule that evidence admissible because it was not obtained through "gross and brutal maltreatment."

When the Committee prescribes no protection to an accused against whom foreign-obtained evidence was procured unlawfully, the same argument applies equally to the justification for prohibiting domestic-obtained evidence when procured

pursuant to a search authorization by a competent military commander); United States v. Whiting, 12 M.J. 253, 255 (C.M.A. 1982) (holding that the NATO SOFA does not confer upon individuals "any specific rights with respect to searches and seizures" in that an individual could object to admission of evidence seized; but rather, "the obligations are placed on the contracting parties to assist one another in certain law enforcement activities.")

[166] *See* MCM, *supra* note 4, MIL. R. EVID. Analysis, at A22-1 ("The Analysis presents the intent of the [Joint Service Committee on Military Justice, which drafted the Military Rules of Evidence]; seeks to indicate the source of the various changes to the Manual, and generally notes when substantial changes to military law result from the amendments. This Analysis is not, however, part of the Executive Order modifying the present Manual nor does it constitute the official views of the Department of Defense, the Department of Homeland Security, the Military Departments, or of the United States Court of Military Appeals.")

unlawfully. If a military investigator violates an accused's constitutional right to be free from an unlawful search, the remedy is exclusion of that evidence in order to deter future such actions by law enforcement. That same rationale should apply to foreign agents who act in contravention of their own law. Disallowing evidence obtained by foreign agents in violation of foreign sovereign law will promote consistent and fair treatment of U.S. military personnel as no different than the citizens and other guests of the foreign country.

The Ninth Circuit cases previously discussed (see *supra* section IV) highlight the potential complexity if military courts consider foreign law. However, those cases also demonstrate that it is not impractical or impossible to decipher and adequately apply foreign law, when warranted. Again, this article does not advocate an examination of foreign law in all cases or even in any particular case. Rather, foreign law should not be completely discounted as irrelevant for all purposes. The introduction of foreign law at courts-martial may highlight for the trial court whether foreign law enforcement acted illegitimately in violation of the rights of the accused service member. This should factor in determining whether a search and seizure was "gross and brutal maltreatment"—or the standard thus currently defined should be revised to more explicitly incorporate this information. Knowing whether foreign law enforcement violated its own law, with or without intending to provide any evidence to U.S. military authorities, requires a deeper insight into how the evidence was obtained and whether it would be unfair or unjust to admit at trial.

VI. Conclusion

Due to the stationing of U.S. military personnel in numerous countries, foreign law enforcement routinely investigates U.S. service members for alleged crimes committed in those countries. Military courts often must consider evidence gathered by such investigations. The current rules and law regarding the admissibility of that evidence should be closely re-examined.

This article does not advocate mandating strict adherence to foreign law as the standard for admissibility. That would subordinate U.S. military authorities to the actions of foreign police. However, when foreign police directly and intentionally violate their own law, that should affect how a U.S. military court considers foreign-procured statements of the accused. The violation of foreign law should be one factor of many to inform assessments of voluntariness.

The same principle should apply to the analysis of evidence obtained by foreign searches and seizures. Current law provides that the fruits of foreign searches are admissible as long as the search did not subject the accused to "gross and brutal maltreatment." The courts have not further defined that vague standard. Application or modification of that standard should incorporate whether the foreign search was conducted in accordance with or in violation of local sovereign law. Local police may actively violate their own law to catch the alleged criminal service member and turn him and the evidence over to U.S. military authorities for court-martial prosecution. To protect the consistent deterrence of improper practices by foreign police, the U.S. military legal system should not allow admission of evidence

procured by such practices. Consideration of foreign law compliance in determining admissibility of foreign-obtained evidence would remedy these issues.

WHEN WIND, WIND TURBINES, AND RADAR MIX —A CASE STUDY

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I. Unexpected Storms and Wind Turbines

On 12 December 2006, air traffic controllers at Travis Air Force Base (AFB), Calif., saw more than they expected when they switched on their Air Surveillance Radar 8 (ASR-8) system. During recent radar system upgrades, the older ASR-8 analog system was digitized to enhance system compatibility, which would allow for data to be fed from a digital radar system located in nearby Mill Valley. However, the digital upgrade, a temporary measure to enhance compatibility until the more modern digital ASR-11 radar system replaced the legacy ASR-8,[1] resulted in some unusual radar returns. For instance, Travis controllers began observing persistent but non-existent weather cells. More concerning, the controllers saw the tracks of aircraft they were following disappear and then reappear.[2] According to controllers, these phenomena did not occur with the analog version of the ASR-8. The disturbing returns appeared to be associated with the 700-plus electricity-generating wind turbines in the Montezuma Hills area southeast of the base.[3]

Through a case study of events occurring at Travis, this article hopes to familiarize legal professionals with the legal, operational, environmental and political issues that can arise when wind turbines and operational air space collide. Additionally, this article demonstrates the utility of early engagement with potential foes and highlights one tool to enhance collaborative efforts to fully understand and possibly resolve highly technological problems associated with civilian activities that could impact military operations. Lastly, it will also introduce the reader to legislation designed to streamline Department of Defense (DOD) review of wind turbine projects.

Wind-turbine development had been growing in the Montezuma Hills area since 1985.[4] Both the wind turbines and the base are in Solano County, and in 1987, county officials designated a sixty-eight-square-mile area as a Wind Resource Area, or WRA.[5] The turbines range in height from 91 to 351 feet,[6] with the closest one located 4.8 nautical miles from the base.[7] Over time, the WRA has developed into an important renewable energy resource for the citizens of Solano and neighboring counties and the state of California.

To better understand the situation as it arose at Travis, one must first have some understanding of how radar systems work. Air traffic control radars such as

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[1] *See* William J. Hughes Technical Ctr., U.S. Fed. Aviation Admin., Airport Surveillance Radar, Model 8 (Asr-8) Interim Digitizer Program 1, http://www.tc.faa.gov/its/cmd/visitors/data/ACT-300/asr-8.pdf (last visited Mar. 27, 2012) (discussing how the ASR-8 digitalization program is designed to temporarily support obsolete ASR-8 radars until the ASR-8 can be replaced).

[2] Letter from Colonel Steven J. Arquiette, Commander 60th Air Mobility Wing, to Solano County Department of Resource Management, (Mar. 8, 2007) (on file with authors).

[3] *Id.*

[4] Am. Wind Energy Ass'n, U.S. Wind Energy Projects—California (2009) (on file with authors); Solano County, General Plan Update, Energy Background Report 3-9 (2006) (on file with authors).

[5] E-mail from Geoffrey Blackman, Westslope Consulting, LLC, to the author (July 19, 2010, 09:36 AM) (on file with authors).

[6] Solano County, *supra* note 3.

[7] Steven Hall, A. F. Flight Standards Agency, Wind Turbine Impact On Travis AFB ATC Radar (2008) (on file with authors).

Figure 1: ASR-11 radar illustrating the SSR and PSR radars. Photo courtesy of the FAA.

the ASR-8 and ASR-11 are really a combination of radar systems.[8] The concave bottom portion is the Primary Surveillance Radar (PSR), while the rectangular top component is the Secondary Surveillance Radar (SSR).[9] (See Figure 1.) Both systems emit energy pulses as the apparatus rotates. The PSR sends out high-frequency radio waves that bounce off or "illuminate" the target and returns to the radar.[10] By interpreting returns from successive pulses (known as primary returns), the radar is able to determine the range, bearing and altitude of objects in the radar's beam.[11] Return pulses are much weaker than the initial energy beams. The low-energy returns are susceptible to interference caused by ground objects (clutter), which can degrade the PSR's ability to provide location and altitude information.[12] The SSR, on the other hand, uses frequencies different from the PSR to send out a pulse that can be received by aircraft equipped with a transponder.[13] Transponder-equipped aircraft react to the SSR pulse by generating a relatively strong return signal containing the plane's location and altitude rather than relying on a low-energy reflection.[14] The stronger SSR return means that it is easier to receive and is less susceptible to interference caused by clutter.[15]

As it pertained to Travis, experts found the PSR problem occurred only in areas that had both wind turbines and heavy traffic along a nearby highway.[16] The apparent "weather cell" changed fluidly based on the quantity and type of wind turbines that were rotating.[17] This area also generally overlapped with the area of dropped targets. Experts also noted a difference between radar returns from the PSR and the SSR, finding that the secondary radar was not affected by the WRA.[18] Fortunately, most planes have transponders and would be detectable; however, those planes without transponders remained a concern.[19]

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[8] Airport Surveillance Radar (ASR-11), U.S. Fed. Aviation Admin., http://www.faa.gov/air_traffic/technology/asr-11/ (last visited Mar. 27, 2012).

[9] *Id.*

[10] Office of the Dir. of Def. Research and Eng'g, Report to the Congressional Defense Committee, The Effect of Windmill Farms on Military Readiness 17 (2006), *available at* http://www.defense.gov/pubs/pdfs/windfarmreport.pdf. The report provides an excellent description of radar fundamentals.

[11] *Id.* at 22-24.

[12] *Id.* at 19.

[13] *Id.* at 18.

[14] *Id.* at 19.

[15] *Id.* at 19.

[16] Blackman e-mail, *supra* note 5.

[17] *Id.*

[18] *Id.*

[19] General Aviation & Part 135 Activity Surveys—CY [sic] 2006, tbl. AV.9, at AV-28 (showing the aircraft with transponder equipment by the state where the aircraft is based), *available at* http://www.

Figure 2: Wind Turbines as seen from perimeter fence at Travis AFB.

Even though the digital ASR-11 was scheduled to replace the ASR-8 in 2008, Travis officials feared the same problem would impact the new radar.[20] The pending switch to the ASR-11 was part of a long-term Air Force and Federal Aviation Administration (FAA) plan to replace legacy systems such as the ASR-8 with more modern and efficient digital systems.[21] Leaders at Travis AFB and their parent command, Air Mobility Command (AMC), were concerned about the impact of this development on flight safety. The Travis AFB controllers believed there was an immediate and daunting air safety issue over the WRA.[22] To appreciate the situation as the Travis AFB controllers saw it, an understanding of Travis AFB's air space environment is necessary.

Aircraft transiting through controlled airspace must comply with the rules applicable to that airspace. Had the FAA designated the airspace over the WRA and Travis AFB as "Class C," planes traversing this area would have been required to have "an operable radar beacon transponder with automatic altitude reporting equipment."[23] As noted above, a transponder would have effectively eliminated the turbine interference. Using the SSR to receive signals from the plane's transponder, controllers would have been able to confidently track aircraft over the WRA irrespective of the wind turbines. Instead of Class C, the FAA determined the

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faa.gov/data_research/aviation_data_statistics/general_aviation/CY2006/. According to the FAA, in 2006, almost eighty percent of general aviation aircraft were equipped with Mode C transponders capable of reporting altitude information. *Id*.

[20] Arquiette letter, *supra* note 2.

[21] FY2002 NAS Ann. Rep. Office of the Dir., Operational Test & Evaluation, Air Force Programs, at 287-28.

[22] Arquiette letter, *supra* note 2.

[23] *See generally* U.S. Fed. Aviation Admin., Aeronautical Information Manual: Official Guide to Basic Flight Information and ATC Procedures ch. 3 (2010) (explaining the various airspace classifications), *available at* http://www.faa.gov/air_traffic/publications/atpubs/aim/. In general terms, Class A space extends from 18,000 and 60,000 feet above the continental United States. Civilian carriers routinely fly in this area and operate under "instrument flight rules." Class B airspace is generally found around busy airports and extends from the surface to 10,000 feet. Class B airspace is specifically tailored to its location and includes a surface area and two or more layers in an "upside-down" wedding cake formation. Class C includes moderate-size airports with an operating control tower and an Air Traffic Control (ATC) facility. Aircraft in this airspace must have a transponder. Class D airspace extends from an airport's surface level to 2500 feet around an operational control tower. In Class D, neither an ATC facility nor transponders are required. Finally, Class E includes remaining areas of controlled airspace that is not included in the previous classes. Transponders are not required in Class E airspace. *Id*. at ch. 3, § 2, Para. 3-2-1 and Fig 3-2-1.

areas over Travis AFB and the WRA to be "Class D" and "Class E," respectively.[24] Neither classification requires a transponder, and Class E airspace does not require radio contact with the control tower.[25] Thus, with degraded PSR signals and some aircraft lacking transponders, controllers feared wind turbine interference would impair their ability to control traffic.

Additionally, the airspace environment around Travis and the WRA includes military tactical and operational training areas, two civilian airports and a high-level transit route between San Francisco and Sacramento.[26] For these reasons, controllers estimated a thousand general aircraft per day transited this area.[27] They further estimated high volumes of aircraft using both visual flight rules (VFR) and instrument flight rules (IFR).[28] Additionally, the controllers also believed a large number of aircraft were operating without transponders in this area due to flight training activities being conducted at nearby Concord and Rio Vista Airports.[29] However, subsequent investigation revealed the actual number of general aviation flights through this area averaged between thirty and sixty per day[30] and the number of aircraft transiting the area without operating transponders was minimal, perhaps as little as one a day.[31] Thus, controllers had overestimated the amount of general air traffic traversing this area, as well as the number of aircraft transiting the area without operating transponders.

Had the air traffic situation been as the controllers believed it to be—and knowing the turbine-generated anomaly decreased the ability of the ASR-8 to interpret the PSR's returns over this area—the safety concern would have been far more substantial. Specifically, controllers expressed concern about maintaining safe separation distances between the IFR aircraft or providing all aviators timely

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[24] U.S. Fed. Aviation Admin., Order JO 7400.9V, Airspace Designations and Reporting Points, Subparts D-E (2011) *available at* http://www.faa.gov/documentLibrary/media/Order/7400.9.pdf.

[25] U.S. Fed. Aviation Admin., Aeronautical Information Manual *supra* note 23.

[26] U.S. Fed. Aviation Admin., Sectional Raster Aeronautical Charts, San Francisco (2011) [hereinafter San Francisco VFR sectional chart], *available at* http://aeronav.faa.gov/index.asp?xml=aeronav/applications/VFR/chartlist_sect. A sectional raster aeronautical chart is a "scanned image" of an FAA VFR sectional chart. *Id*.

[27] Letter from Lieutenant General (Lt Gen) Vern M. Findley, the AMC vice commander, to Kevin Haggerty, Manager, Airspace and Rules Division at the FAA (Sept. 3, 2009) (on file with authors).

[28] VFR and IFR refer to rules pilots follow based on the type of flight plan and weather conditions. The requirements for VFR flights are set out in 14 C.F.R. 91.155. They vary depending upon the different type of airspace, visibility, and distance from clouds. Flight plans flown following VFRs permit pilots to follow a fixed object, such as a road or railroad tracks, to an airfield. VFRs are important should an aircraft's instruments fail or if a non-instrument rated pilot files in adverse weather. Pilots who fly using IFR flight plans fly according to instruments in their cockpit.

[29] Travis ATC estimates at one time were 2,500 civil aircraft activities over the WRA from surface to 10,000 feet per day, including participating and non-participating (transponder not operating) aircraft. *See* U.S. Transp. Command, Coop. Research & Dev. Agreement, Operations Working Grp., Research Conclusions and Recommendations at 6 (2010) [hereinafter USTRANSCOM CRADA Report] *available at* http://www.co.solano.ca.us/civicax/filebank/blobdload/aspx?blobid=7939; E-mail from Lieutenant Colonel (Lt Col) Brian W. Lindsey, Director of Operations at 60th Operational Support Squadron, to Gregory Parrott (Aug.10, 2009, 13:15 CST) (on file with authors).

[30] E-mail from Ronald Morgan, Morgan Aviation Consulting, to the authors (July 14, 2010 13:38, PM) (on file with authors).

[31] USTRANSCOM CRADA Report, *supra* note 29.

safety alerts.[32] For these reasons, the controllers felt it was important to let affected pilots know of the reduced service over the WRA.[33]

Base authorities acted promptly after discovering this issue. To address immediate safety needs, the base issued a Notice to Airman (NOTAM), which provides pilots general information deemed essential for the safe and efficient operation of airplanes.[34] The NOTAM advised pilots flying in aircraft without transponders that Travis AFB's ability to provide air traffic control over the WRA was limited.[35] Additionally, the FAA placed this information on charts pilots used to navigate through this area.[36] Further, Travis AFB officials briefed this newly discovered condition to pilots at the nearby civilian airports.[37] On 8 March 2007, the wing commander formally notified the Solano County Department of Resource Management about the wind turbines' impact on Travis AFB's radar.[38] Hoping to forestall additional wind turbine construction in the WRA, he described the potential impact additional wind turbines could have on the new digital radar:

> While we have not yet reached a solid conclusion, we have evidence indicating the wind turbines will create significant interference with the base's radar and could lead to potentially serious flight safety hazards in terms of planes dropping off radar, flight tracks on radar different from actual tracks, and "false targets"—planes the radar sees but are not actually there. Ultimately, these safety concerns affect not only Air Force aircraft and crews but the general flying public as well, as 85% of the air traffic in the Travis AFB coverage area is civilian, and smaller planes are more susceptible than large military aircraft to some of the radar issues that result from the wind turbines.[39]

At the time, the three largest wind farm developers in the Montezuma Hills area, enXco, Florida Power and Light (FPL)[40] and the Sacramento Municipal Utility District (SMUD), each had pending construction projects. Each agreed to halt

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[32] *Id.* at 5.

[33] *Id*.

[34] Joint Chiefs of Staff, Joint Pub. 1-02, Department of Defense Dictionary of Military and Associated Terms 233 (2010), *available at* http://www.dtic.mil/doctrine/new_pubs/jp1_02.pdf.

[35] This caution is maintained in the current NOTAM regarding radar coverage over the WRA at M0817/11 NOTAMR M0672/11 issued on 28 December 2011.

[36] *San Francisco* VFR sectional chart, *supra* note 26. The San Francisco Visual Flight Rules sectional aviation chart provided the following cautions: Numerous windmills reaching a height of 645 feet above mean sea level. Radar is limited south east of Travis AFB. Traffic advisory may not be available to non-transponder-equipped aircraft.

[37] 60 AMW/JA enXco, FPL Windfarm Issues Timeline (2007) (on file with authors).

[38] Arquiette letter, *supra* note 2.

[39] *Id*.

[40] Florida Power and Light is a subsidiary of NextEra Energy Company. For convenience and consistency, we will refer to the subsidiary, FPL, rather than the parent company in this article. *See* http://www.nexteraenergy.com/pdf/form10k.pdf at page 4.

construction of additional turbines until the radar issue was resolved to the satisfaction of Travis officials.[41]

EnXco keenly felt the impact of this decision, as the company was within one week of obtaining final approval for "Shiloh II," a $350 million project to build about seventy-five turbines.[42] For at least two years, the company had been assiduously completing the lengthy process of obtaining the necessary governmental approvals to build the wind turbines.[43] This included technical siting studies, lease negotiations with land owners, an environmental review and electrical system network transmission upgrade activities. Travis AFB officials were made aware of enXco's plans in November 2006, during the Shiloh II Draft Environmental Impact Report (EIR) public comment period.[44] The company had already submitted its plans to the FAA, which issued a "Determination of No Hazard" (DNH) for each of the seventy-five turbines.[45] In its amended EIR, enXco observed that the FAA consulted the DOD before making its decision and that the FAA represented the interest of the Air Force in this matter.[46] Finally, enXco added, "The FAA determination of No Hazard to Air Navigation is the final conclusion about whether a project would or would not have an adverse effect on aeronautical safety."[47]

Despite the foregoing, the Solano County Airport Land Use Commission determined that enXco's project was inconsistent with the Commission's Travis Airport Land Use Compatibility Plan,[48] concluding that the final EIR did not adequately address the impact of the proposed development on Travis AFB's digital radar.[49] At a subsequent meeting of the Solano County Planning Commission, both FPL and enXco requested six-month continuances for the Montezuma Wind and Shiloh II projects respectively, which the Commission granted.[50]

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[41] Solano Cnty, Dep't of Res. Mgmt., Amendment to Final Environmental Impact Report, Shiloh II Wind Plant Project 4-35 (2007) *available at* http://www.co.solano.ca.us/resources/ResourceManagement/3_Exhibit%20B_Shiloh%20II%20FEIR%20Amendment_April%202007.pdf.

[42] Letter from Joseph B. Fahrendorf, Vice President, enXco, Escondido CA, to General (Gen) Lichte, Commander, Air Mobility Command, (Oct. 30, 2007) (on file with the authors).

[43] *Id.*

[44] 60 AMW/JA Windfarm bullet paper, *supra* note 35. On 9 November 2006, before a meeting of the Solano County Airport Land Use Commission, and again in a meeting enXco arranged with the 60 OG/CC, base officials were invited to state any concerns they may have. As these notifications occurred prior to the inclusion of the Mill Valley radar feed to the ASR-8, the base responded that it had no comment and the project would have an unknown impact on the planned DASR-11.

[45] On November 6, 2006, the FAA issued DNH rulings for the turbines. This was, of course, before the wind turbine-induced problems became evident. *See* Shiloh II Amended EIC, *supra* at note 41 at 4-33.

[46] Shiloh II Amended EIC, *supra* note 41.

[47] *See Id.* at 4-36. The content of the "Department of Defense" input will be discussed *infra.*

[48] The Airport Land Use Commission reviews development projects for consistency with Travis AFB's "maximum mission" as defined in the Travis Airport Land Use Compatibility Plan.

[49] Solano County Airport Land Use Commission, Cal., Resolution 07-01 (April 17, 2007) (on file with the author).

[50] 60 AMW/JA bullet paper, *supra* note 35.

II. A Temporary Fix Reveals Problems

To the credit of both the Air Force and enXco, the two entities resolved the impasse through cooperation and a joint study. Between October 2007 and February 2008, enXco partnered with the Air Force and civilian radar experts to form a Joint Technical Working Group to evaluate the impact of the proposed new turbines.[51] For a variety of reasons, including the expectations of improved performance of the ASR-11, possible improvements from additional feeds from other radars, and the location of the proposed turbines, the experts predicted enXco's project would not further degrade radar performance. Specifically, the experts found the probability the new radar would detect an aircraft (probability of detection, or Pd) at 4,000 and 10,000 feet was, respectively, 78.03 and 78.25 percent.[52] These percentages represented a discrete Pd loss that was not deemed to be a significant decrease from the 80 percent Pd the Air Force Flight Standards Agency (AFFSA) and Raytheon (the ASR-11's manufacturer) sought to achieve with the ASR-11.[53] For technical reasons, the experts believed the ASR-11 would perform better than this minimum standard.[54] On 3 March 2008, the base withdrew its objection,[55] Solano County issued enXco its use permit,[56] and enXco began construction of its turbines (a year later than it expected). The wing commander made it plain that the withdrawal was fact-specific to this particular group of turbines.[57]

Moving beyond this particular enXco project, the real challenge to the Air Force was the lack of a widely accepted and validated method to accurately gauge the cumulative impact further turbine construction could have on Travis AFB's digital radar. The FAA's evaluation system included analysis by the "Radar Support System (RSS)," a system that goes beyond "line of sight" screening and can evaluate the effect of both existing and proposed structures like buildings and chimneys.[58] Air Force officials, however, were concerned about the RSS' ability to accurately *predict* the impact, if any, of additional wind turbines with their rotating

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[51] *See generally*, Letter from Gen Arthur J. Lichte, Commander, Air Mobility Command, to Mr. Joseph B. Fahrendorf, V.P. enXco, (Nov. 30, 2007) (outlining the group's efforts and plans) (on file with the author).

[52] Letter from Geoffrey N. Blackman, Partner/Senior Eng'r, Regulus Grp., LLC., to the Solano County Planning Comm'n (Mar. 4, 2008) (on file with the author).

[53] *Id.* Eighty percent is the design standard Pd for the radar in areas free of clutter. U.S. Dep't of Def., Operational Requirements Document (ORD) for DOD Air Traffic Control and Landing Systems (ATCALS) in the National Airspace System (NAS) 8 (Mar. 16, 2005) (on file with the author).

[54] Blackman letter, *supra* note 52 (noting that the assembled panel of experts expected the ASR-11's Pd rate to outperform the ASR-8 by between two and twelve percent).

[55] Letter from Colonel (Col) Steven J. Arquiette, Commander 60th Air Mobility Wing, to the Solano County Dep't of Res. Mgmt. (Mar. 3, 2008) (on file with author).

[56] Press Release, enXco, enXco Announces the Permit Approval of Shiloh II Wind Energy Project (Apr. 17, 2008), http://www.enxco.com/about/press/enxco_announces_the_permit_approval_of_shiloh_ii_wind_energy_project/.

[57] Arquiette letter, *supra* note 55.

[58] The FAA utilized a "Radar Support System" (RSS) produced by the Technology Service Corporation to assist them in conducting their aeronautical studies. While useful in siting studies, RSS is not as helpful when used as a predictive tool to assess the turbines' impact on the ASR-11.

blades and unique electromagnetic effects on the ASR-11.[59] AMC officials noted, with some trepidation, that if the ASR-11 performed as expected, it would already be operating at close to the required minimum level of efficiency.[60]

While the Joint Working Group's detailed analysis revealed Shiloh II's turbines would not further degrade radar performance, it provided no basis for concluding the next group of turbines would likewise have a negligible effect. Thus, the issue became the point at which new turbine construction drop the ASR-11 below the eighty percent detection rate.[61] If not this group, maybe the next group of turbines would ultimately drop the radar below an acceptable performance level. To resolve these issues, AMC and Travis AFB officials sought a predictive modeling tool to evaluate the cumulative impact additional turbines would have on the ASR-11 and determine the ASR-11's minimally acceptable operational Pd standard.[62] Unbeknown to AMC and Travis, enXco and a radar consultant, Westslope Consulting, LLC, were also seeking a similar tool.[63] Unfortunately, the predictive modeling technology largely trailed the rate at which wind energy development was growing.[64] Time was of the essence, and the remaining developers, SMUD and FPL, had projects they were anxious to get approved.[65]

III. A Wind Storm of Issues

A. Project Approval and *the* Voice for the United States on Issues of Air Navigation Safety

As the enXco Shiloh II project demonstrated, there was confusion as to who speaks on behalf of the United States on issues of air navigation safety. What are the respective roles of the Air Force and the FAA? The first step in evaluating the Air Force's role in the evaluation process is to determine whether enXco's position about the FAA's DNH with respect to their turbines was "the final conclusion" regarding its potential as a hazard to air navigation. Since the FAA delegated control of the navigable airspace around Travis AFB to the Air Force,[66] and the Air Force uses the airspace regularly, it has an obvious interest in air safety.

On the other hand, as the wind turbine developers were quick to point out, the FAA, the agency responsible for air safety, had expressly approved these turbines. The developers not only urged Solano County to follow the FAA's lead, but also contacted their U.S. senators, who in turn sent a letter to the Secretary of Defense.[67] In the letter, the senators expressed their concerns about the delay in

[59] "Thoughts Regarding Gen (R) Looney's Office Call w/ 60 AMW/CC" Lt Col Brian Lindsey, 60 OSS/DO, 14 Aug 09, (on file with author).
[60] *See, generally* Findley letter, *supra* note 27.
[61] *Id.*
[62] *Id.*
[63] E-mail from Geoffrey Blackman, Westslope Consulting, LLC, to Lt Col Brian Lindsey, 60 OSS/DO (Aug. 5, 2009 3:12 PM) (on file with the author).
[64] Findley letter, *supra* note 27.
[65] *Id*.
[66] USTRANSCOM CRADA report, *supra* note 27, at 3.
[67] Letter from U.S. Senators Dianne Feinstein, Charles Grassley, Ron Wyden, Barbara Boxer, Tom

the developers' projects, sought consolidated decision making and encouraged the DOD to participate in the FAA's review process.[68] The issue to resolve was whether delegating airspace control also delegated authority to determine whether construction in that area would impermissibly harm air navigation.

The FAA's supremacy in air navigation issues was established in legislation creating the organization. Before this legislation, the responsibility for controlling and apportioning the nation's airspace was divided between the DOD, the Department of Commerce (where the FAA's predecessor was located), the Civil Aeronautics Board and the President. The military air traffic control (ATC) system operated independently from the civilian system.[69] Communication between them was not automatic, leading to accidents.[70] While there had been prior reform efforts, three mid-air collisions, two of which were between military planes and civilian airliners, convinced then-President Dwight D. Eisenhower and Congress of the pressing need to centralize this cumbersome system. On 13 June 1958, President Eisenhower urged Congress to act swiftly in passing the bill that would create the FAA.[71] In his message, he emphasized the importance of unified "federal (sic) Aviation Agency charged with aviation facilities and air traffic management."[72] He wanted the new agency to have "paramount authority" over U.S. airspace.[73] Another top Eisenhower Administration official also recognized that the military would play an important role in the new regulatory scheme, but he strongly supported the legislation's goal to consolidate the authority to issue safety regulations in the new FAA.[74] In a letter to the committee, Elwood R. Quesada, the special assistant for aviation matters, wrote, "It is essential that one agency of government, and one agency alone, be responsible for issuing safety regulations if we are to have timely and effective guidelines for safety in aviation."[75]

On 23 August 1958, Congress passed the Federal Aviation Act (hereafter the "Act"), which created the FAA and gave it the President's desired "paramount authority" in issues of aviation safety.[76] The House Report accompanying this statute provided the following guidance in the section entitled "Division of Responsibility:"

Harkin, Jeff Merkley, Jon Tester, Richard Durbin, and Max Baucus, to Robert M. Gates, Secretary of Defense, (May 19, 2009) (on file with the author).

[68] *Id.*

[69] H.R. Rep. No. 85-2360, (1958), *reprinted in* 1958 U.S.C.C.A.N. 3741.

[70] *Id.*

[71] Letter from Dwight Eisenhower, President of the United States, to the Congress of the United States (June 13, 1958), *available at* http://www.presidency.ucsb.edu/ws/index.php?pid=11091.

[72] *Id.*

[73] *Id.*

[74] H.R. Rep., *supra* note 69, at 3761. In addition to being President Eisenhower's special assistant, Quesada was also a retired Air Force Lieutenant General and was the first FAA Administrator. He was also one of the pilots of the legendary aircraft "Question Mark" which demonstrated the viability of refueling airplanes in flight.

[75] *See id.*

[76] Federal Aviation Act of 1958, Pub. L. No. 85-726, §72 Stat. 731, (codified as amended at 49 U.S.C. §§ 40101-49105 (2006)).

> Clearly an agency is needed now to develop sound national policy regarding use of navigable airspace by all users—civil and military. This agency must combine under one independent administrative head functions in that field now exercised by the President, the Department of Defense, the Department of Commerce and the Civil Aeronautics Board. It is also intended by this bill to eliminate divided responsibility that exist in other areas, particularly conflicts between civil and military agencies in the field of electronic aids to navigation.[77]

In short, the FAA retains the authority to make DNH decisions regardless of any delegation the agency may make regarding control of the airspace. In fact, as the situation at Travis evolved, Congress stepped in and cleared up any lingering doubts involving DOD and FAA roles in the review of alternative energy projects. This legislation, the 2011 National Defense Authorization Act,[78] will be discussed in greater detail later in this article.

B. The FAA's Obstruction Evaluation System and Criteria for a DNH Finding

The Act created a legislative and regulatory scheme requiring the FAA (vice the Air Force) to draft regulations pertaining to navigation and to assess the impact tall structures may have on air safety. Specifically, section 40103 of the Act requires the FAA's administrator to prescribe regulations for (a) navigating, protecting, and identifying aircraft; (b) protecting individuals and property on the ground; (c) using the navigable airspace efficiently; and (d) preventing collisions between aircraft, between aircraft and land or water vehicles, and between aircraft and airborne objects.[79] Section 44718 requires the owners of objects tall enough to impact air safety, like wind turbines, to notify the FAA, but the Act imposes no similar requirement to notify the Air Force.[80] Owners of structures tall enough to pose a threat to air safety are required to provide a public notice "in the form and way the Secretary prescribes" (referring to the Secretary of Transportation, the FAA's parent agency).[81] If the structure could obstruct navigable airspace or interfere with navigation facilities, the Act requires an "aeronautical study" to determine "the extent of any adverse impact on the safe and efficient use of the airspace."[82] In conducting the study, the FAA must consider, among other things, the cumulative impact resulting from the proposed construction or alteration of a structure when combined with the impact of other existing or proposed structures.[83]

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[77] H.R. Rep., *supra* at 3743-3744.
[78] Ike Skelton National Defense Authorization Act for Fiscal Year 2011, PL 111-383, § 358 (Jan. 7, 2011).
[79] 49 U.S.C. § 40103(b)(2)(A) – (D)(1994).
[80] 49 U.S.C. § 44718(a)(1) and (a)(2)(1994).
[81] 49 U.S.C. § 44718(a)(1994).
[82] *See id.* § 44718(b)(1).
[83] *See id.* § 44718(b)(1)(E).

Pursuant to these statutes, the FAA drafted detailed regulations and published a handbook for accomplishing these legislative goals.[84] Then existing regulations detailed how the FAA would evaluate objects affecting navigable airspace, described notice requirements, provided for the aeronautical studies as appropriate and explained how to request a review of the FAA's decisions.[85] Only a portion of the handbook described how the FAA was to evaluate structures that might affect air navigation and communication facilities.[86]

While recognizing that many structures may create interference, the FAA will only issue hazard notifications if the interference demonstrates a "substantial physical or electromagnetic adverse effect" on navigable airspace or navigation facilities.[87] A situation reaches this level when a proposed structure "causes electromagnetic interference to the operation of an air navigation facility or the signal used by an aircraft"[88] or when the interference's "adverse effects" impact a "significant volume" of aeronautical activity.[89] A structure would have an "adverse effect" if it exceeds the obstruction standards, impacts the physical or electromagnetic radiation of air navigation facilities and has one of six consequences, two of which apply to wind-turbine-induced radar degradation over the WRA: derogation of airport capacity/efficiency and affecting future VFR and/or IFR operations as indicated by the airport's plans already on file.[90] Determining how much activity constitutes a "significant volume" depends on the type of activity. For example, if one aeronautical activity per day were affected, this would indicate regular and continuing activity that would constitute a "significant" volume, regardless of the type of operation.[91] An affected instrument procedure or minimum altitude used on average only once per week would be significant if the procedure served as the sole procedure under certain conditions.[92] This background is crucial to understanding the FAA's DNH process and the role the Air Force played.

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[84] FAA, JO 7400.2G, Procedures for Handling Airspace Matters (Apr. 10, 2008). An earlier version, JO 7400.2F, was in effect at the time relevant to the events in this article. The earlier version contained similar provisions. Hereafter, it will be referred to as the Handbook. Moreover, on 10 March 2011, the FAA cancelled and replaced the Handbook with JO 7400.2H, Procedures for Handling Airspace Matters *(noting that wind turbines are a special case, in that they may cause interference up to the limits of the radar line of site or at a greater distance than other more routine obstructions)*.

[85] Objects Affecting Navigable Airspace, 14 C.F.R. §§ 77.1 – 77.75 (2004).

[86] FAA Procedures, *supra* note 84, at para. 6-3-10.

[87] *See id.* para 6-3-3 through 6-3-5.

[88] *Id.*

[89] *Id.*

[90] *See id.* para 6-3-3(a)-(f). The other four are: (1) requiring a change to an existing or planned IFR minimum flight altitude, a published or special instrument procedure, or an IFR departure use procedure for a public airport; (2) require a VFR operation, to change its regular flight course or altitude; (3) restrict the clear view of runways; and (4) affect the usable length of an existing or planned runway.

[91] *See id.*, para 6-3-4.

[92] *See id.*

C. Air Force Participation Before the 2011 National Defense Authorization Act

Before the 7 January 2011 passage of the Ike Skelton 2011 National Defense Authorization Act, and as illustrated by the enXco Shiloh II project, Air Force involvement with either the FAA or developers was usually minimal until very late in the DNH process.[93] While developers like enXco typically spent years investigating potential sites and invest substantial sums in obtaining local permits and environmental studies,[94] they were not required to formally notify the FAA or the Air Force of their construction plans until they were close to beginning turbine construction. Although recently revised FAA guidance now requires developers to provide up to forty-five-days notice of their construction plans, the previous regulation permitted notice as late as thirty days before construction.[95] While the majority of these regulatory provisions deal with physical obstructions, the FAA handbook recognized "an electromagnetic interference potential may create adverse effects as serious as those caused by a physical penetration of the airspace by a structure" and required that those effects be identified and, if possible, resolved.[96]

Because modern turbines exceed the height standard, the FAA presumes the turbines to be a hazard unless a subsequent study by the FAA proves otherwise.[97] As part of that review, the FAA contacts the Air Force for its evaluation of the proposed projects.[98] The Air Force's program manager for Obstruction Analysis/Airport Airspace Analysis (OE/AAA) then forwards the FAA's request for information to functional experts for their input regarding the proposed wind turbines.[99] At the time the Travis issue arose, the Air Force practice was to evaluate a proposed structure's potential for physical obstruction and its impact only on long-range radars air defense radars.[100] The Air Force did not provide the FAA with guidance on the potential impact the structure could have on ATC radars like the one at Travis.[101] As explained later, this deficiency was the source of considerable consternation to officials at Travis and AMC.[102] To illustrate this point, this article next discusses the Air Force's role in evaluating FPL's thirty-turbine project for the WRA.

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[93] Skelton Act, *supra* note 78. The impact of the new statute will be discussed *infra*.

[94] See, e.g., enXco Wind Energy, *Project Development*, www.enxco.com/wind/development (last visited May 13, 2012).

[95] Notice Requirements, 14 C.F.R. § 77.7 (2004). The 45-day notice requirement became effective January 18, 2011. The superseded notice requirement was located at 14 C.F.R. §§ 77.17(b) (2004).

[96] Handbook, *supra*, note 84, at paras. 6-3-10(a) and (f).

[97] *See id*, para. 6-3-2.

[98] *See id*, para. 6-3-6(f).

[99] E-mail from Lt Col Brian W. Lindsey, 60 OSS/DO, to Raymond Crowell, 60 AMW/DS (June 17, 2009, 9:17 AM) (on file with author); e-mail from Terri Johnson, USAF OE/AAA Program Manager, A3O-AAN USAF Liaison, Eastern Service Area, to Lt Col Brian Lindsey, 60 OSS/DO, Travis AFB (Aug. 10, 2009,10:38 AM) (on file with the author).

[100] E-mail from Shawn Jordan, 84 RADES/SCMD, to the author (Aug. 10, 2009, 9:16 AM) (on file with the author).

[101] Johnson e-mail, *supra* note 99.

[102] E-mail from Colonel (Col) James C. Vechery, 60 AMW/CC, to Lt. Colonel Brian Lindsey, 60 OSS/DO (Aug. 14, 2009, 3:57 PM) (on file with author).

To put the FPL project into context, Travis AFB and AMC officials were aware SMUD and FPL planned to pursue new turbine projects following approval of enXco's Shiloh II and the February 2009 installation of Travis' new digital radar, the ASR-11.[103] As noted earlier, these officials were still concerned about the cumulative impact of turbine development and the lack of a predictive model to assess new projects. Additionally, ongoing efforts to find a validated predictive modeling tool revealed that any such effort was at least a year from being fielded.[104] Further, on 4 May 2009 Travis and AMC officials learned the FAA issued DNH findings for SMUD's forty-nine-turbine project.[105] Consequently, Travis and AMC officials monitored the progress of FPL's application to the FAA very closely and with heightened interest.

On 1 June 2009, the Air Force's OE/AAA manager forwarded the FAA's requests for inputs on FPL's project to the 84th Radar Evaluation Squadron (84 RADES) at Hill AFB, Utah, and AMC's Terminal Instrument Procedures or "TERPS" Branch of its Operations Division (AMC/A3AT)[106] This duty section addresses issues of physical obstruction, that is, whether the height of the turbines would intrude or come close to intruding on flight paths near Travis.[107] The AMC Operations Division reported the height of the turbines would not hazard planes using Travis[108]—a logical conclusion since the WRA itself was more than 4.5 nautical miles from the base.

While 84 RADES does evaluate a structure's potential for electromagnetic interference, the squadron does not evaluate all radar systems. Its primary focus is on homeland defense. Specifically, it evaluates radars that feed data into a North American Aerospace Defense Command (NORAD) Region Operations Center or Air Defense Sector radar.[109] These are basically long-range air-defense radars (rather than ATC radars). For that reason, 84th RADES *did not evaluate* the turbines' impact on Travis' ATC radar.[110] The 84 RADES did, however, evaluate the turbines' potential impact on long-range radars from Mill Valley, Stockton and Sacramento.[111] On 15 June 2009, 84 RADES reported FPL's turbines would have a "minimal" impact on these radars.[112] The Air Force OE/AAA program manager relayed both

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[103] Letters from Col Steven J. Arquiette, 60 AMW/CC, to SMUD and FPL (both Mar. 24, 2008); Letter from Colonel Mark C. Dillon, 60 AMW/CC, to Solano County Planning Comm'n (Apr. 16, 2009).

[104] E-mail from Dr. Donald R. Erbschloe, AMC/ST, to Raymond Crowell, 60 AW/DS and author (May 29, 2009, 12:11 PM) (on file with author).

[105] Determination of No Hazard to Air Navigation, 2009-WTW-2379 through 2009-WTW-2428, (May 4, 2009). The FAA published a separate DNH for each of SMUD's 49 turbines.

[106] Lindsey e-mail, *supra* note 99.

[107] E-mail from John F. Tigue, AMC/A3AR, to the author (Aug. 13, 2009, 9:21AM) (on file with author).

[108] *Id*.

[109] U.S. Dep't of Air Force, Instr 13-101, Evaluation of Ground Radar Systems para. 1.3.1 (Oct. 29, 2004).

[110] Jordan e-mail, *supra* note 100.

[111] *See id.*, Mr. Jordan added that 84 RADES " . . . did not assess this project against the Travis (ASR-11) since it is not integrated into the Air Defense or AMOC [Air and Marine Operations Center] air pictures."

[112] *Id.*

the AMC/A3AT and 84 RADES input to the FAA.[113] Though the FAA considered this input the definitive Air Force position regarding this project,[114] neither AMC's obstruction analysis nor 84 RADES' electromagnetic analysis addressed Travis and AMC concerns about the wind turbines' impact on the ASR-11.[115]

In an effort to ensure their concerns were considered, Travis and AMC officials engaged with permitting officials in Solano County, the developers, and the FAA. During these interactions, which included a teleconference with the FAA's OE/AAA manager, Air Force officials from both locations unambiguously stated their concerns about the impact additional turbines could have on the ASR-11.[116] Despite these efforts, the FAA issued a DNH determination to FPL on 7 August 2009 regarding the ASR-11,[117] stating:

> This determination included evaluation of the potential impacts to the radar coverage of the new Travis AFB ASR-11commissioned in February 2009. Potential impacts to both the military mission and provision of services to civilian aircraft in the Bay-Delta area were considered. Understanding the fact that the Montezuma Hills Wind Resource Area (WRA) has approximately 815 wind turbine generators established and the petitioner is requesting to build an additional 31 turbines, the results of this study concluded that there was "no significant impact" to the airspace and air traffic control services provided to aircraft in the vicinity of the WRA. The USAF confirmed that coordination was accomplished through the 84th RADES and the Air Mobility Command (AMC), the parent command to the military mission at Travis AFB.[118]

During their analysis, FAA technicians noted the problem created by the wind turbines, but the FAA ultimately decided the problem was not sufficiently serious to issue a presumption-of-hazard-to-air-navigation determination.[119] The FAA concluded the VFR sectional cautions (mentioned earlier) sufficiently mitigated the hazard.[120] As quoted above, the FAA's rationale within the DNH suggested it was at least partially premised on the fact the WRA already had almost 815 turbines.[121]

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[113] Johnson e-mail, *supra* note 99.

[114] *Id*.

[115] Findley letter, *supra* note 27.

[116] E-mail from John F. Tigue, AMC/A3AR, to Colonel William A. Malec, AMC/A3A (June 29, 2009, 4:36 PM) (on file with author.)

[117] Determination of No Hazard to Air Navigation, 2009-WTW-3043 through 2009-WTW-3073, 7 Aug 2009. The FAA published a separate DNH finding for each of FPL's 30 turbines.

[118] The quoted language was included in each of the FAA's DNH determinations for all of FPL's turbines.

[119] E-mail from Lt Col Brian W. Lindsey, Director of Operations, 60 Air Mobility Wing, to the author (Major (Maj) Thomas F. Collick) and to John Tigue, Air Mobility Command, Air Traffic Systems and Resource Manager, (August 13, 2009, 10:43 CST) (on file with the author).

[120] *Id*., and *see* note 35, *supra,* for contents of notice.

[121] Quoting from Aeronautical Study # 2009-WTW-3044-OE, "This determination included evaluation of the potential impacts to the radar coverage of the new Travis AFB ASR-11 commissioned in

The FAA's DNH determinations for both the SMUD and FPL projects, despite objections by Travis AFB and AMC, convinced Lieutenant General (Lt Gen) Vern M. Findley, the AMC vice commander at the time, to write directly to the FAA's OE/AAA program manager. In his 3 September 2009 letter, Lt Gen Findley reiterated AMC's concern about the safety impact of the FAA's recent DNH decisions on the SMUD and FPL turbine projects. He observed the existing turbines in the WRA already caused Travis' ATC radar to lose primary surveillance radar on general aviation aircraft in the WRA "at least" fifteen percent of the time.[122] Lt Gen Findley warned that additional WRA development that further reduced Travis' ability to track aircraft among the Air Force's large, fast-moving planes "invite[d] catastrophe."[123] In emphasizing the need for a way to assess the impact of future turbine construction, he wrote:

> At some point, the construction of additional turbines *will* impact aviation safety. Neither we nor the FAA, I assume, know when we've reached that threshold. While the construction of 76 wind turbines may not, in itself, *appear* to pose a safety problem, the fact that this would be a ten percent increase in the number of turbines already operating in the WRA is troubling because *we currently have no way to assess their cumulative impact*. As a possible solution, we suggest the FAA and the Air Force join interested wind energy developers to develop an assessment capability.[124]

Lt Gen Findley closed his letter by explaining he had "no choice" but to object to additional WRA development absent a method of assessing the impact of future turbine construction on the Travis radar. The general sent a copy of this letter to Solano County officials, who then attached his letter to a next-day request that the FAA reconsider the DNH decision in FPL's case.[125]

On 15 October 2009, the FAA notified Solano County that it was denying the reconsideration request.[126] The FAA stated it had followed its procedures and

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February 2009. Potential impacts to both the military mission and provision of services to civilian aircraft in the Bay-Delta area were considered. Understanding the fact that the Montezuma Hills Wind Resource Area (WRA) has approximately 815 wind turbine generators established and the petitioner is requesting to build an additional 31 turbines, the results of this study concluded that there was "no significant impact" to the airspace and air traffic control services provided to aircraft in the vicinity of the WRA . . . ."

[122] Findley letter, *supra* note 27.

[123] *Id*.

[124] *Id*. (emphasis in original).

[125] Letter from Mr. Lee Axelrad, Deputy Cnty. Counsel, Solano Cnty., to Manager, Air Space Rules Div., FAA, (Sept. 4, 2009) (on file with author). Solano County's request included only FPL's turbines. Any review petition must be filed within thirty days of the FAA's decision. Because more than thirty days had elapsed since the FAA's DNH decision for SMUD, Solano County could not request review of that decision. In the absence of a petition for review, the FAA's decision becomes final 40 days after issue. If a petition is filed, the decision's effective date is delayed until the matter is resolved. See 14 CFR § 77.37(a) and the Handbook, para 7-1-5(b) and 7-1-5(c).

[126] Letter from Elizabeth L. Ray, Dir. of Syss. Operations Airspace and Aeronautical Info. Mgmt., Air

confirmed the results of the original evaluation. While the FAA acknowledged the turbines would impact the ASR-11, the agency found "no substantial adverse impact" and no hazard to navigation.[127] The agency also stated that it considered the Air Force to be "team members" when conducting aeronautical studies and that the agency regularly met with Air Force officials concerning the obstruction evaluation program. The FAA further stated the Air Force "sets their own parameters and standards for the cases it wants to evaluate."[128] Finally, the agency correctly noted that the Air Force received a copy of the study and the "USAF" responded with no objection.[129]

The FAA's denial left the DNH actions in place and Travis and AMC in a quandary. Neither Travis nor AMC officials were satisfied with the FAA's decision. They remained concerned the FAA reached its conclusion without a validated tool to assess the cumulative impact future turbine projects could have on the ASR-11. Additionally, this experience exposed deficiencies in how the Air Force responded to FAA requests for inputs into the obstruction evaluation process. In determining how to proceed, they wanted to address both issues. Before deciding on a final course of action, they considered but ultimately rejected other options, discussed next.

IV. Rejected Options to a Squally Problem

A. Internal Resolution through the U. S. Attorney General

Aside from repeatedly bringing its concerns to the appropriate FAA officials and elevating them as necessary, the Air Force had limited options in such a disagreement between federal agencies. While the U.S. Attorney General is authorized to decide issues of law between different executive departments, this authority does not extend to questions of fact.[130] The issue between the Air Force and the FAA was one of fact, not law. AMC's and Travis' review of the wind turbines' impact on the ASR-11 concluded that future development had the potential to degrade its performance below acceptable levels. The FAA's aeronautical study came to the opposite conclusion. Resolving this dispute would require an assessment of

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Traffic Org., to Lee Axelrad, Office of Solano Cnty. Counsel, (Oct. 15, 2009) (on file with the author).

[127] *Id.*

[128] *Id.*

[129] *Id*. By "USAF" the FAA is apparently referring to the 84 RADES and AMC/A3AT studies referenced *infra.* This is an understandable conclusion. The FAA provided the Air Force's OE/AAA with a request for Air Force inputs about the FPL turbine project. Just over two weeks later, the Air Force's OE/AAA provided the requested response indicating FPL's project would have "minimal impact" on long-range radar and would not physically obstruct aircraft at TAFB. It was natural for the FAA to conclude that response—and not the later contrary comments of TAFB, AMC or Lt Gen Findley—as the final and considered Air Force opinion on the FPL turbine project. As the FAA noted in their response to Solano County, the Air Force is "responsible for its internal coordination and for notifying the appropriate offices."

[130] 28 U.S.C. §§ 511-513 (2006). The provision applicable to the military services is 28 U.S.C. § 513. The Attorney General has delegated this authority to the Office of the Legal Counsel. *See* Department of Justice website, http://www.justice.gov/olc/opinions.htm (last visited May 13, 2012).

the merits of the different studies—precisely the sort of dispute excluded from the Attorney General's review.[131]

B. Solano County Option

As noted earlier, Solano County delayed enXco's wind farm project when the Air Force could not[132]—an occurrence that suggested the two agencies should explore other ways the county could assist the Air Force when their interests coincided. Though the Air Force's interest in Travis' continued operation is manifest, state law also gives Solano County a statutory basis for the same interest. While California recognizes federal supremacy regarding the operation, control and safety of the airways,[133] state law also requires county officials to encourage development around military airports that is consistent with the safety and noise standards developed by the installation.[134] Responding to base closures due to development that interfered with base operations, the California legislature noted the military is a "key component of California's economy" and that protecting military installations was "in the public interest."[135] Solano County thus was legitimately interested in preventing further degradation of Travis' radar, which in turn could lead to decreased or abolished flying operations at the base. Because the Air Force is part of the executive branch, it could not contest the FAA's DNH decisions in court.[136] Solano County, however, as a state entity, could request the FAA to review its decision.[137] If not satisfied, the county could challenge the FAA's decisions in federal court, as a Nevada county had done in a case that set out the issues such a challenge would have to confront to be successful.[138]

In *Clark County v. FAA*, county officials succeeded in overturning no-hazard determinations for wind turbines that both presented a physical obstruction and degraded radar performance.[139] A wind farm developer planned to construct eighty-three four-hundred-foot wind turbines ten miles southwest of a proposed new airport.[140] Clark County studies revealed the turbines intruded into the runway's departure slope.[141] In addition, another study showed the turbines could impact aviation safety by creating false and/or intermittent targets on the airport's radar.[142] Two offices within the FAA raised concerns about the turbine's impact on the radar, but the FAA dismissed them.[143] As in the Travis situation, the FAA conducted its

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[131] Obstruction to Navigation, 21 Op. Att'y Gen. 594 (1897).
[132] *See supra* text accompanying notes 55-77.
[133] Cal. Pub. Util Code § 21240 (Deering 2010).
[134] Cal. Pub. Util.Code § 21675 (Deering 2010).
[135] Muzzy Ranch Co. v. Solano Cnty. Airport Land Use Comm'n, 164 Cal.App.4th1, 16 (Cal.App. 1 Dist., 2008).
[136] U.S.C., *supra* note 130.
[137] 14 CFR § 77.37(a) (2010).
[138] 49 U.S.C. § 46110 (2005).
[139] *See generally* Clark County, Nev. v. FAA, 522 F.3rd 437 (D.C. Cir. 2008).
[140] *Id*. at 438.
[141] *Id.* at 440, 442.
[142] *Id.* at 442.
[143] *Id*.

own aeronautical study, concluded there was no problem, and issued a DNH for each of the eighty-three turbines.[144] When Clark County sued, the FAA responded by urging the court to dismiss the case because Clark County lacked standing to bring the action and its petition was not ripe.[145] The FAA also claimed that even if it did not prevail on the first two issues, its no-hazard determinations were reasonable and appropriate[146].

The court rejected all the FAA's contentions. Clark County established standing by demonstrating the radar problems created by the turbines and then showing it would suffer injury because the FAA's DNH rulings would allow construction of those same problematic wind turbines.[147] In denying the ripeness claim, the court noted that the FAA's DNH rulings were the only decisions the FAA would make. At oral argument, the FAA conceded that though the determinations are subject to review and renewal, a later challenge likely could not object to the initial DNH decision. The court found this concession persuasive on the "ripeness" issue.[148] To assess the reasonableness of the FAA's decision, the court reviewed the FAA's decision in accordance with the Administrative Procedures Act to determine if the agency's action was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law."[149] Finding that the FAA had failed to adequately explain its decisions regarding either the physical obstruction evidence or provide "any coherent explanation countering the concerns about radar interference," the court vacated the FAA's determinations.[150]

Like Clark County, Solano officials probably could have demonstrated they had standing and a ripe case and quite possibly that no convincing evidence supported the FAA's decision. Solano County had standing because it could first establish that the existing wind turbines had adversely affected Travis' radar. Then, the county could show it suffered injury because the FAA's DNH rulings would permit the construction of turbines that could further degrade the radar and imperil Travis AFB operations—which Solano County had a statutory duty to protect.[151] For the same reasons stated in the Clark County case, this matter would also be ripe for decision.

In addressing whether the FAA's decision was arbitrary, capricious or an abuse of discretion, Solano County could have pointed out that, as in Clark County's case, the FAA's own technicians identified a problem with the wind turbines that

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[144] *Id.* at 441.

[145] *Id*. at 440.

[146] *Id.*

[147] *See id.* at 440. If the FAA had determined the wind turbines would hazard air navigation, Solano County officials (like their counterparts in Clark County NV) would have been compelled to stop the project as further construction would not be compatible with operations at Travis AFB. *See* Shutt Moen Assocs., Travis Air Force Base Land Use Compatibility Plan: Solano County, California, Table 2A (2002) *available at* http://www.co.solano.ca.us/civicax/filebank/blobdload.aspx?blobid=3929. (adopted by Solano County Airport Land Use Commission).

[148] *See id*. at 441.

[149] *See id*. at 441 (referencing the standard defined at 5 U.S.C. § 706(2)(A) (2006)).

[150] *Id.* at 443.

[151] *See supra* notes 133, 134 and 138 and text accompanying note 147.

the agency ultimately disregarded. It also would have had the benefit of radar studies showing the ASR-11 was missing at least fifteen percent of PSR or Primary Surveillance Radar from general aviation aircraft over the WRA. Significantly, the FAA's lack of a validated predictive model to assess the impact of further turbine construction would weaken the FAA's case—as would Lt Gen Findley's opinion that further development without such a tool would "invite catastrophe." With these facts, a court could conclude that the turbines' effect was not only "adverse" but so considerable as to have a "substantial adverse" effect on the Travis ATC radar. Based on these circumstances, the FAA should have issued a notice of hazard,[152] and failing to do so could be construed as an abuse of discretion. In sum, Solano County might have prevailed on this last point unless the FAA could explain how it arrived at its DNH ruling despite the demonstrated decrease in detection and radar performance over the WRA. However, shortly before the 15 October 2009 FAA decision denying the County's request for reconsideration, the winds of change began to blow . . . .

V. A Cooperative Solution But Not "The" Solution

Because officials at both AMC and Travis had extensive involvement with Solano County and the wind-farm developers, all parties trusted each other. As noted above, with the DNH in hand, the developers could have made a strong case for their projects before Solano County. Even so, enXco, FPL and SMUD voluntarily agreed not to proceed with turbine construction until the radar issue was resolved. The willingness of all parties to work with the base to resolve this issue led to a more cooperative, sustained approach without resort to litigation.[153] During ongoing discussions with wind-farm developers and the County, Air Force officials, with the assistance of the U.S. Transportation Command (USTRANSCOM),[154] formally invited developers to help the Air Force find a solution to the radar issue by participating in a Cooperative Research and Development Agreement (CRADA).[155]

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[152] *See* text accompanying notes 121 and 125.

[153] One option Air Force officials considered was the creation of a second "Joint Technical Working Group" as was done for enXco's Shiloh II project. This approach was tempting because it had worked previously, but it had drawbacks, too. First, resolution of the issue took almost one year and stalled development of this important renewable energy source. Second, and more important, adopting this approach would not address the concerns expressed by AMC and Travis to the FAA. The FAA reached its DNH finding for FPL's and SMUD's projects without a verifiable means to assess the cumulative impact additional turbines may have on the ASR-11's performance. While not rejecting a joint technical team, AMC and Travis AFB wanted to ensure any solution to the present wind turbine issues also included a means to assess the impact of further development in the WRA.

[154] The United States Transportation Command, located at Scott Air Force Base, Ill., was established in 1987 and is one of 10 U.S. unified commands. As the single manager of America's global defense transportation system, USTRANSCOM is tasked with the coordination of people and transportation assets to allow our country to project and sustain forces, whenever, wherever, and for as long as they are needed. USTRANSCOM has a Technology Transfer and Cooperative Research and Development Agreements Division with the capability to enter into technology exploration partnerships with non-federal entities. *See* U.S. Transportation Command, http://www.transcom.mil (last visited May 13, 2012).

[155] On 30 Sep 2009, Solano County officials hosted a "Travis AFB Radar—Wind Turbine Co-

A CRADA permits the federal government to collaborate with nonfederal entities on research projects of mutual interest.[156] While CRADA participants share personnel and resources, non-federal collaborating parties do not receive federal funds.[157] Because CRADAs can be executed quickly,[158] they are an effective means of quickly bringing together talented people and resources. In this case, enXco, FPL, and SMUD all participated.[159] Additionally, other CRADA collaborators provided technical support, including commercial companies Westslope Consulting, JDA Aviation Technology Solutions and Morgan Aviation,[160] and two governmental entities—the Air Force Flight Standards Agency and the Department of Transportation's Volpe National Transportation Center. The Department of Energy's Idaho National Laboratories provided an independent review of the technical work done under the CRADA.[161] The FAA did not participate in the CRADA.

The CRADA created two working groups, a Radar Working Group and an Operations Working Group.[162] To assess the ASR-11's performance, the Radar Working Group first obtained baseline radar and display data, then simulated the impact of the pending wind turbine projects.[163] With this data, the group used Westslope's innovative (and proprietary) methodology to manually manipulate components of the ASR-11, thus quantifying the pending projects' best- and worst-case scenarios on the radar.[164] The worst-case scenario (no radar returns from the

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Existence Workshop" where then Brigadier General (Brig Gen) Steven J. Lepper, AMC's Staff Judge Advocate at the time, personally extended an invitation to developers in attendance.

[156] 15 U.S.C § 3710a (2006).

[157] *Id*. at § 3710a(d)(1).

[158] The government first proposed the CRADA concept at a meeting on 30 September 2009 (E-mail from Colonel James C. Vechery, 60 AMW/CC, to Brig Gen Steven J. Lepper (Oct. 2 2009 8:47AM) (on file with author). By 7 December 2009, the wind turbine industry partners had signed the agreement; (E-mail from author to Brig Gen Steven J. Lepper (Dec. 9, 2009, 10:27AM) (on file with author).

[159] U.S. Transp. Command Coop. Research and Dev. Agreement, Assessment of Wind Farm Constr. on Radar Performance,(2009), (on file with the author). enXco Development Corporation, a U.S. subsidiary of enXco Incorporated is an affiliate of EDF Energies Nouvelle. The latter is a French company and therefore required special permission to join the CRADA. While awaiting formal approval, enXco was permitted to provide information on their construction and participate where possible.

[160] Westslope Consulting, JDA Aviation and Morgan Aviation provided radar technical expertise, federal aviation air space use and regulation and traffic service requirements at developer expense. USTRANSCOM CRADA Report, *supra* note 29.

[161] AFFSA, Volpe Transportation Systems Center and the 84th RADES represented the government's radar technical expertise. Idaho National Labs provided a government requested independent review of the Radar Working Group's results. USTRANSCOM CRADA, Radar Working Group Out-Brief, (19 Jan. 2010) [hereinafter USTRANSCOM CRADA Out-Brief] (on file with author).

[162] U.S. Transportation Command Cooperative Research and Development Agreement, Assessment of Wind Farm Construction on Radar Performance, Attachment A, Proposed Joint Technical Activities and Milestones, 7 December 2009, (on file with the author).

[163] USTRANSCOM CRADA Out-Brief, *supra* note 161.

[164] *Id*.

affected area) yielded a cumulative Pd drop on the radar display of 3.2 to 3.5 percent in the airspace above the WRA.[165]

The second group, the Operations Group, developed and recommended an operationally acceptable radar Pd rate.[166] This was one of the CRADA's major accomplishments, because the baseline Pd value provided a minimum standard "necessary to maintain aviation safety and efficiency of flight operations."[167] When used with the predictive simulation developed by the CRADA, a baseline provides a meaningful way to assess the impact of future wind farm development on the ASR-11 that the Air Force did not have before.[168]

After careful analysis, the groups determined that the three pending projects would not significantly degrade the ASR-11's performance nor would they impact air safety or flight operations.[169] The results proved to support the FAA's earlier finding that the proposed developments would not create an air safety hazard.[170] Based on these results, the Travis AFB commander notified Solano County and the wind farm developers about the results of the CRADA working groups. He informed them the Air Force was withdrawing its objections to the projects.[171]

While the CRADA achieved impressive and valuable results,[172] it was not "the" solution" nor a way to do an "end run" around the FAA. A near-term solution for Travis and nearby developers would include creating a system that could unilaterally analyze future development near Travis AFB, without the need for future CRADA collaborations. To date, the CRADA has not produced these results, although its work continues. Additionally, any solution should include FAA adoption—or at least consideration—of the CRADA's baseline Pd rate when assessing further WRA development. As discussed earlier, the FAA, the final arbiter on air safety in the navigable airspace, uses its own process to evaluate wind turbine effects.

Further, the CRADA cannot evade the FAA's process for the simple reason that the CRADA's results are not legally binding—which becomes especially important as additional developers who are not CRADA collaborators seek project approvals. Moreover, the CRADA's critical component was the willingness of the

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[165] *Id*.

[166] USTRANSCOM CRADA report, *supra* note 29.

[167] Letter from Col James C. Vechery, Commander 60th Air Mobility Wing, to Solano County Department of Resource Management (Jan. 19, 2010) (on file with the author); (The CRADA team determined a minimum average probability of detection (Pd) over the WRA at the radar scope of 75.3 percent surface to 4000 feet and 79.2 percent surface to 10,000 feet are the baseline values necessary to maintain aviation safety over the WRA).

[168] USTRANSCOM CRADA report, *supra* note 29.

[169] *Id.*

[170] *See generally*, Determination of No Hazard to Air Navigation, *supra* note 117.

[171] Letter from Col James C. Vechery, Commander, 60th Air Mobility Wing, Travis AFB CA, to Michael G. Yankovich, Solano Cnty. Dep't of Res. Mgmt.(19 Jan. 2010) (on file with the author).

[172] In October 2010, USTRANSCOM and the Volpe National Transportation Systems were selected as the winner of the 2010 Federal Laboratory Consortium for Technology Transfer (FLC) Mid-Atlantic Region Interagency Partnership Award for the collaborative work in transferring technology accomplished under the CRADA.

developers, Solano County, Travis and AMC to cooperate in fashioning a solution. The developers did not limit their legal options by participating in the CRADA. Only the FAA, exercising its authority governing safety issues in navigable airspace, can make the proposed Pd rates enforceable.

The CRADA results did vindicate the decision of all involved to cooperate rather than litigate. Based on the FAA's DNH findings, the developers could have tried in court to force Solano County to issue construction permits for their turbines. With AMC and Travis fearful of the potential consequences of further WRA development, Solano County might have acted to protect the county's interest in the base by seeking to overturn the FAA's DNH rulings. Based on the analysis in Section IV above, Solano County might have prevailed against the FAA and forced a "Determination of Hazard," but this would have been only a temporary setback for the developers. After obtaining data similar to that the CRADA provided, the developers would have been able to demonstrate to the FAA that their projects would not substantially degrade the ASR-11. By joining the CRADA, the parties avoided time-consuming and expensive litigation to arrive at the same point as they did otherwise. Travis and AMC withdrew their objections, Solano County issued the construction permits, and the developers built and are now operating the new turbines.

In November 2011, the CRADA partners extended the collaboration agreement for two years.[173] Collaborators continue to collect flight data for validating the predictive tool. Additionally, through various techniques, radar experts have continued to make software enhancements to Travis' radar performance using actual traffic and pre-planned test flights directly over the WRA. The improvement has been significant, even with construction and operation of the additional turbines.[174] Significantly, the dialog among all parties has continued with the prospect that future issues, if any, can be expeditiously resolved.[175]

VI. New Problem, New Legislation, New Procedures

Meanwhile, developments, largely centered around a long-range radar facility in Fossil, Ore., convinced Congress to change how the Air Force and the DOD respond to the challenges wind turbines present. This article next provides the context for the creation of these new procedures, set out in Section 358 of the 2011 NDAA[176]

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[173] E-mail from USTRANSCOM ORTA, to USTRANSCOM CRADA (5 Dec. 2011) (Subj Draft Modification 2).

[174] *See generally* Karen Parrish, *Pentagon Streamlines Approval for Energy Projects*, Am. Forces Press Service, July 26, 2011, *available at* http://www.defense.gov/news/newsarticle.aspx?id=64814 (noting the CRADA effort and how its results may be the model moving forward).

[175] E-mail from Greg Parrott, 60 AMW/JA, to Maj Thomas F. Collick, 43 AG/JA (12 Dec. 2011. 12:39 PM) (on file with the author).

[176] Skelton Act, *supra* note 78.

A. Long-Range Radar Problem in Oregon Generate Congressional Interest in FAA Process

As with the situation at Travis AFB, the controversy in Oregon involved the potential impact of a wind farm developer's plan to add new turbines to an area already congested with them. The Shepherds Flat area, near Fossil, contained approximately 1800 wind turbines.[177] To this number, the developer, Caithness Energy, planned to add 338. Like the developers around Travis, Caithness Energy notified Air Force officials about the proposal, to which officials responded they had no objection to the proposed development.[178] Erroneously, but understandably, believing this local endorsement indicated Air Force-wide approval for the project, the company continued expensive site preparation.[179] When this work was complete and Caithness was ready to begin construction, the company gave the FAA the required thirty-day notice.[180]

As part of the FAA evaluation process, Air Force officials first considered the possibility the new turbine project could negatively impact their radars. Specifically, the Air Force worried that the additional turbines could degrade the ability of radars at Whidbey Island Naval Air Station, Wash., and Mountain Home AFB, Idaho, to track aircraft.[181] In addition, the North American Aerospace Defense Command (NORAD) and the U.S. Northern Command (NORTHCOM) were particularly concerned about the proposed development's effect on the long-range Air Surveillance Route radar at Fossil.[182] NORAD relies on this site to provide detection and tracking information that allows the command to decide whether to deploy fighter aircraft in response to a threat.[183]

Like their counterparts at Travis AFB, the DOD radar experts had no way to assess the impact, if any, the additional turbines would have on their radar. Declining to accept the unknown level of degradation risk this set of turbines posed, Air Force officials advised the FAA of their concerns.[184] Based on the Air Force's objections, the FAA issued a "Notice of Presumed Hazard" on 1 March 2010—devastating news for Caithness Energy.[185] Not anticipating an issue at this late stage of the project, Caithness Energy had to cancel long-standing plans to begin turbine construction

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[177] *Impact of Wind Farms on Military Readiness: Hearings Before the Subcomm. on Readiness of the H. Comm. on Armed Servs.*, 111th Cong., at 43 (2010) (statement of Dr. Dorothy Robyn, Deputy Under Secretary of Defense for Installations and Environment), *availale at* http://www.gpo.gov/fdsys/pkg/CHRG-111hhrg61770/pdf/CHRG-111hhrg61770.pdf

[178] *Id.*

[179] *Id.*

[180] *Id.*

[181] *Id*.

[182] *Id.*

[183] *Id.*

[184] Scott Learn, *Air Force Concerns About Radar Interference Stall Huge Oregon Wind Energy Farm*, OregonLive.Com, April 14, 2010, http://www.oregonlive.com/environment/index.ssf/2010/04/air_force_concerns_about_radar.html.

[185] *Id*.

in May 2010.[186] The FAA's decision and the resulting $2 billion Caithness' project cancellation attracted significant Senate and media attention.[187]

Ultimately, the Caithness Energy's turbine project was approved. As with the wind turbines in Solano County's WRA, DOD's further study of Caithness Energy's proposed turbine project revealed new turbines would have less impact than initially thought.[188] In late April 2010, the DOD commissioned a sixty-day study by the Massachusetts Institute of Technology to develop mitigation measures. The study suggested two near-term mitigation measures—an adjustment of the radar settings for optimal performance at the Fossil radar and adding software to essentially edit out false targets (The DOD has since implemented some of these measures).[189] Based on the DOD study and the expected mitigation measures, the Air Force withdrew its objections to the project on 30 April 2010.[190] Approximately one year later, deliveries of the first large turbines began in May 2011, with construction of the 338-turbine site scheduled for completion in 2012.[191]

B. Congressional Focus on Long-Range Radar Drives Legislation

Two months after the Air Force withdrew its objections regarding Shepherds Flat, in June 2010, the Readiness Subcommittee of the House Armed Services Committee held a hearing on the impact of wind turbines on military readiness. Perhaps because the Shepherds Flats situation was fresh in their minds, subcommittee members took testimony on the national security issues raised by wind turbine development and its impact on long range radars.[192] Then subcommittee chairman, former Rep. Solomon Ortiz, a Texas Democrat, noted wind energy's growing importance coupled with increasing military objections to these projects based on conflicts with radars and existing training routes. He added that he was concerned

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[186] *Id.*

[187] *Id*.; Juliet Eilperin, *Pentagon Objections Hold Up Oregon Wind Farm*, Wash. Post, Apr. 16, 2010, *available at* http://www.washingtonpost.com/wp-dyn/content/article/2010/04/15/AR2010041503120.html; Parrish article, *supra* note 174.

[188] Press Release, Office of the Deputy Under Secretary of Defense - Installations and the Environment, Department of Defense notifies Federal Aviation Administration - wind turbine development plans in Northern Oregon and Southern Washington pose no additional risk to national security (1 Oct. 2010), *available at* http://www.acq.osd.mil/ie/download/20101001-turbines.pdf.

[189] *Id.*

[190] *Id*.

[191] Caleb Denison, *Big Wind Farm Gets Big Turbine Delivery,* EarthTechling (May 31, 2011), http://www.earthtechling.com/2011/05/big-wind-farm-gets-big-turbine-delivery/.

[192] Impact of Wind Farms hearing, *supra* note 177 Statement of Rep. John Garamendi, *available at* http://democrats.armedservices.house.gov/index.cfm/hearings?ContentRecord_id=f0755a71-d039-491f-a724-fe4778cabc7c. Rep Garamendi represents California's 10th District which includes Solano County. He noted the hearing focused on long-range radar and attempted, with limited success, to elicit testimony from Ms. Robyn concerning the ATC radar at Travis AFB. Rep. Garamendi took the opportunity to express his approval of the way wind developers and the military worked together to resolve issues at Travis AFB.

by the "lack of a coordinated, well-established review process within the Department of Defense to provide timely input for these green energy initiatives."[193]

Dorothy Robyn, deputy undersecretary of defense for installations and environment, testified before the committee and expanded on Rep. Ortiz's comment. She recommended the subcommittee support creating a single DOD point of contact for developers on renewable energy sitings, describing the proposed point of contact as a sort of "1-800-Butterball"—the equivalent of a turkey-cooking hotline that wind developers could consult to receive an authoritative and comprehensive DOD position.[194] Because technological solutions were critical, Robyn urged federal agencies to "realign their research and development priorities to give greater emphasis to this issue."[195] Though her focus was primarily long-range radars, she did observe that wind-turbine-induced degradation of ATC radars could adversely affect DOD training missions.[196]

Wind-energy developers were represented by Stu S. Webster, director of wind development, permitting, and environmental at Iberdrola Renewables.[197] Webster told the subcommittee that a "better system for engaging federal agencies on radar and airspace issues" was necessary to avoid jeopardizing wind projects and meeting the nation's energy goals.[198] He added that the wind industry supported establishing a "single entity" to review wind projects in DOD.[199] To help the industry achieve the nation's energy goals, he urged the subcommittee to develop an improved process for early consultation, establish a proactive plan to upgrade existing radars and invest in significant research and development.[200]

The final witness was from the FAA—Nancy Kalinowski, vice president for system operations services of the FAA's Air Traffic Organization, whose office is responsible for assessing the impact of development that impinges on the country's navigable airspace.[201] During her testimony, Kalinowski pointed out the steep rise in wind turbine cases from 3030 in 2004 to 25,618 in 2009, before dropping to 18,685 cases in 2010. While the FAA reviews each turbine separately, she acknowledged the wind turbines' cumulative effect will "obviously be more significant based on the total number grouped together."[202] Kalinowski questioned the adequacy

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[193] *Id.* Statement of Rep. Solomon Ortiz, Chairman, Subcommittee on Readiness.

[194] *Id.* Testimony of Dr. Dorothy Robyn, Deputy Under Secretary of Defense (Installations and Readiness).

[195] *Id.*

[196] *Id.*

[197] According to its website, Iberdrola Renewables, Inc. is headquartered in Portland, OR and is the second-largest wind operator in the U.S. and is generating power from more than 40 renewable energy projects for its utility-scale customers in the United States, *see* IBERDROLA RENEWABLES, http://www.iberdrolarenewables.us/business-overview.html (last visited May 13, 2012).

[198] Impact of Wind Farms hearing, *supra* note 177 Statement of Mr Stu S. Webster, Director of Wind Development Permitting and Environmental, Iberdrola Renewables.

[199] *Id.*

[200] *Id.*

[201] *Id.* Statement of Ms. Nancy Kalinowski, Vice President, Systems Operations Services, Air Traffic Organization, Federal Aviation Administration.

[202] *Id.*

of the forty-five year-old requirement that her agency receive notice no later than thirty days before construction. That standard, she stated, was appropriate when the FAA evaluated the impact of single, stationary structures—but not in complex wind-turbine cases.[203] As discussed next, many of the concerns highlighted by these witnesses were incorporated into new legislation that formalized DOD's role in the obstruction review process.

C. Section 358 of the Ike Skelton NDAA and its Implementing Regulation

The legislation quickly changed how the Air Force and DOD respond to renewable energy projects that have the potential to impact their operations. The statute made it a DOD objective to ensure that the "robust development of renewable energy sources" and the "increased resiliency of the commercial electric grid" move forward while "minimizing or mitigating" adverse impacts on military operations and readiness.[204] To this end, the statute created an executive agent, imposed two sets of requirements to be implemented within 180 and 270 days, respectively, and required the DOD to surmount new, and higher, hurdles before deciding a renewable energy product presents an "unacceptable risk." Each will be discussed below.

The statute required the Secretary of Defense to appoint an "executive agent"[205] and a lead organization from the DOD to carry out the reviews required by the new law.[206] The executive agent's role is to oversee a clearinghouse to coordinate DOD review of renewable energy projects' effects on military capability.[207] The new law unequivocally makes the executive agent the one person (senior officer as discussed later) who will speak to the FAA for the Air Force and DOD on wind turbine and other renewable energy issues. Additionally, the executive agent is responsible for developing "planning tools" necessary to determine the acceptability of proposals that are ultimately submitted to the FAA for review. Once fully developed, the planning tools will likely include predictive models or simulation tools like the one being developed by Westslope.[208]

Not later than 180 days after enactment, the statute required the executive agent review OE/AAA applications received from the FAA that could adversely impact military operations or readiness.[209] In addition to assessing the scope and duration of the impact, if any, the project might have on operations and readiness,

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[203] *Id.*

[204] Ike Skelton Act, *supra* note 78.

[205] As noted in Karen Parrish's *Pentagon Streamlines Approval for Energy Projects*. Mr. David Belote, a retired United States Air Force Colonel and the former air base wing commander at Nellis AFB NV, had considerable experience responding to the challenge of renewable energy projects near an active military base and major test and training range.

[206] *See supra* note 78 at § 358(b).

[207] Parrish article, *supra* note 174.

[208] *See supra* note 163 and accompanying text.

[209] *See* Skelton Act, *supra* note 78 at § 358 (c). The requirements of the "preliminary review" described in this section are set out in Section 358(c)(1)-(4).

the executive agent must identify "feasible and affordable actions"[210] that DOD, the developer or "others"[211] could take to mitigate adverse impact and minimize risk to national security. The executive agent was required to work with other federal agencies to ensure his or her response to the FAA was "integrated" and "timely."[212]

Further, the executive agent was required to establish procedures for a "coordinated consideration" of responses to or review requests from local officials and developers, including guidance to each military installation on implementing these procedures. Finally, the statue imposed a public notice requirement on the executive agent. The statute required the executive agent to develop procedures to conduct early outreach to parties submitting applications to the FAA's OE/AAA for projects that could impact operations or readiness, as well as extending the outreach to the "general public."[213] Both the general public and developers must receive clear "notice on actions being taken"[214] and be given the opportunity to comment.[215]

Beginning no later than 270 days from enactment, the executive agent was required to develop a "comprehensive strategy for addressing the military impacts" of projects requiring OE/AAA analysis.[216] In addition to assessing the "magnitude of interference"[217] created by these projects, the executive agent was required to identify geographic areas that are or may become likely sites for wind turbine projects.[218]

Under the new process, where development might adversely impact military operations or readiness, the executive agent will assess the threat. After assessment, the executive agent will categorize the area as high risk, medium risk, or low risk. The executive agent will share his assessment with interested parties and will also identify "feasible and affordable long-term actions"[219] to mitigate the adverse impacts of these projects. Potential mitigation actions could include reviewing DOD's research and development priorities, modifying military operations to accommodate these projects, recommending upgrades or modifications to existing DOD systems, acquiring new systems by the DOD or other federal agencies and modifying to the proposed project.

DOD hazard assessments begin with the executive agent's preliminary review previously described.[220] The DOD is required to complete its assessment and respond to the FAA no later than thirty days after a developer files an OE/AAA

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[210] *See id.* § 358 (c)(1)(B).

[211] *Id.*

[212] *Id.* § 358 (c)(3).

[213] *Id.* § 358 (c)(4).

[214] *Id*.

[215] *Id.*

[216] *See id*. § 358(d)(2). The elements of the "comprehensive strategy" discussed here are set out in Section 358(d)(1) and Section 358(d)(2).

[217] *Id*. § 358(d)(2)

[218] *See infra* notes 222-227 and accompanying text for a discussion of the progress made to date in complying with the act.

[219] Skelton Act, *supra* note 78 at § 358(d)(2)(C).

[220] *See id.* at § 358(e). The assessment requirements discussed in this paragraph are detailed in Section 358(e)(1)-(4)

request with the FAA. The DOD's preliminary assessment will describe the risk of adverse impact on military operations and readiness and the mitigation needed to address the risk. The Secretary of Defense cannot object to a developer's OE/AAA filing on the basis of "unacceptable risk" unless the Secretary determines—after full consideration of mitigation actions—that approval of the project would "result in an unacceptable risk to the national security of the United States."[221] Moreover, the Secretary must notify congressional defense committees of his action. The notification must include the basis for the decision, discuss the operational impact that led to the decision and explain the mitigation options considered why they were not adequate or feasible.

Interestingly, the DOD, other federal agencies, alternative energy associations and nongovernmental organizations had already been collaborating on new review procedures.[222] In early December 2010, industry representatives had agreed to approach Congress with DOD officials in an effort to establish review guidelines, but that effort was cut short with the passage of the authorization act in early January 2011.[223] Perhaps their efforts and prior partnerships helped the newly created clearinghouse to move quickly.

Consistent with the legislation, the clearinghouse has reached several significant milestones. On 26 July 2011, officials reported that the clearinghouse identified 249 backlogged projects in thirty-five states and Puerto Rico.[224] Of those, 229 were approved representing ten gigawatts of wind-generated energy.[225] The clearinghouse worked with all branches of the services, the FAA and the Bureau of Land Management in reaching this conclusion. Further, after being posted for public comment in October 2011,[226] the strategy and the requisite "procedures" have since largely been outlined in a section of federal regulations titled "Mission Compatibility Evaluation Process."[227]

The new procedures provide for informal and formal project reviews.[228] The informal review triggers when the clearinghouse receives a request from a project proponent. The proponent is to supply as much information about the project as possible, including the geographic location with coordinates, the nature of the project and any other information that would assist the Clearinghouse to accurately and reliably review the proposed project.[229] Within five days, the clearinghouse is to forward the information to those DOD components that may have an interest in reviewing the project.[230] Within forty-five days (fifty days after first contract), the clearinghouse must notify the project proponent of its determination that the proposal

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[221] *Id.* at § 358(e)(2).

[222] Parrish article, *supra* note 174.

[223] *Id*.

[224] *Id*.

[225] *Id*.

[226] Mission Compatibility Evaluation Process, 76 FR 65112-02, 65115 (Oct. 20, 2011).

[227] See 32 C.F.R. §§ 211.1 – 211.12 (2002).

[228] *Id*. at §§ 211.7 and 211.6.

[229] *Id.* at § 211.7(a).

[230] *Id.* at § 211.7(b).

will or *will not* have an adverse impact on military operations and readiness.[231] If the clearinghouse expects an adverse impact, it must immediately notify the proponent, seek discussions regarding project mitigation and designate a DOD component to serve as an agent to discuss mitigation.[232] Parties are then to seek mitigating solutions.[233] The regulation is silent regarding an impasse at this point, but the steps should at least ensure the parties have met and identified issues early in the review process should the proponent continue toward a formal review.

Formal review begins when the clearinghouse receives a properly filed application pursuant to 49 U.S.C. §44718 from the Secretary of Transportation.[234] The clearinghouse then forwards the proposal to DOD components it believes has an interest in the project, and those offices must then respond within twenty days.[235] Additionally, the DOD offices responsible for installations and environment, readiness and operational test and evaluation must provide a preliminary assessment of the level of risk of an adverse impact on military operations and readiness and the extent mitigation may be needed.[236] No later than thirty days from receiving a proposal, the clearinghouse must notify the Secretary of Transportation that the proposal *may* or *may not* have an adverse impact on military operations and readiness.[237]

Like the informal procedures, for those projects that may have an impact, the clearinghouse must seek discussions regarding project mitigation and designate a DOD component to serve as an agent to discuss mitigation.[238] The applicant then has five days to respond to the invitation to discuss recommendations and mitigation measures. Additionally, the clearinghouse is to notify the Secretaries of Transportation and Homeland Defense[239] and invite the administrator of the FAA and the Secretary of Homeland Security to the discussions.[240]

Unlike the informal procedures, the formal process does provide for an impasse. Absent a written agreement to extend discussions between the designated DOD component and the applicant, the discussions shall not extend beyond ninety days from initial notification to the applicant.[241] If the designated DOD component and applicant remain in a stalemate, the clearinghouse must determine that the proposal, as it may have been modified by the applicant, would result in an

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[231] *Id.* (As defined in the regulation, "adverse impact on military operations and readiness" is defined as "[a]ny adverse impact upon military operations and readiness, including flight operations, research, development, testing, and evaluation, and training that is demonstrable and is likely to impair or degrade the ability of the armed forces to perform their warfighting missions.")

[232] *Id.*

[233] *Id.*

[234] *Id.* at § 211.6.

[235] *Id*.

[236] *Id.* at § 211.5(c).

[237] *Id.*

[238] *Id*.

[239] *Id*.

[240] *Id.*

[241] *Id.*

unacceptable risk to national security.[242] Whether or not the clearinghouse concurs with the DOD component, the clearinghouse forwards its recommendation to the senior official. The senior official then makes his independent recommendation to the senior officer.[243] At this point, the senior officer ultimately makes a determination on behalf of the DOD regarding whether or not the applicant's project, including mitigation measures of the DOD and the applicant, would result in an unacceptable risk to the national security and notifies the Secretary of Transportation of his decision[244] If an unacceptable risk determination is made, the senior officer must identify which of the three criteria creates the unacceptable risks to national defense.[245] At this time, the senior officer must report this determination to Congressional defense committees along with supporting rationale.[246] If necessary, the senior official and senior officer may seek an extension of time from the Secretary of Transportation.[247]

In November 2011, in another significant milestone, the DOD partnered with the National Resources Defense Council to release a new mapping tool to help steer renewable energy projects away from areas where they would interfere with military activities or environmentally sensitive areas.[248] The Renewable Energy and Defense Database (READ) uses geospatial data to show if a potential site conflicts with installations, flight training routes, testing and training ranges or other military activities, including sites where projects such as wind turbines could interfere with technical radar systems.[249] It allows developers to enter geographic coordinates for potential projects early in the planning process.[250]

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[242] *Id*. (An unacceptable risk to the national security of the U.S. is defined as, "the construction, alteration, establishment, or expansion of a structure or sanitary landfill that: (1) endangers safety in air commerce, related to DOD activities; (2) interferes with the efficient use and preservation of the navigable airspace and of airport traffic capacity at public-use airports, related to the activities of the DOD; (3) Will significantly impair or degrade the capability of the DOD to conduct training, research, development, testing, and evaluation, and operations or maintain military readiness.")

[243] *Id*. (As outlined in 32 C.F.R. § 211.5 "Responsibilities," the "senior officer" is the Deputy Secretary of Defense and is the only DOD official that may convey to the Secretary of Transportation a determination that a project would result in an unacceptable risk to the national security. The Under Secretary of Defense for Acquisition, Technology, and Logistics is designated as the "senior official." Only the senior official can recommend to the senior officer that a project would result in an unacceptable risk to the national security.

[244] *Id.*

[245] *Id.*

[246] *Id*. at § 211.10.

[247] *Id.* at § 211.

[248] Donna Miles, *Database Helps Identify Renewable Energy Sites*, American Forces Press Service, Nov 9, 2011, *available at* http://www.defense.gov/news/newsarticle.aspx?id=66019.

[249] *Id*.

[250] *Id*.

VII. Moving Forward

Under the new statute, the DOD and the Air Force were forced to fine-tune their response procedures in relatively short order. While this undoubtedly caused a lot of work for clearinghouse pioneers, the DOD and the Air Force are already reaping benefits.[251] Ironically, as mentioned in the letter from nine senators[252] and the subsequent Congressional testimony,[253] a source of frustration to the developers—the lack of a single voice speaking on behalf of the DOD (much less the Air Force)—was similarly frustrating for officials at Travis and AMC.[254] The new procedures should curb situations like those involving FPL's turbine project, where one pair of Air Force organizations tells the FAA that FPL's turbines' impact will be "minimal," while another pair warns the FAA that the same turbine project "invites catastrophe." But perhaps more important is the synergy this clearinghouse will bring to all proposal reviews.

When Travis encountered this relatively new phenomenon nearly five years, legislation had not yet outlined DOD review procedures. As the highly technical issues surfaced, personnel in the field were not equipped to deal with identifying specific causes, much less mitigation measures to limit impacts. At that time, they dealt with the issue while seeking out assistance within the Air Force, DOD and beyond. Building that network took valuable time. Many times during the process, personnel working the wind-turbine issues learned of capabilities as projects were being approved. A CRADA involving multiple agencies to study this phenomena was still nearly two years off. Scientist from MIT, like those that assisted in developing mitigation measures at Sheppard's Flat, were not readily available. Despite the seemingly tight regulatory timelines imposed on the DOD to identify problems and possible solutions, establishing the DOD-level clearinghouse, with its supporting capabilities, vast experience and readily identifiable chain of command from installation to the clearinghouse, has in and of itself markedly enhanced the response.[255]

Yet another source of frustration for developers was also, ironically, again frustrating for officials at Travis—the timing of the Air Force involvement. As demonstrated by the Shiloh II project, developers were well on their way to project approval when the issue surfaced. On the flip side, once the problem surfaced, Travis and AMC had very little time to understand the extent of the issue before making comments within the timeframes of the California environmental review process. As in the FPL case, the Air Force raised its concerns after the FAA issued the DNH opinions to the developer. Such belated involvement, however unknowing and

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[251] *See generally*, Parrish article, *supra* note 174 (noting the CRADA effort and how its results may be the model moving forward).

[252] Letter from U.S. Senators, *supra* note 67.

[253] Impact of Wind Farms hearing, *supra* note 177; *see supra* at notes 192 - 203.

[254] Findley letter, *supra* note 27.

[255] *See generally*, Parrish article, *supra* note 174 (noting the CRADA effort and how its results may be the model moving forward).

unintentional, is not in the Air Force's interest and also tests the Air Force's good relations with local permitting authorities. Where, as was the case, the Air Force could not bring suit on its own behalf, overturning an erroneous DNH was a virtual impossibility. The Air Force's best opportunity to influence this process is to be engaged as a full partner with the developers as *early* as possible. The Renewable Energy and Defense Database, with its specific information regarding installations and their military activities, will go far towards alerting developers of these issues in the early planning phases.

Looking to the future, there are other solutions on the horizon to resolve air safety issues over wind farms. The FAA's Next Generation Air Transportation System modernization initiative includes overhauling radar surveillance. This technology involves on-board Global Positioning System receivers transmitting location and altitude to other nearby aircraft and air traffic controllers. After this system is fully operational (scheduled for 2020), many secondary surveillance radars will eventually be shut down. Ultimately, the Next Generation system offers a potential long-term solution for some ATC radar problems,[256] but its requirements do not apply to "see and avoid" airspace (operating without transponders) and to primary radar for homeland defense purposes.[257] Such a system could be complemented with regulations requiring planes transitioning immediately above places like the WRA to be equipped with the requisite GPS systems.[258] Other options explored have included the development of "stealth" turbines, which can absorb instead of reflect radar energy.[259] In the near term, a possible solution at other DOD installations could involve employing Westslope's methodology and the review process used and honed in CRADA collaboration for an independent predictive analysis. This would enhance the earliest stages of turbine planning, not only at Travis AFB, but for other potentially affected DOD installations and developers alike. As the CRADA research suggests, even if a predictive modeling or simulation tool is never fully honed, optimizing radar performance and software enhancements may mitigate the extent of this problem.[260] Hopefully, these and other potential solutions will be fielded and improved upon as both wind energy and aviation, including unmanned aviation, only continue to grow.

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[256] 14 C.F.R. pt. 91, *available at* http://edocket.access.gpo.gov/2010/pdf/2010-12645.pdf (site last visited June 25, 2010).

[257] *Id.*; *see also Air Traffic Services and Technology*, AOPPA Online, http://www.aopa.org/whatsnew/air_traffic/ads-b.html (last visited May 13, 2012).

[258] U.K. Civil Aviation Auth., Airspace Change Proposal Framework Briefing: Establishment of Transponder Mandatory Zone(s) around the London Array (LA) and the Thanet Offshore (TOW) Windfarms in the Eastern Thames Estuary (Mar. 26, 2010) *available at* http://www.ukfsc.co.uk/files/Consultations%20CAA%20DAP/NATMAC%20Informative%20Framework%20Briefing%20March%202010.pdf (discussing the United Kingdom Civil Aviation Authority exploring "Mandatory Transponder Zones").

[259] *See, generally* Martin LaMonica, *Wind Power Growth Limited by Radar Conflicts*, Cnet (Feb. 4, 2010) http://news.cnet.com/8301-11128_3-10447450-54.html.

[260] *Id.*

VIII. Conclusions

The wind turbine-induced radar issue was as unexpected as it was difficult to fully resolve. It demonstrated how one technological change—receiving a new radar feed—exposed an operational vulnerability base officials could not have foreseen. In such cases, it is difficult to be proactive and get ahead of such a technological puzzle. With wind energy as an important and fast growing resource to our nation, the Air Force is becoming a proactive partner in promoting safe, responsible wind energy development. In time, working through the relatively newly established "executive agent" and continuing to bring bright, talented people to bear should solve this problem will be solved. Equally important, and perhaps for an unforeseen technology of tomorrow, this difficult situation showed the benefits that can accrue to all parties where there is a willingness to try new ideas and cooperate with each other (versus litigate) toward a common goal.

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