THE AIR FORCE

LAW REVIEW

THE MASTER OPERATIONS LAWYER'S EDITION

- CONTRIBUTORS -

COMMANDER JOHN ASTLEY, III
MAJOR GRANT BLOWERS
LT COLONEL ARTHUR C. BREDEMEYER
CAPTAIN DAMS L. BROWN, II
LT COLONEL ANNE L. BURMAN
CAPTAIN DAVID P. S. CHARITAT
LT COLONEL ROBERT A. COE
COLONEL CHARLES J. DUNLAP, JR.

PROFESSOR RICHARD J. GRUNAWALT
CAPTAIN ROBERT G. HANSEMAN
MAJOR TERESA K. HOLLINGSWORTH
CAPTAIN JOSHUA E. KASTENBERG
BRIGADIER GENERAL WILLIAM A. MOORMAN
CAPTAIN JEFFREY S. PALMER
MR. W. DARRELL PHILLIPS
LT COLONEL MICHAEL N. SCHMITT

Volume 42, 1997
FOREWORD ............................................................................ iv
   Brigadier General William A. Moorman, USAF

ARTICLES

Disciplining the Force — Jurisdictional Issues in the Joint and Total Force ....... 1
   Major Grant Blowers, USAF
   Captain David P.S. Charitat, USAF

JAGs Deployed: Environmental Law Issues ........................................... 19
   Lieutenant Colonel Anne L. Burman, USAF
   Major Teresa K. Hollingsworth, USAF

Fighter Ops for Shoe Clerks ................................................................. 49
   Lieutenant Colonel Robert A. Coe, USAF
   Lieutenant Colonel Michael N. Schmitt, USAF

International Agreements: A Primer for the Deploying Judge Advocate ....... 101
   Lieutenant Colonel Arthur C. Bredemeyer, USAF

The Law of the Sea and Naval Operations ............................................ 119
   Commander John Astley III, USCG
   Lieutenant Colonel Michael N. Schmitt, USAF

Taming Shiva: Applying International Law to Nuclear Operations .......... 157
   Colonel Charles J. Dunlap, Jr., USAF

The Realities and Legalities of Information Warfare ............................. 173
   Captain Robert G. Hanseman, USAF
European Collective Security in the Next Millenium ......................... 201
  Captain Davis L. Brown, II, USAF

Claims Encountered During an Operational Contingency .................. 227
  Captain Jeffrey S. Palmer, USAF

The JCS Standing Rules of Engagement: A Judge Advocate’s Primer .... 245
  Professor Richard J. Grunawalt

Fiscal Law Constraints Upon Exercise-Related Activities .................. 259
  Mr. W. Darrell Phillips

The Legal Regime for Protecting Cultural Property During Armed Conflict ........................................................................ 277
  Captain Joshua E. Kastenberg, USAF
The Air Force Law Review is a publication of The Judge Advocate General, United States Air Force. It is published semiannually by the Air Force Judge Advocate General School as a professional legal forum for articles of interest to military and civilian lawyers. The Review encourages frank discussion of relevant legislative, administrative, and judicial developments.

The opinions expressed in this publication are solely those of the individual authors. The articles do not in any way promulgate policies or state the official opinions of The Judge Advocate General, USAF, or the Department of the Air Force. Other departments and agencies of the United States Government do not necessarily concur with the views expressed in the Review.

The Review solicits contributions from its readers. Information for contributors is provided on the inside back cover of this issue.

Readers who desire reprint permission or further information should contact the Editor, The Air Force Law Review, Air Force Judge Advocate General School (CPD/JAL), 150 Chennault Circle, Maxwell Air Force Base, Alabama 36112-6418. Official governmental requests for free copies, not under the depository program, also should be sent to the above address.


Distribution. The Review is distributed to Air Force judge advocates. In addition, it reaches other military services, law schools, bar associations, international organizations, foreign governments, federal and state agencies, and civilian lawyers.

Bound Copies. Readers should retain individual copies of the Review. The publisher does not supply bound volumes.
CONTENTS

FOREWORD ........................................................................................................... iv
   Brigadier General William A. Moorman, USAF

ARTICLES

Disciplining the Force - Jurisdictional Issues in the Joint and Total Force ....... 1
   Major Grant Blowers, USAF
   Captain David P.S. Charitat, USAF

JAGS Deployed: Environmental Law Issues.................................................... 19
   Lieutenant Colonel Anne L. Burman, USAF
   Major Teresa K. Hollingsworth, USAF

Fighter Ops for Shoe Clerks............................................................................... 49
   Lieutenant Colonel Robert A. Coe, USAF
   Lieutenant Colonel Michael N. Schmitt, USAF

International Agreements: A Primer for the Deploying Judge Advocate ....... 101
   Lieutenant Colonel Arthur C. Bredemeyer, USAF

The Law of the Sea and Naval Operations....................................................... 119
   Commander John Astley III; USCG
   Lieutenant Colonel Michael N Schmitt, USAF

Taming Shiva: Applying International Law to Nuclear Operations............ 157
   Colonel Charles J Dunlap, Jr., USAF
The Realities and Legalities of Information Warfare .................................173
Captain Robert G. Hanseman, USAF

European Collective Security in the Next Millenium ................................. 201
Captain Davis L. Brown, II, USAF

Claims Encountered During an Operational Contingency ............................ 227
Captain Jeffrey S. Palmer, USAF

The JCS Standing Rules of Engagement: A Judge Advocate's Primer ............. 245
Professor Richard J. Grunawalt

Fiscal Law Constraints Upon Exercise-Related Activities ......................... 259
Mr. W Darrell Phillips

The Legal Regime for Protecting Cultural Property During Armed Conflict ...... 277
Captain Joshua E. Kastenberg, USAF
THE AIR FORCE LAW REVIEW

MAJOR GENERAL BRYAN G. HAWLEY, USAF
The Judge Advocate General of the Air Force

MAJOR GENERAL ANDREW M. EGELAND, JR., USAF
The Deputy Judge Advocate General of the Air Force

COLONEL JACK L. RIVES, USAF
Commandant, Air Force Judge Advocate General School

LIEUTENANT COLONEL PATRICK W. LINDELMANN, USAF
Editor, The Air Force Law Review

MAJOR TERESA K. HOLLINGSWORTH, USAF
CAPTAIN RICK A. BECKER, USAFR
STAFF SERGEANT ELIZABETH A. SMITH, USAF

Associate Editors

EDITORIAL BOARD

COLONEL JACK L. RIVES, USAF, of Georgia
Chairperson

LIEUTENANT COLONEL R. PHILIP DEAVEL, USAF, of Mississippi
LIEUTENANT COLONEL DENNIS W. SHEPHERD, USAF, of Kentucky
LIEUTENANT COLONEL ANNE L. BURMAN, USAF, of Illinois
MAJOR PAMELA D. STEVENSON, USAF, of Indiana
MAJOR MICHAEL A. RODGERS, USAF, of Ohio
MAJOR LAUREN K. HEMPERLEY, USAF, of Texas
MAJOR VICKIA K. MEFFORD, USAF, of California
MAJOR ANN D. SHANE, USAF, of North Carolina
MAJOR STEVEN E. WALBURN, USA, of Tennessee
MAJOR DAVID C. WESLEY, USAF, of Alabama
MAJOR SCOTT R. MARTIN, USAF, of Florida
MAJOR GARY F. SPENCER, USAF, of Alabama
MAJOR TIMOTHY G. BUXTON, USAF, of Pennsylvania and Colorado
MAJOR BARBARA J. ZANOTTI, USAF, of West Virginia, Florida, and Colorado
MAJOR PHILIP G. MOWRY, USAF, of Ohio
MAJOR KIRK L. DAVIES, USAF, of Utah
W. DARRELL PHILLIPS, of Alabama and Texas
FOREWORD

[We are honored to celebrate our second theme edition of *The Air Force Law Review* in Operations Law with this special introduction from Brigadier General William A. Moorman. /*/ General Moorman shares his personal experiences about his and other JAGS' involvement in Operations Law and discusses the recent JAG FLAG exercise].

Shortly after my arrival to Twelfth Air Force as the Staff Judge Advocate in the summer of 1989, I discovered that I was also the USSOUTHAF Staff Judge Advocate. USSOUTHAF was the air component of US SOUTHCOM, one of the unified commands. Several months later, I began to explore a series of plans for contingencies in Panama. My staff became more and more engaged in operational concerns as the situation with U.S. Forces in Panama steadily deteriorated under Manuel Noriega's dictatorship.

As we moved steadily toward intervention, I immersed myself, for the first time in my eighteen year career, in the concepts of Rules of Engagement, the Law of Armed Conflict, targeting issues, handling of prisoners and detainees, and a host of other potential problems that were likely to accompany the execution of our plan to restore democracy to Panama, while protecting US citizens present in that country. This was to be our first real involvement, as judge advocates, in any kind of combat since Vietnam had drawn to a close some 15 years earlier. I knew that we were not well-prepared to be active assistants to warfighters. Also, I discovered that many operators did not fully understand the range of possible options available to them within the law of armed conflict and the body of other law which potentially affected Air Force operations.

To my surprise, many planners were operating under a misperception of the legal constraints placed on them. Thus, I found that the work of the judge advocate in planning OPERATION JUST CAUSE revolved around explaining to planners and other operators that they had more, rather than fewer, options in planning the air campaign. It appeared that in the years following Vietnam, we had subtly communicated to a generation of Air Force personnel that air operations must have as their central planning focus minimizing collateral damage. It became the frequent role of the judge advocate to explain that operational necessity was the primary imperative. After our eventual launch of OPERATION JUST CAUSE in the middle of the night on 19/20 December 1989, and the successful operations which followed, it was time for judge advocates to consider the future.

Against the backdrop of General Noriega's arrest and transport to Miami for eventual trial, a member of the Chairman's Legal Advisor's staff in the Joint Chiefs of Staff office, Colonel Mike Nye, and I delivered a presentation at The Judge Advocate General's Worldwide Conference at Homestead AFB in January 1990. My appearance in BDUs, designed to emphasize our involvement in operations, was greeted with mild amusement. Our thesis that judge advocates must begin to prepare for involvement in contingency operations in an increasingly more complex world was greeted with polite, but somewhat skeptical, attention. We had no way of knowing that Saddam Hussein would make us look like we had clear insight into the future less that eight months later when his forces invaded Kuwait.

In the years since OPERATION JUST CAUSE, we made tremendous progress as a Department in preparing judge advocates and paralegals to cope with the challenges provided by what we
now call operations law. We established superb courses at the Air Force Judge Advocate General School, took advantage of operations law educational opportunities at the Army and Navy JAG Schools, and began to establish a solid base of operations law related scholarly articles by judge advocates who had been involved in operations. But despite the tremendous improvements we made, we still lacked the appropriate vehicle for translation of theory, recorded lessons learned, and course work into field application.

While I was the Staff Judge Advocate for USAFE from 1993 to 1995, we set in motion an effort to establish yet another approach to teach operations law-related topics to those who would be involved in the growing number of contingencies we then faced in Europe. Although we attempted to put a practical edge on our effort, we did not achieve everything we needed to do. Finally, at Air Combat Command, we decided to create a training program which would actually provide those, who were most likely to be tasked, with the practical tools and experience they needed in order to be immediately effective in a deployed environment.

Our charter was to design a week-long training exercise which would do the following: First, it had to employ judge advocate and paralegal teams. These teams were to be comprised of people assigned to the same base with the idea that, if called upon, they would go to a contingency together. Second, it would have a field training component to prepare the judge advocates and paralegals to operate in conditions they could expect to find in a contingency location. I believed it was important for our teams to know how to handle everything from pitching a tent to dealing with possible terrorist threats. Third, the instruction would be provided by both judge advocates and paralegals since both groups had much to contribute. Fourth, the scenarios employed in the field training portion would have to be sufficiently demanding to ensure that taskings could not be accomplished without teamwork. I wanted the training to emphasize that judge advocates and paralegals each bring unique skills to the operational environment and that the full potential of each must be realized in order to be successful. Finally, I wanted to make sure that the field training was interactive. This meant that a cadre of experienced judge advocate and paralegal controllers would act as both critics and coaches.
The First JAG FLAG Experience

We began the effort to plan this new departure with the assistance of many people who had previously deployed. We asked for their ideas concerning those things they wish they had known before they were actually deployed. The assistance of those who had "been there, done that" was absolutely essential to making what we had in mind relevant to future operations. Next, we convened a working group of prior deployers.

At some point in the planning, we selected the name JAG FLAG for our training concept. We wanted to clearly convey to those who heard about our training program that it shared a common set of goals with the major FLAG exercises which inspired its name. We wanted to emulate RED FLAG where Air Force pilots and their direct support crews go to hone their warfighting skills against the best the Air Force has to offer in RED force opposition. We wanted to emulate the training experience which others have encountered in the BLUE FLAG exercises which have become key to joint warfighting at the theater campaign level.

Our training concept was fairly straightforward. We assembled a team of instructors from across the Air Force, but mainly from ACC. They were selected based upon their real-world knowledge and their ability to clearly convey what they knew to others. They were responsible for building the course materials and the training vignettes to be used for applications training. They reviewed the inputs from others who had deployed, applied their own experiences, reviewed all of the materials available, and designed a comprehensive training package. An added objective was to insure that those judge advocate and paralegal teams we trained would be equipped with materials and experiences which would help them build more robust training scenarios for their home station exercises.

On 19 May 1997, we assembled the first class for JAG FLAG. However, the training actually began before the teams arrived at Nellis AFB. Some weeks prior to their arrival, we began loading data peculiar to our training scenario country (simply named HOST) into databases which already existed on FLITE. These databases could be accessed by anyone with enough foresight to appropriately search for data prior to departure for the deployed training location. Among the items loaded were a Status of Forces Agreement, a Project Pitfall letter, and other materials concerning the country, its customs, and its government. Few of our participating teams thought to look for this information on WEBFLITE prior to their arrival at Nellis, but they all came away knowing that WEBFLITE contains a wealth of information which can start deployers out well, from the moment they are alerted.

Teams, one from almost every ACC base, one from the Air National Guard, and one from the Reserves, were told to arrive with the materials they needed to deploy and operate in a relatively bare base location. They arrived with BDUs, gas masks, laptops and portable printers, and written materials which they thought essential. Most brought a similar suite of gear, although at least one experienced team thought to bring air mattresses for the cots they would sleep on for their two deployed nights. The final class make-up was nineteen JAG/Paralegal teams, twelve controllers, and an adjunct faculty of six.

Classroom work occupied the first two days. Each block of instruction was designed to provide the teams with specific information which would meet our training objectives. Our aim in this instruction was to keep the information practical and useful to both the JAG and paralegal. In addition to the legal topics, we provided briefings on the practical concerns of setting up a legal
office and how to work together as a team. The briefings were designed to tie into the actual field exercise that was planned for the second two days. In this manner, we would encourage the participants to actually apply what had been briefed.

The field exercise began the morning of the third day. The teams were processed through a deployment line, received chemical refresher training, and carried their gear to the deployment site. The deployment site, Camp Cobra, is about 5 miles from Nellis and is used for their support group exercise training. The camp consists of a few permanent buildings (these were used for the teams to set up their legal offices) and some frames over which tents can be placed. There is no air conditioning, heat or shower facilities.

The first task on reaching the deployment site was for the teams to set up their living and working spaces. After this, the teams were presented with the first training vignette (scenario). Each team was required to work on its own in addressing the problems raised in every vignette. They could use their own resources or, if they had such a capability, use phone line connections to access FLITE.

Three issues that surfaced early on in the planning process were how to keep some measure of control over this potential gaggle, how should the vignettes be distributed and, how would the process actually work without other functional areas to react upon/with? We solved the first two problems through the use of what we called Observer/Controllers (O/Cs) for each team. The teams were numbered 1-19 and then divided into groups of three with one group of four. Each member of the Exercise Staff was then given the task of serving as an O/C to one group.

The O/Cs were critical to the entire deployment experience. Their charter was to deliver the vignettes; answer questions; monitor progress or the lack thereof; and mentor where needed. Depending on the vignette, the team could be required to provide a simple one-line written answer or to brief a topic. Time limits were placed on some answers. The entire process was coordinated so that each O/C knew when the next vignette or intelligence report should be given. Teams were left on their own to divide their time, prioritize tasks, and keep track of their work.

The lack of other functional experts was an issue without a real solution. If we wanted the functional experts to serve simply as role players, space and manning would not permit the number of different functionals that would have been needed to keep every team working on the same vignette. While it might have been possible to stagger the vignettes so that each team was working on a different vignette, this would still have resulted in a rather significant commitment of manning and resources, without any real benefit to the non-legal participating functional area. If we wanted the functional to actually participate rather than be role players, we again ran into the limitations on space. Additionally, the number of people needed to react with 19 different legal offices would be enormous. (Not to mention the logistics and financial issues that would need to be resolved!)

Our final solution was to press forward. We recognized that the lack of other agencies to react with would somewhat detract from the realism of the training. However, we worked to design the vignettes to minimize this as much as possible. Also, each vignette requested that, in addition to providing the answer, the team list what other information they would like to know and what other functional areas or agencies they should contact.

The vignette flow was designed to cover a wide variety of topics. This included: preparing a will and power of attorney; creating a LOAC, Force Protection, and ROE briefing; devising a General Order-1; advising on several fiscal law/contracting issues; providing legal assistance; answering military justice questions; applying the SOFA, Project Pitfall and other exercise-created
documents to respond to host country issues; reviewing the exercise ROE and requesting a change using the proper format from the Standing Rules of Engagement; and providing advice on targeting issues.

The vignettes came from various sources. Some were our contacts with the Army and Navy, USAFE and PACAF; and others were submitted by the various team members. To get a true flavor of what the teams went through, you can visit our website at: http://www.acc.af.mil/ja and review the O/C Handbook. This handbook contains every vignette presented to the teams, and it shows the school solutions and the time flow. The handbook will give you a real appreciation for just what the participants faced:

While we had prepped the team with two days of briefings, to further assist them in providing responses to the various vignettes we also provided each team with five diskettes full of talkers, checklists, background papers, and briefings on a myriad of operational topics. Several of the vignettes were specifically written so that if a team used the information on the diskette, they could find the answer.

The primary goal of the vignettes was to give the participants practical, hands on experience in dealing with real world operational issues. Another equally important objective was to task saturate each team to the point that they could not complete the work unless they worked together as a team. As we stated earlier, one of our primary goals was to foster teamwork. We wanted to stretch both the judge advocates and the paralegals to use their full capabilities. Some teams quickly caught on, and the paralegal was reviewing the information provided on diskette; finding the appropriate items; reviewing them; and, putting together a possible response. All of this was done while the JAG was reviewing or separately preparing an answer to a different vignette. Other teams needed some mentoring from the O/Cs, but all were effectively working together by the end of the deployment.

In addition to having to deal with the vignettes and the heat, dust and discomfort of working in an unfamiliar and uncomfortable environment, we also included such stresses as loss of power, simulated shelling, mass casualties (simulated with frightening realism by personnel from the Nellis hospital), and a few simulated chemical attacks. The end result was a realistic and demanding environment that had everyone - participants and O/Cs alike - looking forward to ENDEX.

The fifth and final day of the exercise was devoted to a HOT WASH/ review of the Camp Cobra vignettes and the end of course critique. The extended period allocated for the HOT WASH - three hours - gave the attendees the opportunity to discuss the vignettes individually; review the school solutions and ask questions.

At several points during the exercise we had stressed to the participants that their feedback was going to be essential. To improve on the program, we would need their honest assessments. Also, as this was he first time we had attempted such an event, we were genuinely interested in their views. While the Staff believed the exercise had gone well, no one was prepared for the unanimously positive responses submitted by the participants. While the critiques contained many suggestions on how to do things differently next time, there was not a single negative comment about the course concept. Every participant felt that he or she had learned valuable lessons from the training, and gave an unqualified "thumbs-up" to the idea of combining the classroom training with some hands-on experience.
So, what does all this tell us? First, that through the hard work and effort of many people we successfully met the challenge of joining the classroom and the field. That is not to suggest that we cannot improve. We are already working to incorporate suggestions and improvements that will result in an even more successful event next year. Second, that this training was an idea whose time had come. Participants and SJAs alike agreed that this concept was exactly what was needed to better prepare our people to deploy. Third, that this training provides great benefit even without the other functional areas involved. While exercising with the other functionals at the base and higher level is crucial to understanding how JA fits into the process, neither base level nor JCS level events can expose the participants to more than a small fraction of the legal issues faced by those at JAG FLAG.

Where are we going from here? JAG FLAG 98 will, if at all possible, occur. In addition, we are looking at expanding the concept. We now know it works for our young and less experienced personnel, but they are not always the most likely ones to deploy. Therefore, we are now pursuing the possibility of holding a SR JAG FLAG for our SJAs and LOMs. For those skeptical about the value of such a program, we too have our concerns. But, remember, just a few years ago most were skeptical about the value of such training for any judge advocate.

While JAG FLAG can be termed a success, it is only the first of many steps that need to be taken. We need to get more of our people involved in base level and higher exercises. We need to do more in our Operational Readiness Inspections than just evaluate how quickly the legal office responds to a LOAC input. We need to do a better job of gathering up and disseminating lessons learned from every deployment, exercise, and contingency.

We are convinced that JAG FLAG is the next logical step in preparing judge advocates and paralegals to operate as a seamless team in any deployed environment. Our materials can be adapted to the requirements of any MAJCOM, and we encourage you to ask for them. We also encourage those of you who are interested in what we are doing to send us your thoughts on how this field-oriented training can be improved. Those of us who have been exposed to the robust wartime/contingency requirements for knowledgeable, well-trained, operations-oriented judge advocates and paralegals, know that we have made great progress over the past few years. But, there is much left to be done.

The creation of JAG FLAG is only one further step along a path which we must travel if we are to remain relevant to a smaller Air Force pursuing Global Engagement. Happily, the Department's strategic plan, JAG 21st Century, recognizes the importance of operations and our involvement in them. Operations has become a Major Focus Area and work is underway to develop Minimum Essential Task Lists (METLs) for our involvement in operations. The creation of a separate Operations Law function under The Judge Advocate General is another giant step forward. We hope this detailed account of the problems and successes we have had with the first JAG FLAG is useful to those of you with an eye on the future and concerned about our place in that future.

______________________________

Authority to publish automatically expires unless otherwise authorized by the approving authority. Distribution: Active duty Air Force judge advocates; judge advocates of the Army, Navy, Coast Guard, and Air National Guard; law schools; professional bar association libraries. Approximate readers-per-copy ratio is 4 to 1.

* General Moorman is the Staff Judge Advocate, HQ Air Combat Command, Langley AFB, Virginia.

1 The information is also available on our website at: http://www.acc.afmil/ja/jagflag.html.
Disciplining The Force - Jurisdictional Issues In The Joint And Total Force

MAJOR GRANT BLOWERS, USAF /*/  CAPTAIN DAVID P.S. CRARITAT, USAF /**/

I. INTRODUCTION

A member of the U.S. Air Force serving as part of a joint task force (JTF) commanded by an Army general commits a serious violation of the Uniform Code of Military Justice (UCMJ). The JTF commander wants to convene a general court-martial. An Air National Guard officer flying a refueling mission as part of a joint campaign in Europe violates the UCMJ. The Air Component Commander of the Unified Command wants to convene a special court-martial. An Air Force airman stationed at a provisional unit in Saudi Arabia commits an offense that merits nonjudicial punishment. The unit commander wants him punished. These types of disciplinary situations have become common in today's Air Force.

U.S. armed forces, including Air Force personnel, are currently deployed and employed all over the globe. They are involved in almost every conceivable type of operation, from standing forces in Western Europe and the Pacific to JTFs in such divergent places as Saudi Arabia, Bosnia, and the Olympic Games in Atlanta. In many instances, deployed forces include combinations of active, Reserve, and National Guard forces. As the Staff Judge Advocate (SJA) for the JTF, Air Component, or provisional unit commander above, a judge advocate (JAG) must understand the intricacies of proper disciplinary authority in such situations and be able to provide guidance and legal advice to his commander.

Maintaining discipline and esprit de corps has always been essential to efficient military operations. Experience has taught us that, in joint and total force operations, maintaining the good order, morale, and discipline of the force is even more crucial to success of the mission than during peacetime. JAGs, however, have come to learn that disciplining such strangely structured, multi-service organizations as JTFs, Unified Commands, and provisional units presents a unique set of problems with regard to proper legal authority to impose nonjudicial punishment under Article 15 of the UCMJ /1/ and to convene courts-martial. If the current trend toward more overseas deployments involving JTFs and mixtures of Army, Air Force, Navy, Marine, Reserve, and National Guard personnel continues, these problems must be solved.

This article presents jurisdictional and command authority issues that commanders and SJAs may face in joint and total force disciplinary situations. First is an analysis of the general principles covering joint force issues as gleaned from the UCMJ and appropriate regulations and instructions. /2/ Next is an examination of Guard and Reserve issues which are based, for the most part, on the status of the
individual being disciplined. Next, various inter-service problems that might arise in standing joint forces and JTFs are analyzed. Finally, this article offers some practical advice to JAGs at every level - JTF, Unified or Combatant Command, Component Command, and unit or provisional unit - the information they will need to deal with jurisdiction questions in today's Air Force. The basic information provided in this article will not answer every question on every subject, provide some fundamental tools and lay a framework for analysis of these issues.

II. GENERAL PRINCIPLES

Two prerequisites must be met for a commander to exercise disciplinary action court-martial or nonjudicial punishment - over a military offender: proper jurisdiction and proper command authority. Jurisdiction is derived primarily from federal statute and is based on the status of the individual being disciplined. Command authority is a creature of regulation and, as the term suggests, centers upon the authority of the person doing the disciplining.

A. Status

Jurisdiction over military members is derived from statute. The United States Constitution expressly authorizes Congress to make rules for the government and regulation of the land and naval forces. This authorization, which the Supreme Court has held to be plenary in nature, includes the power to define the elements of, and to set punishments for, offenses committed by military personnel.

The UCMJ represents Congress' exercise of this power. Article 2 addresses status prerequisite of military jurisdiction by defining the simple phrase "persons subject to this chapter." The article provides an extensive list of individuals subject to the UCMJ by virtue of their status.

Turning to the jurisprudential interpretations of these provisions, it becomes clear that establishing court-martial jurisdiction is relatively simple when compared to traditional criminal jurisdiction. Civilian criminal jurisdiction is traditionally divided into jurisdiction over the person and jurisdiction over the offense, also referred to as subject matter jurisdiction. Prior to the landmark case of Solorio v. United States, the concept of military jurisdiction was a source of endless litigation and debate. Courts struggled over the precise definition of "service connection" as the basis for jurisdiction over an offense. Solorio eliminated the need for such debate by merging subject matter jurisdiction into jurisdiction over the person.

B. Command Authority

Unlike the status prerequisite of proper jurisdiction, the issue of proper command authority primarily involves regulations: Command authority is not jurisdictional in the traditional sense of the word, but cases have held that failure to follow established procedures in convening courts-martial may be fatal.

UCMJ Articles 22-24 address who has the authority to convene general, special, and summary courts-martial. In general, these articles empower commanders at various levels to convene courts-martial. Article 22 authorizes commanders of Unified and Specified Commands with general court-martial convening authority (GCMCA). Air Force Commanders are addressed in section (a)(7) of the article, which provides GCMCA to "the commanding officer of an air command, an air force, an air division, or a separate wing of the
Air Force." Finally, Article 22 empowers the President /17/ and each separate service secretary /18/ to designate as GCMCA any commanding officer.

Article 23 /19/ provides similar guidance on special courts-martial convening authority (SPCMCA). All GCMCAs, installation commanders, and commanding officers of Air Force wings, groups, and separate squadrons are empowered by the article to convene special courts-martial. The article also empowers each separate service secretary with the authority to designate SPCMCAs.

Several Air Force Instructions address convening authority in general. AFI 51-201, paragraphs 2.1, 2.2, and 2.3 authorize convening authority for general, special, and summary courts-martial respectively. Paragraph 2.1 requires Numbered Air Force and separate wing commanders without specific authorization as GCMCAs by Department of the Air Force Special Order to obtain approval by the Air Force Judge Advocate General (TJAG) prior to convening general courts. Paragraph 2.2 similarly requires prior approval by the Major Command (MAJCOM) Commander for those commanders listed in Article 23 who do not have specific authorization to convene special courts by a Department of the Air Force Special Order.

AFI 25-201, paragraph 6.2, states that all members of a tenant unit or Air Force Element (AFELM), whether designated as a unit or not, are attached to the host command and its appropriate subordinate and higher commands for the exercise of general, special, and summary court-martial convening authority. Attachment to a host command for these purposes does not preclude any other commander from exercising such authority over a member of the tenant unit or AFELM. However, the Air Force policy expressly favors exercise of court-martial authority by the host command "to expeditiously resolve the matter, preserve resources, and retain command prerogatives pertaining to matters affecting the maintenance of good order and discipline within the installation." /20/

C. Nonjudicial Punishment

Article 15 of the UCMJ authorizes "any commanding officer" to impose nonjudicial punishment upon "officers ... [and] other personnel of his command." /21/ The article, however, also provides that such authority will be limited by regulations as prescribed by the President and the service secretaries and is subject to the well-known limitations depending upon the rank of the commander. Section (a) authorizes GCMCAs and general officers to delegate their powers to impose punishment under Article 15 to a "principal assistant," provided service regulations so authorize.

The issue for a commander with respect to nonjudicial punishment then becomes who, in a JTF, Unified Command, or force augmented by Guard and Reserve personnel, are "officers or other personnel of his command." Other problems arise since each separate service secretary may promulgate regulations that limit the nonjudicial punishment authority of commanders within her service. /22/

III. RESERVE AND GUARD ISSUES

A. Air Force Reserve Jurisdiction

Reservists called to active duty or on inactive duty for training are in exactly the same jurisdictional status as any other active duty member. /23/ A Reserve commander may exercise disciplinary authority in the same way as any other commander. /24/ The member is not relieved
from such jurisdiction by termination of the period of active duty or inactive-duty training during which the offense occurred. /25/

However, this subject matter jurisdiction lapses upon the member's discharge from all obligations of military service; a complete termination of military status is required and must relieve the member of any further military service. /26/ Jurisdiction over the person of the member first attaches when action with a view to trial of the reservist is taken while that member is subject to the UCMJ. Once attached, jurisdiction continues for all purposes of trial, sentence, and punishment, notwithstanding the expiration of the member's term of service or other period in which the member is subject to the UCMJ. /27/ Thus, if jurisdiction first attaches before the effective termination date of a reservist's self-executing orders, the member may be held for trial beyond the effective termination date.

Actions which are considered with a view to trial includes apprehension, imposition of restraint (restriction, arrest, or confinement) and/or preferral of charges. /28/ The member must be on active duty prior to arraignment at a court-martial to be subject to that court-martial's jurisdiction but may be involuntarily called to active duty for the purpose of an Article 32 hearing, court-martial, or nonjudicial punishment proceeding. /29/ The member may only be ordered to active duty by a person empowered to convene a general court martial in a regular component of the armed forces. /30/

The GCMCA directing a recall may be the GCMCA of the active duty unit to which the member is attached for training purposes, the active duty unit at which the member was performing duty when the offense occurred, or the host unit as designated in the applicable host-tenant support agreement where the member is performing active duty or inactive-duty training (IDT). /31/ However, unless the order to active duty is approved by the Secretary of the Air Force (SAF), the member may not be sentenced to confinement or required to serve a punishment consisting of any restriction of liberty except during a period of IDT or normally scheduled active duty. /32/

B. Air National Guard Jurisdictional Principles

The term "Air National Guard" is used to describe two overlapping but legally distinct organizations. /33/ Broadly speaking, one is a state organization, not subject to the UCMJ; the other is a federal organization, subject to the UCMJ.

The state organization, called simply the Air National Guard (ANG), is comprised of federally recognized units of the organized state militias. /34/ The ANG is subject to the "Militia Clause" of Article I of the Constitution and is organized, armed, and disciplined by Congress, although its officers are appointed by the states. At the top of the ANG chain of command is the state governor who is also the commander-in-chief of his state's ANG units. Both the units and the members are trained by the states but, in the words of the Militia Clause, "according to the discipline prescribed by Congress." /35/ /36/

Federally funded ANG training duty, referred to as "Title 32 duty," is ordered by the state governor and paid for with federal funds. This form of duty is used for weekend drills, annual training, and most schools and assignments within the United States. Most National Guard duty falls into this category. Conversely, "Title 10 duty" is duty ordered by the President or the Secretary of the Air Force under the authority of federal law and paid for with federal funds. This form of duty is used for basic (initial) military training, overseas training missions,
and occasions when the Guard is called or ordered to active duty (mobilized) by the U.S. Government. ANG members are not subject to the UCMJ unless they are performing Title 10 duty. Most states, however, have a "state UCMJ" which may apply to Guard members while in Title 32 status. /37/ These codes generally follow the federal UCMJ for traditional military offenses /38/ but rely on state criminal statutes for other offenses.

The Air National Guard of the United States (ANGUS) is conceptually very different. Congress created the ANGUS under the "War Powers Clause" /39/ as part of the 1933 amendments to the 1916 National Defense Act. It is a reserve component of the Air Force at all times. /40/ Both units and members of the ANGUS are parts of the "ready reserve" /41/ and the "selected reserve." /42/ Members are also, simultaneously, members of the ANG - they join both organizations upon enlistment. /43/ All officers are federally recognized "Reserve of the Air Force" officers, and the ANGUS chain of command runs to the Commander-in-Chief, the President of the United States. Unless and until ordered to active duty as Reserves of the Air Force, however, ANGUS members remain members of their respective state ANG units /44/. In the words of the Supreme Court: "In a sense, all [Air Guard members] must keep three hats in their closets - a civilian hat, a state hat, and an [Air Force] hat – only one of which is worn at any particular time." /45/

The key concept within the Guard is status and, more specifically, the fact that only one status can be assumed at any particular time - one hat at a time. ANG duty is Title 32 duty, unless the unit or member is "federalized" under the Militia Clause. /46/ Permissible use of the federalized state militia is limited by the Constitution to three areas: "execute the federal law," "suppress insurrections," and "repel invasions." /47/ Since by definition "the federal law" applies in US territory, insurrections occur by definition in U.S. territory, and invasions occur against U.S. territory, it makes sense to limit the federalized state militia to operations only in U.S. territory. /48/ With this limitation in mind, the U.S. statutes governing federal use of the ANG follow the constitutional language. /49/

There must be a specific statutory basis to call the ANGUS onto active duty. In the event of a Congressional declaration of war or national emergency, any ANGUS unit (or "any member not assigned to a unit organized to serve as a unit") may be ordered to active duty for the duration of the war or emergency plus six months. /50/ If there is a national emergency as declared by the President, the duty is limited to not more than 24 consecutive months. /51/ If there is 'a presidential determination that "it is necessary to augment the active forces for any operational mission," the duty is limited to not more than 270 days (federal force end strength may not be affected). /52/ ANGUS units may be ordered to duty at any time, as reserve components, for not more than 15 days per year. /53/ Individual ANGUS members, with their consent (and the consent of the governor to which their ANG unit is assigned), may be ordered to active duty at any time and for any length of time. /54/ Most real world overseas (OCONUS) deployments involving the Air National Guard use this provision, therefore, most Guard personnel in a deployed environment will be in "volunteer" status.

By operation of law, these deployed Guard volunteer personnel are relieved of duty with their respective state ANG units to enter on active duty. /55/ Although they are unquestionably subject to the UCMJ, /56/ the appropriate convening authority structure is unclear unless and until they are assigned or attached to a particular unit in the deployed area (AOR). /57/ At that time, the MAJCOM or numbered air force (NAF) to which these personnel are assigned in the AOR establishes the SPCM and GCM convening authorities. If Guard members get into trouble before they are so assigned, there may be jurisdictional and practical problems stemming from the fact that the ANG unit has not been mobilized and remains a state militia unit. Since the ANG unit is not yet mobilized, that unit's commander does not yet have GCMCA or SPCMCA. Even if the unit commander is deployed with his troops, he will not have convening authority since he has no federal unit to command. Therefore, when
the individual volunteer members have not yet been assigned or attached 49 10 U.S.C.A. § 12406 (West 1996 and Supp. 1997): to the MAJCOM or NAF, a situation arises in which no commander has proper disciplinary authority over them. /58/

With regard to Article 15 jurisdiction, the appropriate commander at the OCONUS base may impose punishment only if the member's temporary duty (TDY) orders attach him to the that commander's unit for Article 15 purposes, or if the commander "exercises the usual responsibilities of command over the member." /59/The Senior Air Force Officer (SAFO) of a Unified Command, JTF, or activity outside the Air Force, may exercise the same authority if the member is TDY with or otherwise attached to the command./60/

IV. JOINT FORCE JURISDICTION

A. Separate Service Issues

Any analysis of jurisdiction in the joint environment must begin with UCMJ Article 17. /61/ This article provides authority to each separate service to convene courts-martial over all persons subject to the UCMJ. /62/ The statute, however, limits such jurisdiction by regulations prescribed by the President and provides for review of any commander's disciplinary action by the department of which the accused is a member./63/

The key provision within the Manual for Courts-Martial with regard to joint jurisdiction is RCM 201./64/ This rule provides Unified Commanders with the authority to convene courts-martial for "members of any of the armed forces." /65/ It further delegates to the Secretary of Defense (SECDEF) the power to designate joint commanders with convening authority./66/ This provision is very important since Article 22 speaks only to separate service secretaries' designation authority. Finally, the rule gives Unified, Specified, and appropriately authorized JTF commanders the authority to "expressly authorize a commanding officer of a subordinate joint command or subordinate joint task force who is authorized to convene special and summary courts-martial to convene such courts-martial for the trial of members of other armed forces under regulations which the superior command may prescribe." /67/

Joint military regulations provide further guidance on these issues. Joint Publication 0-2, Unified Action Armed Forces, requires joint force commanders to "exercise only as much control and discipline of the component elements of the command as is essential to the performance of the mission." /68/ Separate service commanders are given primary responsibility for discipline of their respective members. This regulation does recognize that some aspects of discipline "must of necessity be handled by the joint force commander. Where appropriate, rules and regulations establishing uniform policies for such matters and applicable to all Services' personnel should be established and published by the joint force commander." /69/

Both the joint publication and Air Force instructions favor the exercise of court-martial jurisdiction by the separate service commander. /70/ Further, paragraph 3-64 of Joint Publication 0-2 makes a distinction between matters that involve more than one service and single-service matters, stating that exercise of disciplinary authority of the joint commander is preferred in the former, while primary responsibility is given to the separate service commander in the latter./71/
B. Command Authority in Joint Commands

Besides examination of the inherent authority of each separate service to convene courts-martial over members of the other armed services, another level of analysis is required. The commander intending to exercise jurisdiction must have competent command authority to do so.

As discussed above, a commander of a Unified Command has authority to convene both GCMs and SPCMs by virtue of Articles 22 and 23./72/ A JTF commander has no inherent disciplinary authority over the members of the JTF until designated as a GCMCA by the SECDEF in accordance with Article 22 and RCM 201./73/ Once this is accomplished, the JTF Commander is in exactly the same position as a Unified Commander.

The joint force commander may choose to exercise his GCMCA himself or he may ask the President or the SECDEF to designate a different GCMCA. Each Component Commander retains only convening authority that he might have had as a result of his position prior to the creation of the joint command. /74/ Under Rule 201, the joint force commander may designate one (or more) of the component force commanders to act as the SPCMCA for members of all services within the joint command, subject, of course, to the limitations placed on such actions by that rule./75/ The key limitation is that the component commander must already be authorized by his separate service to convene special courts-martial./76/

C. Nonjudicial Punishment in Joint Commands

Joint Publication 0-2 empowers the commander of a joint command or JTF with nonjudicial punishment authority over all members of his command, unless a superior commander withholds such authority. That authorization, however, is recognized as "an exception to the traditional policy of the armed forces that a member of one Service should not impose nonjudicial punishment upon a member of another service." /77/ The regulation further constrains the power of the joint commander by requiring him, in those situations in which he chooses to exercise this "exceptional" power, to follow the regulations of the offender's service with respect to punishment, suspension, mitigation, appeals, and other matters.

AFI 51-202 encourages commanders of joint commands to exercise disciplinary authority through the Air Force component commander or the SAFO. This is especially true for matters that involve only the Air Force and that occur on a military reservation or within the military jurisdiction of the Air Force." AFI 51-202 also requires the joint commander to coordinate with the SAFO prior to taking action. /79/ Collateral decisions (such as personnel and finance actions, and UIF and selection records entries) are handled through Air Force channels. /80/

Most Article 15 punishments for Air Force members in a joint command will be imposed by the SAFO. Paragraph 2 of AR 51-202 authorizes the SAFO in a Unified Command to offer and impose nonjudicial punishment. This authority includes Air Force members who are TDY to the command and those over whom the commander exercises "the usual responsibilities of command." /81/ If the SAFO is a general officer or a GCMCA, he may designate a "principal assistant" as the nonjudicial punishment authority. /82/
None of the above affects the authority of a commander of a deployed unit to impose nonjudicial punishment on the members of his command. The problems that usually arise involve personnel assigned directly to the joint command or otherwise not assigned to a specific unit. For these personnel, the SAFO within the joint command is the nonjudicial punishment authority.

D. Provisional Units

Most SPCMs and nonjudicial punishments are handled at the unit level. The authority of each unit commander to convene a SPCM or impose nonjudicial punishment on members of his command is not affected by the unit's inclusion, in whole or in part, in a joint task force. However, problems arise with those personnel who are deployed either as individual augmentees to other units, or as part of the JTF staff itself. One solution which has been utilized in the past is the establishment of provisional units to which such personnel could be attached. A standing unit commander might have SPCMCA by designation by the JTF commander or another GCMCA, but he may not be the SAFO and would therefore, lack authority to impose nonjudicial punishment on individuals who are not members of his home command.

Past practice has been to return personnel who commit offenses while in theater to their home units for both Article 15 and court-martial action. This alternative to taking action at the deployment location has several advantages and disadvantages. On the one hand, there is no requirement to set up in-theater courts and jails; offenders are taken out of the operating area where they might hinder operations; and deployed commanders are relieved of disciplinary responsibilities and can concentrate on the mission. On the other hand, offenders are not disciplined by the same commander who was offended by the action; the costs are high, including potentially removing quality personnel from the theater as witnesses; court panels are made up of personnel who were not in the theater of operations and may not understand the situation there; and time is a factor, with the threat of speedy trial and staleness of evidence problems. Furthermore, such problems may be multiplied where the offender is a member of the Reserve or Guard whose status might change if transferred to his home unit. There may also be a negative incentive created by sending offending personnel home for discipline: some disgruntled personnel may engage in criminal activity simply as a way to leave the theater of operations. Problems of this sort can easily be avoided by creation of a provisional unit whose commander is delegated SPCMCA and to which all Air Force personnel are attached for administrative (including nonjudicial punishment) purposes.

V. CONCLUSION

Judge advocates serving as SJAs at each level of command must be aware of the potential jurisdictional and command authority limitations and requirements on commanders in joint and total force operations. Prevention is preferable to dealing with problems after they arise.

Judge advocates assigned with Reserve or Guard personnel should develop procedures for taking appropriate disciplinary steps with respect to these personnel. A simple, straightforward checklist-type process is useful, especially under field conditions. The first step is to get or make a "wiring diagram" showing the complete organizational structure and chain of command for all units and personnel within the command. This should be accomplished immediately upon arrival in the deployed location. JAGs must be able to determine the status of every person within the command. Toward this goal, JAGs must familiarize themselves with the kind of "paperwork" required
to establish jurisdiction. Working closely with the personnel office to get the necessary documentation and personnel code lists for each assigned member is essential. It is also necessary to obtain and keep on file orders establishing every unit in the command," individual orders for all attached Reserve and Guard members, and orders empowering commanders with disciplinary authority. Most jurisdictional issues devolve to establishing a chain of command and ensuring the availability of the supporting documentation.

Judge advocates for all Unified and Combatant Commanders should ensure that each Component Commander has at least SPCMCA, and should consider requesting designation of one or more component commanders as GCMCA over the entire command. In most situations, however, it is appropriate to allow courts-martial to be convened by the service involved.

JAGs should also consider having the JTF Commanders designated as GCMCAs, /85/ and may want to request that each separate service appoint its Component Commander as an SPCMCA when he is not already one by virtue of his position. Then the JTF commander could consider designating one or more of the Component Commanders as SPCMCA for the entire joint command. This designee may not actually exercise that authority over members of other services, but it would offer the JTF Commander another option. SJAs at these commands must obtain and keep on file designation letters, orders, and other significant jurisdictional documents.

JAGs should advise both JTF and Unified Commanders to establish uniform policies for discipline within the command. While discipline should be handled by the separate service whenever possible, certain cases may require action by the joint commander.

Prior to authorization of the JTF Commander as a convening authority, or for units that are not assigned as part of joint commands, SJAs should become familiar with the requirements of AFI 25-201 and any applicable host tenant agreements. SJAs at all levels must determine who the SAFO is in a joint command and advise him as to his Article 15 authority. Finally, commanders in deployed situations must weigh the advantages and disadvantages of establishing provisional units. While disciplinary matters should not drive the establishment of commands, it may be an important factor in the decision.

This article was not intended to answer every jurisdictional or command authority question that might arise. It was meant to provide a basic foundation of knowledge for judge advocates faced with unique problems associated with joint and total force operations.

The authors gratefully acknowledge the assistance of the following individuals in the research and preparation of this article: Robert I. Gruber, Colonel, ANGUS; J. Thomas Johnson, Colonel, ANGUS; Lt Colonel Dwight K. Keller, Lt Colonel Dennis W. Shepherd, Lt Colonel Christopher F. Burne, and Charles F. Seemann III, Esquire.

* Major Blowers (BS, University of Missouri-St. Louis; JD, University of Missouri-Columbia) is Chief of International Agreements at Headquarters United States Forces Korea. He is a member of the Missouri Bar.

** Captain Charitat (BS, United States Air Force Academy; MIB, Florida International University; JD, Louisiana State University) is the Area Defense Counsel at Whiteman Air Force Base, Missouri. He is a member of the Louisiana State Bar.

While concentrating throughout on Air Force instructions and situations and procedures that are particular to the Air Force, similar problems arise within all the services.


Coleman v. Tennessee, 97 U.S. 509 (1879); Dynes v. Hoover, 20 How. 65 (1858).

Kinsella v. United States, 361 U.S. 234 (1960) (holding that Article I, § 8 gave Congress the power to adopt the UCMJ).


The main case addressing the "service connection" requirement was O'Callahan v. Parker, 395 U.S. 258 (1969). O'Callahan involved a conviction of a service member for an assault and attempted rape that occurred off base, against a civilian victim. Except for his status as an active duty member, the offense had no connection to the military. The Supreme Court, held that no service connection existed and overturned his conviction. In Relford v. Commandant, 401 U.S. 355 (1971), the Court articulated a test for service connection consisting of 12 separate factors to consider. Nevertheless, the "service connection" standard continued to be a difficult legal concept until Solorio.

"We therefore hold that the requirements of the Constitution are not violated where, as here, a court-martial is convened to try a serviceman who was a member of the armed services at the time of the offense charged." Solorio, supra note 7, at 378 (emphasis added).

Command authority in this article is limited to a commander's authority, to discipline assigned personnel as part of their command responsibilities. Command authority in the Air Force is controlled by Air Force Instruction 51-604, Appointment to and Assumption of Command (2 Jan. 1997). Issues concerning appointment to command have long been recognized. In 1988, Colonel John Brancato noted that: [s]ince 1985 alone, the United States Air Force Court of Military Review has invalidated the actions of at least six Air Force base commanders in the realm of courts-martial, declaring that the incumbents did not succeed to command properly, and, therefore, were not commanders at all! Yet, in every case these "commanders" were accepted, treated, and regarded as commanders by officials throughout the Air Force, including their own Air Force judge advocates. Clearly, this situation means one of two things: Either the court is very wrong, or the underlying doctrine very bad.

John R. Brancato, In Search of Command and Staff Doctrine, 28 A.F.L. REV. 1, 3 (1988). Courts have continued to wrestle with this issue. See, e.g. United States v. Harrington, 23 MJ 788 (ACMR 1987);

13 McClaughry v. Deming, 186 U.S. 49 (1902) ("[A] court-martial is the creature of statute, and as a body or tribunal, it must be convened and constituted in entire conformity with the provisions of the statute, or else it is without jurisdiction.") Id. See also Runkle v. United States where the court stated: 'A court-martial organized under the laws of the United States is a court of special and limited jurisdiction. It is called into existence for a special been accomplished it is dissolved .... To give effect to its sentences it must appear affirmatively and unequivocally that the court was legally constituted; that it had jurisdiction; that all the statutory regulations governing its proceedings had been complied with, and that its sentence was conformable to law:

Runkle, supra note 3, at 556. But see United States v. Richardson, 5 M.J. 627 (A.C.M.R. 1978) ("It does not, however, follow that every violation of a statutory provision in connection with the formation and proceedings of a court-martial will be considered a jurisdictional defect.") and Humphrey v. Smith, 336 U.S. 695 (1949) (holding that a failure to hold a thorough and impartial Article of War 70 pretrial investigation [predecessor of the Article 32 investigation under the UCMJ] was not a jurisdictional defect),


15 The Joint Staff Officer's Guide (AFSC PUB 1) defines Unified Commands, also known as Combatant Commands, as commands that have "broad continuing missions and [are] composed of forces from two or more military departments." Such commands may be established in accordance with regional responsibilities (U.S. Central Command, U.S. European Command, and U.S. Southern Command) or functional responsibilities (US Space Command, U.S. Strategic Command, U.S. Transportation Command). Specified Commands (US Forces Command, for example) are composed of forces from a single military department.

16 10 U.S.C.A. § 822(a)(3) (1996 and Supp. 1997). The President, the Secretary of Defense, and each separate service secretary also have GCMCA per sections (a)(1), (a)(2), and (a)(3).


20 AFI 25-201, para. 6.2.1. (AFI 25-201 succeeded AFR 11-4, Legal Service Support.)


22 Article 15 states: "Under such regulations as the President may prescribe, and under such additional regulations as may be prescribed by the Secretary concerned, limitations may be placed on the powers granted by this article . . . ." U.C.M.J., Art. 15; 10 U.S.C.A. § 815 (a) (West 1983 & Supp. 1997).

23 This was not always true. Congress greatly expanded jurisdiction over reservists in 1986 with passage of the National Defense Authorization Act of 1987, Pub. L. No. 99-661, Section 804, 100 Stat. 3906 (1986). The most comprehensive and detailed published analysis on this


26 Manual for Courts-Martial (1995), Rule 204 [hereinafter MCM]. The discussion of the rule in the Manual states: "[a] service member is subject to court-martial jurisdiction until lawfully discharged or, when the service member's term of service has expired, the government fails to act within a reasonable time on objection by the service member to continued retention."

27 MCM, Rule 202(c).

28 MCM, Rule 202(c)(2).


31 AFI 51-201, Administration of Military Justice (1 Sept. 96) para. 2.8. [hereinafter AFI 51-201].

32 10 U.S.C.A. § 802(d)(4),(5) (1996 and Supp. 1997). Requests for SAF approval are sent from the GCMCA's SJA to HQ USAF/MAJM and should include the following information: a copy of the preferred (or intended to be preferred) charges and specifications; a summary of the available evidence relating to each offense; evidence of previous convictions and nonjudicial punishment, if any; an indication that the member has been offered and refused NJP, if applicable; and information concerning the accused's background (including civilian job and family situation) and character of the member's military service. AFI 51-201, supra note 31, at para. 2.8.


35 The term "Militia Clause" (or "Militia Clauses") refers to clauses 15 and 16 of Article I, Section 8 of the Constitution, which provides: "The Congress shall have power ... to provide for calling forth the Militia to execute the Laws of the Union, suppress Insurrections and repel Invasions; To provide for organizing, arming, and disciplining, the Militia, and for governing such Part of them as may be employed in the Service of the United States, reserving to the States respectively, the Appointment of the Officers, and the Authority of training the Militia according to the discipline prescribed by Congress. . . ." U.S. Const. art. 1, § 8, Cl. 15, 16.

36 Id.

37 Missouri, for example, codifies its "UCMJ" at Missouri Revised Statutes, Chapter 40.

38 Traditional military offenses are those that have no corresponding definition in civilian criminal codes such as absent without leave, disrespect to a superior commissioned officer, and failure to obey are examples:
39 See supra note 3 and accompanying text.

40 Throughout this discussion, it is important to distinguish the term "Reserve of the Air Force" from "Air Force Reserve." The Air Force Reserve is a single, distinct organization, whereas the term Reserve of the Air Force connotes a much broader group including the Air Force Reserve, the ANGUS, and the ANG while in the U.S.


44 Perpich, supra note 33, at 2424.

45 Id. at 2427.

46 See supra notes 35-36 and accompanying text.

47 U.S. Const. art. I, § 8, Cl. 15.


58 Several proposals have been discussed to deal with this problem. The ANGUS leadership has proposed creating a standing provisional unit to which all Guard members in this "limbo" status could be temporarily assigned until they are assigned to an active unit. The most current proposal, however, involves temporarily assigning all activated Guard personnel to the Air National Guard Readiness Center, a permanent field operating agency, until such time as they are assigned or attached to an active unit.
59 AFI 51-202, Nonjudicial Punishment (1 Oct. 96) at para. 2.1.1. Since this term is undefined, it is usually wise to ensure orders attaching Guard members to active units address Article 15 authority.

60 Id.

61 10 U.S.C.A. § 817 (West 1996). Of course, since many deployments involving joint forces occur overseas, the actual analysis may begin with the appropriate Status of Forces Agreement or other international law to ensure that the United States has primary jurisdiction over the person and the offense.


63 10 U.S.C.A. § 817(a), (b) (1996).

64 MCM, Rule 201, Reciprocal Jurisdiction.

65 MCM, Rule 201(e)(2)(A).

66 MCM, Rule 201(e)(2)(B).

67 MCM, Rule 201(e)(2)(C). The comments, however, make it clear that such reciprocal jurisdiction is not to be utilized outside of the joint environment. "The rule and its guidance effectuate the 'congressional intent that reciprocal jurisdiction ordinarily not be exercised outside of joint commands or task forces." Comment (e) to Rule 201. This guidance often presents problems for multi-service operations that are not actual joint commands or task forces. Issues arise, for example, in joint training where a member of one service is assigned to a training position under the command of another service. The usual practice is simply to return the member to his home unit for appropriate discipline, but this can be costly and inefficient.

68 Joint Publication 0-2, para. 3-59 a.

69 Joint Publication 0-2, para. 3-63.

70 Joint Publication 0-2, para. 3-65 a(2) states: "An accused should not ordinarily be tried by a court-martial convened by a member of a different Military Service except when the court martial is convened by a CINC or by the commander of a joint command or task force who has been specifically empowered by the President, the Secretary of Defense, or a superior commander under the provisions of the Rules for Courts-Martial (RCM) 201(e)(2) MCM to refer such cases for trial by court-martial or the accused cannot be delivered to the Military Service of which the accused is a member without manifest injury to the armed forces." AFI 51-201, para. 2.4, states: "The commander of a joint command, unified command, or joint task force is responsible for discipline in the command. The joint or unified commander should normally exercise disciplinary authority through the Air Force component commander or the senior Air Force officer (SAFO) to the extent practicable." While authority to convene courts martial may exist in joint commands and takes precedence over Air Force authority for offenses related to joint concerns or matters, offenses committed by Air Force members of joint commands are preferably addressed by Air Force commanders and convening authorities. Similarly, Air Force Commanders and convening authorities should only exercise jurisdiction over members of other Services when warranted by RCM 201."
71 The regulation provides no specific guidance on the definition of matters in which more than one service is involved. Presumably this phrase connotes situations in which the offender is from a different service, either the victim or the commander who has authority to impose punishment.

72 See supra notes 14 to 19 and accompanying text.

73 Id. The designation must be in writing and may be by separate Secretary of Defense letter or may be found in the orders creating the JTF. The designee must already be a GCMCA by virtue of his position within his respective service and may already have some convening authority over members of the command he commanded before the JTF was established. Creation of the JTF does not affect this authority.

74 For JTFs, the Air Component Commander is often a Numbered Air Force Commander and would continue to exercise disciplinary authority over the members of his command assigned to the JTF. For standing commands, the Component Commander is usually designated with convening authority upon assuming the position:

75 See supra note 70.

76 Joint force commanders can request designation of Component Commanders as SPCMCAs from each of the separate services. Paragraphs 2.1 and 2.2 of AR 51-201 direct all such requests for Air Force commanders to AFLSA/JAJM. See also HQ USAF Special order GA 1432, 27 June 1994, which appoints all general officers serving as Air Component Commanders as GCMCA's and all Colonels serving in such positions as SPCMCAs. But see United States v. Almy, 34 M.J. 1082 (CGCMR 1992) (holding that blanket designation of all Coast Guard Commanding officers as SPCMCAs was not authorized by Article 23).

77 Joint Publication 0-2, para. 3-65 b.

78 AFI 51-202, supra note 59, at para. 2.2. The AFI does, however, recognize that the commander of a joint command, unified command, or joint task force is responsible for discipline in the command and references Joint Publication 0-2 (implying that the joint commander may have authority to act in other situations if he chooses to exercise his "exceptional" power). Id.

79 Id.

80 AFI 51-202, supra note 59, at para. 7.1.4. If the SAFO is junior in rank to the imposing commander, the GCMCA of the Air Force host base makes the selection decisions. If that commander is still junior to the imposing commander, the decision is elevated to the highest ranking Air Force GCMCA. In any case, it is clear that selection decisions must be made by an Air Force commander. See AFI 36-2907, para. 1.2.7. See also AFI 36-2907, Unfavorable Information File Program (1 May 97).

81 AFI 51-202, supra note 59, at para. 2.1.1.

82 Id. at para. 2.1.2. This principal assistant is usually the next senior Air Force member in the command, but may be any senior Air Force member with SAF approval.

83 AFI 38-101, Air Force Organization (29 June 94) addresses creation of provisional units. Examples include the 7440 Provisional Wing created by CINCUSAFE during Operation
Provide Comfort and several provisional units created as part of Operations Desert Shield/Desert Storm/Southern Watch.

84 Since both AFI 51-201 and Joint Publication 0-2 prefer discipline by the separate service where practical, it is arguable this practice is required in many joint deployment situations.

85 Not all JTF Commanders are appointed as GCMCAs. The Commander, JTF Southwest Asia, for example, has not been so appointed. GCM cases arising in that command are usually handled by the home command, Central Command. Commanders of stand-alone JTFs, however, may be better off with their own authority to convene GCMs and their SJAs must advise them on this issue.
JAGs Deployed: Environmental Law Issues

LIEUTENANT COLONEL ANNE L. BURMAN, USAF */*
MAJOR TERESA K. HOLLINGSWORTH, USAF /**/

Our mission of preparing for war will still come first, but with it should come the need to aggressively eliminate any permanently destructive effects our actions might have on the environment.

- Admiral Jeremiah, Vice Chairman of the JCS /1/

I. INTRODUCTION

More than any other time in our history, Air Force judge advocates deploy and play a major role in operations. Judge advocates anticipate and prepare for most operational issues, such as jurisdictional issues, targeting review, and rules of engagement development. However, other less apparent issues, such as those dealing with environmental law, must also be recognized as an essential part of the mission. Recent events illustrate the major role in overseas exercises /2/ and operations /3/ environmental issues can play. Such issues could surprise the deployed judge advocate who may assume domestic regulatory protections play no part on foreign soil, or who is unfamiliar with international law requirements.

As important as it is to understand which laws and regulations apply to overseas operational deployments, it is equally important to distinguish those which do not apply. For example, several aspects of environmental law apply only to our installations overseas, not to deployments that take place off of installations or federal facilities. This article focuses on the latter, operations away from Air Force installations, and includes both exercises and deployments in support of combat and operations other than war. The term "overseas deployment" will be used throughout the article to mean only those overseas operations that take place away from installations or fixed site facilities. /4/ The purpose of this article is to describe the various sources of environmental law (both domestic and international) as they apply to these overseas deployments.

II. GUIDANCE ON ENVIRONMENTAL ISSUES DURING OVERSEAS DEPLOYMENTS

A. The Air Force Environmental Quality Program

A good place to begin identifying the applicable environmental requirements is within Air Force policy directives and instructions. According to Air Force policy, achieving and maintaining environmental quality is an essential part of the Air Force mission, /5/ whether in the United States or overseas. /6/ The Air Force commitment to achieve and maintain environmental quality abroad is based on the need to ensure long-term air, land and water access required to protect U.S. interests. /7/ Specifically, the Air Force is committed to cleaning up environmental damage resulting from its past activities; meeting all environmental standards applicable to its present operations; planning its future activities to minimize environmental impacts; managing responsibly the irreplaceable natural and cultural resources it holds in public trust; and eliminating pollution from its activities wherever possible /8/ Taken together, these
commitments make up the "four pillars" of the Air Force Environmental Quality Program (AFEQP): Cleanup, Compliance, Conservation, and Pollution Prevention. Although the four pillars of the AFEQP are the same for domestic and overseas operations, important distinctions exist in the application of the Program depending on the location of the overseas operation. For example, some requirements under the AFEQP apply only to overseas operations on, and deployments to, fixed site installations and facilities. The following discussion of each of the four pillars will distinguish among the requirements which apply to overseas deployments vice these fixed sites. These distinctions are important to know since judge advocates (JAGS) must advise commanders during overseas deployments on cleanup, compliance, conservation, and pollution prevention management activities.

Concerning cleanup, the first pillar of the AFEQP, the most recent guidance covering overseas deployments is a policy letter issued by the Deputy Secretary of Defense, which supplements the current Air Force policy directive and instruction. The DoD policy letter applies to remediation of environmental contamination not only on DoD installations or facilities overseas, but also caused by DoD operations that occur within the territory of a foreign country. These "DoD operations," as defined by the policy letter, include training, but not operations connected with actual or threatened hostilities, peacekeeping missions, or relief operations. For environmental contamination caused by current DoD operations at overseas locations (that is, contamination not located on, and not flowing from a DoD installation or facility), the policy is for service components to take prompt action to remediate known imminent and substantial endangerments to human health and safety. Under this policy, remediation will be considered accomplished when the contamination no longer poses an imminent and substantial endangerment to human health and safety. Commanders have the flexibility to make risk-based decisions concerning the level of remedy, ranging from restricting access, to permanent remedies.

The in-theater commander may approve more extensive remediation of environmental contamination when required to maintain operations or protect human health and safety, and when required by international agreement. In either case, if a DoD environmental executive agent has been designated, the commander must first consult with the agent before the remediation is implemented. Except for these situations, additional remediation is the responsibility of the host nation using its own resources.

Turning to compliance, the second pillar of the AFEQP, facilities overseas must comply with DoD Final Governing Standards (FGS), or, in their absence, the environmental criteria of the DoD Overseas Environmental Baseline Guidance Document (OEBGD). It is important to note, however, that the compliance requirements of the FGS and OEBGD apply only to our installations and facilities overseas, not to overseas deployments. For overseas deployments - including peacekeeping missions, relief operations, and actual or threatened hostilities - Air Force Policy Directive (AFPD) 32-70 requires Air Force deployment plans to identify necessary resources and assign specific responsibilities to comply with applicable environmental standards. The Directive also requires that, consistent with force security requirements, the Air Force support environmental compliance inspections of its operations and activities worldwide, and aggressively correct areas not in compliance. The broad language of this policy directive, which does little to identify actual compliance standards, exemplifies the current lack of specific environmental standards for contingency operations.

Because of this lack of standards, late in 1996, the Army requested a defense-wide environmental compliance policy be developed to cover the military's increasing number of...
contingency operations. Standards and procedures applicable to different phases and kinds of operations would provide consistent guidance and oversight to these operations and among service components. DoD Deputy Under Secretary for Environmental Security, Sherri W. Goodman, recently authorized the creation of a work group to address this issue, but the resulting DoD Instruction is not expected for over a year.

With respect to conservation, the third pillar of the AFEQP, Air Force policy is to conserve natural and cultural resources through effective environmental planning which integrates the environmental consequences of proposed actions and reasonable alternatives into all levels of decision making. Overall guidance for military overseas environmental planning is found in Executive Order (EO) 12114, Environmental Effects Abroad of Major Federal Actions. This EO establishes requirements for Federal actions which may do significant harm to the environment of places outside the United States. DoD Directive 6050.7, Environmental Effects Abroad of Major Department of Defense Actions, implements DoD policy in regard to the EO. The Directive establishes compliance procedures and identifies exemptions to compliance. The Air Force has supplemented this guidance with specific rules regarding required levels of review for environmental assessments and environmental impact statements dealing with global commons. All deployments, whether or not they are to installations and facilities, must accomplish the Environmental Impact Analysis Process (EIAP) and prepare an exercise or contingency specific environmental plan.

Under prevention, the fourth pillar of the environmental program, Air Force policy is to prevent future pollution by reducing the use of hazardous materials and releases of pollutants into the environment to as near zero as feasible. The policy also requires minimal use of environmentally damaging materials, and the recycling or reuse, whenever possible, of spent material created from using hazardous wastes. To meet the policy's requirements, overseas installations and facilities must comply with AFI 32-7080, Pollution Prevention Program. Since AFI 32-7080 only applies to deployments to installations and facilities, guidance for other types of deployments would instead be found in the relevant operations plan (OPLAN) and any applicable host country law or international agreements.

Although the AFEQP provides a reasonable overview of environmental responsibilities and obligations for deployed JAGS, a considerable amount of this program's guidance does not apply to overseas deployments. For these deployments, OPLANS (or Exercise Plans in cases of exercises) are the best sources of guidance on environmental issues. In fact, AFI 32-7006 specifically requires all deployments to develop and comply with an exercise or contingency-specific environmental plan.

**B. Operations Plans (OPLANS)**

OPLANS are documents developed normally at the combatant command level to detail how operations will be conducted. They can be standard plans that are later tailored for a specific scenario, or deliberate plans developed originally for a particular operation. Exercise plans (EXPLANS) are very similar to OPLANS in structure and organization. Generally, plans contain several annexes, which identify broad subject areas (e.g., intelligence, logistics). The annexes usually contain one or more appendices, which identify sub-components and describe the specific tasks required. The appendices may contain one or more tabs to further expand on given areas.
Where environmental requirements will be found within an OPLAN depends on the type of plan, single-service or joint. For example, in a plan developed for a pure Air Force deployment, the environmental considerations should be in Annex W, Civil Engineering, at Appendix 2, "Environmental Protection and Compliance Tasks." In a plan developed for a joint operation, however, the environmental portion will most likely comprise a separate annex. For joint planning, the Chairman of the Joint Chiefs of Staff (CJCS) has published guidance on the Joint Operation Planning and Execution System (JOPES). The CJCS Manual prescribes formats and procedures applicable to the joint staff, all combatant commands, services, and combat support agencies responsive to the Chairman of the Joint Chiefs of Staff. Under DOPES, "Annex L" to a given OPLAN should address environmental considerations. The stated purpose of Annex L is to prescribe environmental planning guidance and define responsibility to support operational planning. The Annex should describe, in sufficient detail, environmental considerations that affect the OPLAN during all phases of the operation. Additionally, DOPES describes two appendices to Annex L. Appendix 1 is for Environmental Assessments, and Appendix 2 is for Environmental Assessment Exemptions.

Although environmental guidance for overseas deployments may be found in different places depending on whether the OPLAN is single-service or joint, the essence of the guidance itself covers the same specific issues. The Air Force requires its exercise or contingency-specific environmental plans to follow guidance in JCS Publication 4-04, Joint Doctrine for Civil Engineering Support. This same publication is referenced in DOPES, Annex L. In general, JCS Pub 4-04 calls for joint civil engineering operations to be planned and conducted with appropriate considerations of their effects on the environment, in accordance with applicable U.S. and host nation agreements, environmental laws, policies, and regulations. To ensure proper attention is given to environmental considerations, the JCS Pub requires a separate annex or appendix be included in each operational order (OPORD) and OPLAN under which units will deploy. The annex or appendix developed in accordance with JCS Pub 4-04 should include, at a minimum, the following major sections:

- Policies and responsibilities to protect and preserve the environment during the deployment
- Certification of local water sources by medical field units
- Solid and liquid waste management
  - Open dumping
  - Open burning
  - Disposal of grey water
  - Disposal of pesticides
  - Disposal of human waste
  - Disposal of hazardous waste
- Hazardous material management including the potential use of pesticides
- Flora and fauna protection
- Archaeological and historical preservation
- Base field spill plan

An OPLAN is not limited to the areas listed above, and should also contain policies and responsibilities for any other relevant environmental issues.

A good example of an Annex to an OPLAN which includes appropriate environmental considerations is Annex L to U.S. European Command (USEUCOM) Standard Plan 4000 (USP 4000). Currently under revision, USP 4000 is the template plan for most USEUCOM
operations. /60/ USP 4000 builds on the DOPES concept, addressing the areas required by Joint Pub 4-04 and numerous other environmental issues. /61/ For example, USP 4000 contains guidance for disposal of infectious and noninfectious medical wastes and addresses the issues of exit and redeployment, even though these items are not specifically enumerated in Joint Pub 4-04. To review the organization and topical breakdown of the USP 4000, Annex L, see Appendix A to this article.

In addition to deployment operations, plans are also routinely developed for joint and coalition exercises, building on the JOPES guidance. The recent exercise, TANDEM THRUST 1997 (TT97), /62/ conducted in the Shoalwater Bay Training Area of Australia, /63/ was saturated with environmental issues. The exercise plan for TT97 contains a very good example of an environmental annex that was drafted to educate exercise participants, avoid environmental problems, and establish procedures to deal with problems and issues arising during the conduct of the exercise. /64/

The training area, Shoalwater Bay, was entered in The Register of the National Estate in 1980 by the Australian Heritage Commission. /65/ The area is a refuge for native marine, terrestrial and avian fauna, including several species which are rare or endangered /66/ and various rare and endangered flora. /67/ The Great Barrier Reef (GBR), the world's largest and most significant living reef system, /68/ is located in the area, firmly establishing it as a highly significant natural and cultural heritage site. /69/

Recognizing the cultural and historical significance of the training area, the environmental annex to the exercise plan admonished participants that "[e]nvironmental, cultural, and heritage protection will not be sacrificed." /70/ The appendix on contingencies, which provided escalation procedures in the event of an environmental accident, required participating forces to make "all practicable efforts to comply with all binding and implied environmental restrictions." /71/ Overall, the plan recognized adherence to, and strict compliance with, environmental regulations and restrictions to be a function inherent in leadership, /72/ and unequivocally placed the responsibility squarely on the shoulders of commanders at all levels to ensure exercise participants were aware of safeguards, responsibilities, and response and reporting requirements. /73/

Although the TT97 EXPLAN does not follow DOPES guidance exactly, /74/ the environmental annex, Annex T, is comprehensive and does address the substantive areas required by Joint Pub 4-04. /75/ (An outline of Annex T to the TT97 OPLAN can be found at Appendix B to this article.) Most notably, the annex covers operations from pre-deployment through the end of the exercise, including assessing the environment before, during, and after the exercise. /76/ Preventive measures," standard operating procedures, /78/ escalation procedures in the event of an environmental incident, /79/ and reporting requirements /80/ of all operations, including maritime, /81/ amphibious, /82/ land, /83/ and air /84/ were comprehensively addressed in the annex.

Although judge advocates are not mentioned specifically in the environmental annex to the exercise plan, they obviously helped develop it. Several legal issues are implied by references in the plan to international agreements such as the Montreal Protocol on Substances that Deplete the Ozone Layer, /85/ the Ramsar Convention, /86/ The International Convention for the Prevention of Pollution from Ships 1973, as modified by the Protocol of 1978 (MARPOL 73/78), /87/ The Queensland Marine Parks Act (1982-1988), /88/ and The London Dumping Convention. /89/ Furthermore, a Navy judge advocate from Pacific Command acted as the chief of the Environmental Monitoring Unit /90/ during the exercise. /91/
As a general practice, those judge advocates participating in an exercise or overseas deployment must be familiar with the terms of the plan and be ready to assist commanders at all levels who are charged with plan development and implementation. Judge advocates should also closely monitor message traffic pertaining to an operation, which may modify, the existing requirements, limitations and obligations found in the plan. Additionally, judge advocates may be involved in the process of investigating and advising on violations of either the plan or other specific environmental laws and requirements. /92/

C. Host Nation Laws, International Agreements, and the Law of Armed Conflict

Even a cursory review of OPLANs and EXPLANs reveals the important role international law plays in environmental planning. To help create comprehensive plans and implement them effectively, judge advocates must be aware of the legal implications to U.S. operations of host nation environmental law, international agreements, and the Law of Armed Conflict (LOAC). The challenge is to identify early the laws that may apply to a given operation or exercise, and to determine the extent to which they may impact U.S. military operations.

1. Host Nation Laws

Whether host nation law applies to deployed U.S. forces depends on the nature of the deployment. For example, U.S. forces need not comply with host nation law in circumstances where immunity is granted by agreement, /93/ U.S. forces are engaged in combat, /94/ or U.S. forces are engaged in a United Nations (UN) security mission. /95/ Other than these exceptions, however, U.S. forces may be held accountable for violations of host country law. The key for judge advocates is to identify any applicable host country law ahead of time and either ensure operations comply with the law, or execute agreements to exempt U.S. forces from compliance requirements.

2. International Agreements

Besides host nation law, U.S. operations may be impacted by international agreements which levy environmental requirements or impose environmental limitations. This is clearly the case for those agreements to which the United States is a party, such as the 1925 Gas Protocol, /96/ the Chemical Weapons Convention, /97/ and the Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD). /98/ However, the analysis must not stop there. U.S. operations abroad may also be impacted by international agreements to which the host nation is a party even if the U.S. is not a party. For example, during Operation Joint Endeavor (OJE), /99/ the application of the Basel Convention, which encourages the disposal of wastes within the nation they are generated, /100/ greatly complicated U.S. forces' transportation of hazardous wastes. /101/

During OJE, United States forces were designated to a sector within the operational area of responsibility centered in the northeast corner of Bosnia Herzegovina. U.S. forces were completely landlocked, requiring bulk materials and major troop units to travel over land or rail routes crossing German, Austrian, Hungarian, and Croatian borders. /102/ The United States needed to transport U.S.-generated waste from operations in Bosnia Herzegovina across national borders into Hungary, Croatia, Germany, or as otherwise determined /103/ for environmentally sound treatment or disposal.
However, the Basel Convention prohibits the shipment of hazardous wastes from a non-member nation, (i.e., Bosnia-Herzegovina), to a member nation, (i.e., Croatia), unless a special agreement has been negotiated. /105/

In June 1996, Croatia refused to allow U.S. hazardous waste to be transported by a commercial contractor from Bosnia-Herzegovina into Croatia unless assurances could be obtained from the other transit countries (Hungary and Austria), and the destination country (Germany), that shipments of hazardous waste would not be frustrated in route. /106/ The Croatian position was that transit agreements established during the operation did not relieve Croatia of its obligations under the Basel Convention. /107/ Eventually, "statements of no objection" were obtained, and in February 1997, shipments of hazardous wastes finally started. /108/ This situation clearly illustrates the need to negotiate international agreements in advance of deployments and to ensure they address the impact of the host nation's obligations under international law. /109/

3. Law of Armed Conflict

While canvassing the various statutes, agreements, treaties, and policies that may apply to the environmental aspects of an overseas deployment, a judge advocate should not overlook the general principles of LOAC. /110/ Following DESERT SHIELD/STORM, much has been written on LOAC as it pertains to the protection of the environment during military operations. /111/ In general, protective provisions of internationally recognized armed conflict laws state that destruction of the environment not justified by military necessity violates international humanitarian law. /112/ The LOAC principles of military necessity /113/ and proportionality /114/ require that only military objectives be attacked, with constant care taken to spare the civilian population and civilian objects. /115/ Furthermore, LOAC principles prohibit the use of methods or means of warfare "which are intended, or may be expected, to cause widespread, long-term and severe damage to the natural environment." /116/ If the offense involves "extensive destruction and appropriation of property not justified by military necessity" and is "carried out unlawfully and wantonly," it may constitute a grave breach /118/ of international humanitarian law.

The threshold question in a LOAC analysis is whether the situation involved is one covered by armed conflict laws. LOAC can apply to international armed conflicts even if war has not been declared, and to "all cases of partial or total occupation of the territory of a High Contracting Party." /119/ The analysis is more difficult for non-international conflicts. /120/ For those conflicts, only the provisions of Common Article 3 of the Geneva Conventions and Additional Protocol II may apply. /121/ Although Protocol II does not specifically address environmental protection, it does prohibit, for the purpose of starving civilians, the attack of agricultural areas and drinking water installations. /122/ It also prohibits, regardless of military necessity, the targeting and attack of installations containing dangerous forces (e.g., dikes, dams, and nuclear electrical generating stations), /123/ all of which would obviously cause environmental damage.

Arguably, many U.S. deployments do not fall within either the definition of international armed conflict or non-international armed conflict, and are not, therefore, covered by the Laws of Armed Conflict. However, U.S. policy is that LOAC principles may nevertheless be applied even in those circumstances when armed conflict, under international law, does not exist. /124/ Therefore, the
principles discussed here could apply to U.S. operations as a matter of policy, without an exhaustive analysis of whether the engagement was an "armed conflict" under the definitions in the conventions.

Given that LOAC may apply to an operation, it becomes necessary to review the applicable language in the Geneva and Hague Conventions specifically addressing environmental concerns. The Regulations Annexed to Hague Convention IV of 1907 Respecting the Laws and Customs of War on Land contain several Articles which should be considered in any analysis of how LOAC applies to environmental destruction during war. /125/

Article 22 provides that "the right of belligerents to adopt means of injuring the enemy is not unlimited." Article 23(g) specifies that it is especially forbidden "to destroy or seize the enemy's property, unless such destruction or seizure be imperatively demanded by the necessities of war." Article 46 adds that "private property cannot be confiscated" by an occupying force, and Article 47 [states] that "pillage is formally forbidden." To further clarify the restrictions upon occupying powers such as Iraq during the conflict with Kuwait, Article 55 states that "the occupying State shall be regarded only as administrator... of... real estate, forests and agricultural estates belonging to the hostile State, and situated in the occupied country. It must safeguard the capital of these properties, and administer them in accordance with the rules of usufruct." /126/

The Geneva Conventions are in concert with the Hague Regulations in recognizing that even destruction caused during warfare is not without legal limits. The pertinent articles define the lawfulness of the destruction based on whether it was justified by military necessity. /127/ Further, Article 53 of Geneva Convention IV requires occupying powers to avoid secondary property damage not justified by military necessity. /128/ It is Department of Defense policy to ensure "the law of war and the obligations of the U.S. government under that law are observed and enforced by the U.S. armed forces." /129/

D. Federal Law, Executive Orders and DoD Guidance

Domestic environmental law can also impact overseas deployments. This is true even though most U.S. environmental statutes are expressly directed at activities in the United States /130/ and, therefore, do not generally have extraterritorial application. Congress ordinarily expresses extraterritorial intent by either referring to specific geographic areas, such as Antarctica or the oceans, or by expressly targeting U.S. citizens, nationals or facilities wherever they are located in the world./131/ For example, the Eighth Circuit Court of Appeals held that the Endangered Species Act, (ESA) /132/ contains a clear expression of congressional intent that the law apply extraterritorially. /133/ The U.S. Supreme Court, however, later reversed the case based on lack of standing," leaving the issue of extraterritorial application "something of an open question." /135/ Despite its potential for international application, to date the ESA has not impacted on operational deployments overseas. /136/

Another federal statute, the National Environmental Policy Act (NEPA) was held to apply in Antarctica under a "global commons" theory by the D.C. Circuit Court in Environmental Defense Fund, Inc. v. Massey. /137/ The Court's ruling did not, however, address whether the
NEPA applied to proposed actions involving an internationally recognized sovereign power. In 1979, President Carter directed NEPA be applied extraterritorially by issuing Executive Order 12114, *Environmental Effects Abroad of Major Federal Actions*. EO 12114 requires an environmental analysis be prepared for major federal actions having significant effects on the environment outside the geographical borders of the United States, its territories and possessions. The intent of the EO is to further the purpose of NEPA by making officials of federal agencies responsible for taking actions which could impact the environment overseas, and requiring them to explain what steps they have taken to minimize possible damage.

EO 12114's procedural requirements are triggered by "major federal actions" that "significantly affect" the environment outside the United States. DoDD 6050.7, *Environmental Effects abroad of Major Department of Defense Actions* implements the EO. Depending on the type of action and the location of the environmental harm, documentation must be generated in the form of an environmental impact statement (EIS), environmental study (ES) or environmental review (ER). An EIS, the most complicated of the three, is required for major federal actions that will significantly harm the environment of the global commons. An ES or an ER may be required for major federal actions that significantly harm the environment of a foreign nation or a protected global resource. An important exception is that no action is required with respect to federal actions that affect only the environment of participating or otherwise involved foreign nations. An ES contains an analysis, similar in scope to an EIS, of the likely environmental consequences of a major federal action, and is prepared by the DoD in conjunction with one or more foreign nations or with an international body or organization in which the United States is a member or participant. An ER is a survey, or concise summary, of the important environmental issues involved in a proposed major federal action. It may be prepared unilaterally by DoD or in conjunction with another federal agency, and does not include foreign government participation.

The deployment of units, ships, aircraft, or mobile military equipment is specifically excepted by the terms of the EO. Additionally, the EO does not extend to actions, which are not "federal," such as when the United States participates in an advisory, information gathering, representational, or diplomatic capacity. Other activities specifically exempted by the language of the order include:

1. Actions not having a significant effect on the environment outside the United States as determined by the agency;
2. Actions taken by the President;
3. Actions taken by or pursuant to the direction of the President or Cabinet officer when the national security or interest is involved or when the action occurs in the course of an armed conflict;
4. Intelligence activities and arms transfers;
5. Export licenses or permits or export approvals, and actions relating to nuclear activities except actions providing to a foreign nation a nuclear production or utilization facility as defined in the Atomic Energy Act of 1954, as amended, or a nuclear waste management facility;
6. Votes and other actions in international conferences and organizations;

7. Disaster and emergency relief action. /150/

If one or more of the exemptions above apply, or if the Secretary of Defense approves an additional exemption, /151/ no environmental analysis or documentation is required. For example, an environmental assessment was determined not to apply to Operation Joint Endeavor since all actions contemplated under this operation were with the consent, participation, and involvement of the foreign nations potentially affected by the action. /152/ However, in accordance with DoD environmental policy, the OPLAN called for "consideration of environmental impacts and efforts to minimize adverse environmental impacts . . . to be accomplished during all aspects of the operation." /153/

In operations where EO 12114 does require an environmental assessment, forces may request an exemption. /154/ This occurred during Operation SEA SIGNAL. /155/ Since no exemption under the language of the DoD Directive applied, the commander in chief (CINC) of United States Atlantic Command requested an exemption from EO 12114's documentation requirements through the joint staff to the Under Secretary of Defense (Acquisition and Technology). The Under Secretary, Dr Kaminski, approved the request, but emphasized in his decision that it is DoD policy to "consider pertinent environmental considerations when making decision regarding DoD activities and operations worldwide" and to "be a leader in environmental stewardship within mission constraints." /156/ In his letter, Dr Kaminski reiterated that commands must perform and document environmental analyses and mitigate negative environmental impacts "to the extent practicable and consistent with national security requirements." /157/ Judge advocates on overseas deployments should determine if the deployment activities are covered by an exemption, or whether a special exemption should be requested. Overall, judge advocates need to be thoroughly familiar with the DoD directives and instructions implementing environmental requirements and obligations for overseas deployments.

In 1996, DoD Directive 4715.1, Environmental Security, /158/ was published. This Directive mandated DoD prepare new, more extensive implementing DoD Instructions covering environmental protections. This began a process of restructuring and revising that continues to the present. When the process is complete, three DoD Instructions will be the mainstay for guidance to practitioners overseas. They are:

1. DoDI 4715.5, Management of Environmental Compliance at Overseas DoD Installations (replaced DoD Directive 6050.16);

2. DoDI 4715.**, Environmental Remediation for DoD Activities Overseas; /159/


III. CONCLUSION

The protection of the environment is not just a domestic issue. The United States Air Force is committed to protecting the environment overseas during exercises, wartime contingencies, and other
operations. The potential for environmental damage must be carefully considered in each aspect of an operation, including pre-deployment, during deployment and post-deployment. Changes to mission plans may be required to ensure potential environmental damage is avoided or minimized to the greatest extent possible consistent with military mission needs. The degree to which operations may be changed to accommodate the environment will obviously vary greatly depending on the mission. Deployed judge advocates must be aware of the many sources of environmental law which may apply to a given operation. Review of the OPLAN and host country law, as well as any applicable international agreements, is necessary to be fully prepared. Additionally, judge advocates should understand the nature of the deployment operations and the extent to which they may impact the environment. Ultimately, the responsibility for environmental stewardship is a function of command. Therefore, it is imperative for deployed judge advocates to be ready to advise commanders at all levels as to their responsibilities and obligations.

APPENDIX A

U.S. European Command (USEUCOM) Standard Plan 4000, Annex L

Table of Contents

1. References
2. General
   a. Purpose

   b. Major Assumptions
   c. Limiting Factors
3. Mission
4. Execution
   a. Concept of Operations
      (1) General Operation Concept

      (2) Preparation and Initial Deployment
      (3) Operations
         (a) Documentation of Initial Environmental Conditions
         (b) Potable Water
         (c) Grey Water
         (d) Wastewater/Human Waste (Sewage)
         (e) Solid Wastes
         (f) Infectious Medical Wastes
         (g) Noninfectious Medical Wastes
         (h) Hazardous Materials
         (i) Hazardous Wastes
         (j) POL
         (k) Spill Prevention and Control
         (l) Incident Reporting
         (m) NBC Waste/Products
         (n) Natural Resources
         (o) Historic and Cultural Resources
(p) Environmental Compliance Assessments  
(q) General Reporting Requirements  
(4) Exit/Redeployment  

(a) Hazardous Wastes/Materials  
(b) Camp Closure Plan  
(c) Site Remediation  
(d) Documentation of Final Environmental Conditions  
(c) Incident Reporting  

b. Tasks/Responsibilities  

(1) Environmental Executive Agent  
(2) Force/JTF Commander  
(3) Force/JTF Engineer  
(4) Component Designated DoD Environmental Executive Agent  
(5) Force/JTF SJA  
(6) Force/JTF Surgeon  
(7) Force/JTF Safety Officer  
(8) Force/JTF Director of Logistics  
(9) Service Components  
(10) DLA  
(11) Unit Level Environmental Point of Contact  

5. Administration and Logistics  

a. Reports  

APPENDIX B  

Tandem Thrust 1997 Exercise Plan (TT97 EXPLAN), Annex T  

Table of Contents  

References  
1. Purpose  
2. General  
Paras a - e identify the geographical location of the exercise  
(f) Policy  
(g) Environment  
3. Responsibilities  
(a) The Combined Exercise Control Group (Forward)  
(b) Commanders  
(c) Environmental Compliance  

d. Specific Environmental Protection Measures  
(e) Complete Reporting Requirements  
4. Operations limitations/restrictions  
(a) Maritime Operations
(1) Sewage
(2) Greywater
(3) Air
(4) Oil and Oily Waste
(5) Hazardous Waste/Materials
(6) Solid Waste
(7) Medical Waste
(8) Spills
(9) Ship Ballast Water
(10) Anchoring
(11) Protection of Marine Mammals
(12) Endangered/Threatened Species
(13) Noise
(14) Use of Sonar
(15) Mine Warfare Operations
(16) Underwater Demolition
(17) Naval Gunfire
(18) UXO Clearance
(19) Dumping
(20) Replenishment at Sea
b. Amphibious Operations
   (1) General
   (2) Anchoring
   (3) Landings

   (4) Use of Hovercraft

   (5) Refueling of Landing Craft
   (6) Beach Operations
c. Maritime Pre-positioning Force Integration
d. Shore Operations
   (1) Historic and Archeological Resources Protection
   (2) Natural Resources Management
   (3) Road Signs
   (4) Vehicular Movements
   (5) Artillery Restrictions
   (6) Engineer Restrictions
   (7) Digging and Defensive Construction
   (8) Hazardous Materials and Waste Management
   (9) Fuel Management
   (10) Water
   (11) Catchment Area Operations
   (12) Reefers
   (13) Fire Restrictions
e. Air Operations (Restrictions)
f. Equipment and Material Transportation Operations (inbound and outbound)
5. Environmental Management Support Tasking Arrangements
   a. Combat Camera
   b. Environmental Awareness Program

Appendix 1: Commander's Environmental Guidance

Appendix 2: Environmental Monitoring Unit (Environmental Assessment Plan)

Appendix 3: Environmental Protection-Contingencies

APPENDIX C

Listing of the Different Categories of Major Federal Actions and Documentation Required for Each Under EO 12114 /161/

1. An Environmental Impact Statement (EIS) is required for major federal actions significantly affecting the environment of the global commons outside the jurisdiction of any nation (e.g., the oceans or Antarctica).

2. An Environmental Study (ES) or an Environmental Review (ER) is required for:
   a. major federal actions significantly affecting the environment of a foreign nation not participating with the United States and not otherwise involved in the action
   b. major federal actions significantly affecting the environment of a foreign nation which provide to that nation
      (1) a product, or physical project producing a principal product or an emission or effluent, which is prohibited or strictly regulated by Federal law in the United States because its toxic effects on the environment create a serious public health risk; or
      (2) a physical project which in the United States is prohibited or strictly regulated by Federal law to protect the environment against radioactive substances.

3. An EIS, EA or ER, as determined by the agency, is required for major federal actions outside the United States, its territories and possessions which significantly affect natural or ecological resources of global importance designated for protection under this subsection by the president, or in the case of such a resource protected by international agreement binding on the United States, by the Secretary of State.

*Lieutenant Colonel Burman (B.S., Loyola University; JD., Chicago-Kent College of Law, LL.M., George Washington University) is the Chief, Military Justice Division, The Air Force Judge Advocate General School, Maxwell AFB, Alabama. She is a member of the Illinois State Bar.
** Major Hollingsworth (B.S., United States Air Force Academy; M.B.A., Troy State University at Montgomery, Alabama; JD., University of Florida) is an instructor, The Air Force Judge Advocate General School, Maxwell AFB, Alabama. She is a member of the Florida State Bar.

1 Admiral Jeremiah, Vice-Chairman of the Joint Chiefs of Staff, quoted in SUSAN D. LANIER GRAHAM, THE ECOLOGY OF WAR 126 (1993).

2 See infra notes 62-92 and accompanying text (impact of environmental considerations on planning and execution of Tandem Thrust Exercise 1997).

3 See infra notes 99-109 and accompanying text (difficulty in negotiating with Croatian government to allow the United States to transport into Croatia U.S. generated hazardous waste from Bosnia-Herzegovina).

4 For a complete analysis on environmental law at overseas installations, see Lt Col Richard A. Phelps, Environmental Law for Overseas Installations, 40 A.F. L. REV. 49 (1996) [hereinafter Phelps].

5 Air Force Policy Dir. 32-70, Environmental Quality, para. 1.1 (20 July 1994) [hereinafter AFPD 32-70].

6 Air Force Instr. 32-7006, Environmental Program in Foreign Countries, para. 1.1 (29 April 1994) [hereinafter AFI 32-7006].

7 Id. at para. 1.1.

8 AFPD 32-70, supra note 5, at para. 1.1.

9 Also commonly referred to as "restoration" or "remediation."

10 AFPD 32-70, supra note 5, at para. 1.3. These terms are not defined in the AFPD, or in AFI 32-7006. However, these terms are defined in Department of Defense Directive 4715.1, Environmental Security, (24 Feb. 1996) [hereinafter DODD 4715.1]. DODD 4715.1, which applies to DoD operations, activities, and installations worldwide, states:

   Restoration is identification, evaluation, containment, treatment, and/or removal of contamination so that it no longer poses a threat to public health and the environment.

   Compliance is meeting applicable statutory, executive order, and regulatory standards for all environmental security functions, including Final Governing Standards (FGS) or the Overseas Environmental Baseline Guidance Document (OEBGD), as appropriate (see infra note 23 and accompanying text).

   Conservation is planned management, use, and protection; continued benefit for present and future generations; and prevention of exploitation, destruction, and/or neglect of natural and cultural resources.

   Pollution prevention is source reduction as defined in 42 U.S.C. §§ 13101-13109, and other practices that reduce or eliminate the creation of pollutants through increased efficiency in the use of raw materials, energy, water, or other resources; or protection of natural resources by conservation.

   Id. at paras. 2a - d, "Definitions."

11 AFPD 32-70, supra note 5, at para. 1.3. See also AFI 32-7006, supra note 6, at "preamble."

12 AR 32-7006 defines the term "installation" as a grouping of facilities, located in the same vicinity, which support particular functions; "facility" is defined as a real property entity used and maintained by a DoD component consisting of one or more of the following: a building, a structure, a utility system, pavement, and underlying land; "deployment" is defined as the relocation of forces to desired areas of operation. AFI 32-7006 supra note 6, at 7.

14 AFI 32-7006, supra note 6, at para. 1.2.1.5.

15 Memorandum from the Deputy Secretary of Defense for several parties including Secretaries of the Military Departments, "Environmental Remediation Policy for DoD Activities Overseas" (18 Oct. 1995) [hereinafter DoD Policy Letter]. The DoD Policy Letter was implemented by Memorandum from HQ USAF/CE, for all subordinate Civil Engineering Organizations, "Environmental Remediation Policy for DoD Activities Overseas" (30 Nov. 1995), which called for the new DoD policy to supplement current Air Force policy, stating the Air Force policy for environmental remediation, contained in Chapter 2 of AFI 32-7006 (24 April 1994) was consistent with, but not as comprehensive as the new DoD policy.


17 Id. at paras. 2.c.(1) and 3 (stating the decision as to whether a contaminated site poses an imminent and substantial endangerment shall be made by the in-theater commander of the service component or defense agency after consultation with the appropriate DoD medical authority and the DoD environmental executive agent, if any, for the respective host nation. The authority to make this decision may be delegated by the in-theater commander of the service component to an installation or facility commander, as appropriate).

18 Id. at para. 3.

19 Id. at paras. 2.c.(2) and 2c.(3).

20 Department of Defense Directive 6050.16, DoD Policy for Establishing and Implementing Environmental Standards at Overseas Installations (20 Sept. 1991) [hereinafter DODD 6050.16]. The Assistant Secretary of Defense (Production and Logistics), in coordination with the Chairman of the Joint Chiefs of Staff and the Under Secretary of Defense Policy was directed to "designate . . . DoD Executive Agent[s] for environmental matters in each foreign country where DoD operations are conducted at installations or facilities." Id. at para. D 1(b). AFI 32-7006 defines Environmental Executive Agent as "[the] Component or Unified Commander designated by the Assistant Secretary of Defense for Acquisition as Responsible for developing and publishing the Final Governing Standards for a specific country." AFI 32-7006, supra note 6, at 7, "Terms Used." AM 32-7006 also contains a list of host nation environmental executive agents. Id. at attach. 3.

21 DoD Policy Letter, supra note 15, at paras. 2.c.(2) and 2.c.(3).

22 Id. at para. 2 c(4). (Service components and defense agencies shall encourage such remediation and cooperate with host nation efforts by providing information about the contamination and appropriate access to contaminated sites, subject to operational and security requirements.) Id.

23 Phelps, supra note 4, at 67, citing DEPT OF DEFENSE ENVTL. OVERSEAS TASK FORCE, OVERSEAS ENVIRONMENTAL BASELINE GUIDANCE DOCUMENT (1992) [hereinafter OEBGD (1992)] at 1-7. FGS are determined by evaluating host-nation standards which are "adequately defined and generally in effect or enforced against host-government and private sector activities," comparing them to the OEBGD baseline standards, and selecting the standard which is the most protective of the environment. Id.

24 AFPD 32-70, supra note 5, at para. 1.3.2. See Phelps, supra note 4, at 55 n. 48, citing Executive Order (EO) 12088, Federal Compliance With Pollution Control Standards, (13 Oct. 1978) [hereinafter EO 12088]. EO 12088 created the first environmental protection requirements of federal facilities overseas, mandating compliance with host country "pollution control standards of general applicability." Phelps, supra note 4, at 55, note 51, citing language in para. C.1 of DODD 6050.16. DODD 6050.16 implemented the mandate of EO 12088 by creating a minimum environmental protection standard applicable to DoD installations and facilities overseas. That minimum standard is embodied in an OEBGD which is based on "generally accepted environmental standards" applicable to DoD facilities in the United States. DODD 6050.16, supra note 20.
25 Phelps, supra note 4, at 69-70, citing OEBGD (1992), at 1-6, paras. b. and c.

26 AFPD 32-70, supra note 5, at para. 1.3.2.

27 Id.

28 Lessons Learned - Operation Joint Endeavor: Environmental Considerations for Future Contingency Operations, A Combatant Command Perspective, 21 May 1997, at p. 2 (draft document on file with the authors) [hereinafter Lessons Learned OJE].


30 Lessons Learned OJE, supra note 28, at 3.

31 Id.

32 AFPD 32-70, supra note 5, at para. 1.3.3.

33 Executive Order 12114, Environmental Effects Abroad of Major Federal Actions (4 Jan. 1979) [hereinafter EO 12114]. See infra note 139 and accompanying text (discussion of EO 12114).

34 Department of Defense Directive 6050.7, Environmental Effects Abroad of Major Department of Defense Actions (31 Mar. 1979) [hereinafter DOD Dir. 6050.7].

35 Id. Currently, Department of Defense Instr. 4715.-- [Draft], Analyzing Defense Actions With Potential for Significant Environmental Impacts Outside the U.S., is being circulated for comment. When approved, this instruction will replace DOD Dir. 6050.7.

36 AFI 32-7061, supra note 13, at paras. 5.2.1-5.2.3. While AFI 32-7061 does not define Global Commons, the term is defined in DOD Dir. 6050.7 as the geographical areas that are outside the jurisdiction of any nation, including the oceans outside territorial limits and Antarctica. Global commons do not include contiguous zones and fisheries zones of foreign nations. DOD Dir. 6050.7, supra note 34, at para. C(4).

37 AFI 32-7061, supra note 6, at para. 7.2.1 (AFI 32-7061, describes specific tasks and procedures for the Air Force EIAP, and incorporates by reference the requirements of EO 12114 and DOD Dir. 6050.7. See AM 32-7061, supra note 13, at para. 5.1.

38 AR 32-7006, supra note 6, at para. 7.2.1.

39 AFPD 32-70, supra note 5, at para. 1.3.4. (Minimal release is to be accomplished through source reduction techniques such as chemical substitution, process changes, etc). Id.

40 Id.

41 AFI 32-7006, supra note 6, at para. 5.1.

42 Id. at para. 7.1.

43 Air Force Manual 10-401, Operation Plan and Concert Plan Development and Implementation, 261 & fig. A2.6. (28 Oct. 1994) [hereinafter AFM 10-401]. AFM 10-401 provides guidance on Air Force-unique planning aspects, as opposed to joint planning. However, in the case of conflicts between the Air Force plan and either the joint or the supported command's guidance, Air Force planners are told to conform to the joint or the supported command guidance. Id. at "preface."

44 See AFM 10-401, id.
45 CJCSM 3122.03, Joint Operation Planning and Execution System Volume II, Planning Formats and Guidance (1 June 1996) [hereinafter CJCSM 3122.03].

46 Id. at 1.

47 Id. at C-457.

48 Id.

49 Id

50 Id. at C-463. See infra, notes 142-148 and accompanying text (The environmental assessment may be an environmental impact statement (EIS), environmental study (ES), or environmental review (ER)).

51 CJCSM 3122.03, supra note 45, at C-465. See infra, notes 154-156 and accompanying text.

52 AFI 32-7006, supra note 6, at para. 7.3.2 (referring to Joint Chiefs of Staff Pub. 4-04, Joint Doctrine for Civil Engineering Support (22 Feb. 1995) [hereinafter JCS Pub 4-04].

53 CJCSM 3122.03, supra note 45, at C-459.

54 JCS Pub 4-04, supra note 52, at para. 4a.

55 Id. at para. 4c.

56 Id.

57 Id. at II-8, fig. II-4.

58 AFI 32-7006, supra note 6, at para. 7.3.2.


60 Interview with Lt Col Richard Phelps, USAFE/JAM, 28 May 1997; Lessons Learned ODE, supra note 28, at 3.

61 The USP 4000 contains virtually all the same main headings as the DOPES guidance and contains numerous subheadings. It must be remembered that the USP 4000 is currently in draft form. USP 4000, supra note 59.

62 Tandem Thrust 97 was a combined United States and Australian military training exercise conducted at the Shoalwater Bay Training Area in Queensland, Australia, and March 1-22, 1997. The exercise was a U.S. Pacific Command (USPACOM) sponsored, joint task force training exercise to train in crisis action planning and execution for contingency response operations. Units of the U.S. Army, Marine Corps, Navy and Air Force assigned to the Pacific Command, as well as units of the Texas Army National Guard participated with units from the Australian Defence Force Maritime, Land and Air commands. See Commander, United States Navy Seventh Fleet Homepage, Tandem Thrust, <http://www.C7F.yokipc.navy>.

63 The Shoalwater Bay Training Area was purchased by the Australian government in 1965, and has been used by their Army, Navy, and Air Force for independent and joint exercises since that time. The United States, New Zealand and Singapore have also exercised in the area. Environmental Education Program Pamphlet (pamphlet prepared for participants in Exercise Tandem Thrust 1997; on file with authors).

64 Tandem Thrust 97 Exercise Plan 97-1 (1997) (copy on file with authors) [hereinafter TT97 EXPLAN 97-1]. The environment was broadly defined to include all aspects of the surrounding of human beings, including not only the natural environment (soil, flora, marine and terrestrial animals, air, water, etc.), but also the cultural environment
(such as historic Aboriginal and Torres Strait environments), as well as the human social environment (e.g., economical issues such as employment, recreational, and cultural activities). \textit{Id. at} 1, annex T, para. 2.g.

65 \textit{Id. at} 1, annex T, app. 3, para. 2.a. (The area met all seven natural criteria and four cultural criteria against which an area is assessed for inclusion in the Register of the National Estate. Few Queensland sites in the Register meet all of these criteria).

66 \textit{Id. at} 1, annex T, para. 4(13). The plan identifies the green turtle and the dugong (a large marine relative of the manatee) as endangered and threatened species. The plan also includes operational restrictions to minimize the impact to the bird life on several islands in the exercise area. \textit{Id.}

67 \textit{Id. at} 1, annex T, "foreword."

68 \textit{Id. at} 1, annex T, app. 3, para. 2.c(2).

69 \textit{Id. at} 1, annex T, app. 3, para. 2.a. In 1981, the GBR became the first place in Australia listed under the World Heritage Convention. The region has been identified by the International Maritime Organization (IMO) as a "particularly sensitive area." \textit{Id. at} annex T, app. 3, para. 2.c(1). (listing of the GBR required meeting strict criteria for establishing rare, unique and superlative examples of natural phenomena.) \textit{Id.}

70 \textit{Id.}

71" \textit{Id. at} 1, annex T, app. 3, para. 3.a.

72 \textit{Id. at} annex T, para. 2.a.

73 \textit{Id. at} 1, annex T, app. 1, para. 3.a & 3.d.

74 In the DOPES, Annex "L" contains the environmental guidance. For TT97, the plan included several additional Annexes and the ordering differed from DOPES, such that the environmental guidance was positioned at Annex "T." Interview with Ms Karen A. Verkennes, TT97 Environmental Action Officer, Commander in Chief, Pacific Fleet (CINCPACFLT), 20 May 1997. Appendix 1 is "Commander's Environmental Guidance;" Appendix 2 is "Environmental Monitoring Unit (Environmental Assessment Plan);" Appendix 3 is "Environmental Protection-Contingencies." TT97 EXPLAN 97-1.

75 See supra note 52 and accompanying text.

76 TT97 EXPLAN 97-1, supra note 64, at annex T, app. 2, paras 3 & 4. (The plan assigned the overall responsibility for environmental assessment and compilation of environmental data to the Combined Exercise Control Group (Forward)/Environmental Monitoring Unit (CECG(FWD)/EMU). \textit{Id. at} annex T, para. 5.a (The mission statement of combat camera under the plan was to perform aerial/ground imagery reconnaissance before, during, and after the exercise to provide information from which to determine original assessment and evaluate geographic environment at end of the exercise (ENDEX)).

77 \textit{Id. at} 1, annex T, para. 3.b (As part of the Environmental Awareness Program required under the terms of the plan, all participants were required to have a copy of the Environmental Awareness and Health Handbook and to view the Environmental Awareness Video before arrival in the Exercise Area).

78 \textit{Id. at} 1, annex T, para. 4.

79 \textit{Id. at} 1, annex T, Appendix 3, para. 4.

80 \textit{Id. at} 1, annex T, app. 3.

81 \textit{Id. at} 1, annex T, para. 4.a., & app. 1, para. 4.a.
82 Id. at 1, annex T, para. 4.b., & app. 1, para. 4.b.
83 Id. at 1, annex T, para. 4.d., & app. 1, para. 4.d.
84 Id. at 1, annex T, para. 4.e., & app. 1, para. 4.e.
85 Id. at 1, annex T, app. 1, para. 4.a.(3).
86 Id. at 1, annex T, app. 3, para. 2.b. (The wetlands of the exercise area constituted an internationally significant site under the convention, whose broad aims are to halt the worldwide loss of wetlands and to conserve, through wise use and management, those that remain).
87 Id. at 1, annex T, app. 3, para. 2.c.(2) (MARPOL 73/78 recognized the need to protect the environment of the GBR by prohibiting the discharge of harmful substances into the sea from ships anywhere in the area. Although specifically exempt from the provisions of MARPOL, under the EXPLAIN warships were expected to comply in a manner consistent with the objectives and purposes of the Convention when it was operationally practical to do so).
88 Id. at 1, annex T, app. 3, para. 2.d. (The Great Barrier Reef Marine Park is managed by the Queensland Department of The Environment).
89 Id. at 1, annex T, para. 4.a.(19).
90 Interview with Ms Karen A. Verkennes, TT97 Environmental Action Officer, CINCPACFLT, 20 May 1997.
91 Id.
92 TT97 EXPLAIN 97-1, supra note 64, at annex T, para. 4.d.(1)(c) (The plan specifically addressed penalties only one area concerning Historic and Archeological Resources Protection, stating any personnel who deliberately desecrate Aboriginal or European sites or remove any artifacts could be penalized under both Military and Civilian Law).
93 For example, a Status of Forces Agreement supplants host country law with procedures agreed upon by the sending and receiving state.
94 The Judge Advocate General's School, United States Army, OPERATIONAL LAW HANDBOOK (TJAGSA JA 422) 5-3, "Environmental Law in Operations" (1996) citing WILLIAM W. BISHOP, JR., INTERNATIONAL LAW CASES AND MATERIALS 659-661 (3.d ed. 1962). (Basic application of Law of the Flag theory, which stands for the proposition that a foreign military force that enters a nation through force is immune from the laws of the receiving nation). Id. [hereinafter Handbook].
95 UN Peace Operations: A Collection of Primary Documents and Readings Governing the Conduct of Multilateral Peace Operations 223 (Walter Gary Sharp, Sr. ed. 1995). The status of UN or multilateral forces depends on the underlying authority upon which the forces are present in the receiving state. If forces are present under the coercive authority of the Security Council (i.e., a chapter VII Peace Enforcement operation), then absolute immunity from any receiving state authority exists and may be asserted. Forces that conduct consensual peace operations under authority of the UN in the territory of a sovereign state (i.e., a Chapter VI Peacekeeping Operation), are not absolutely immune from all local national law and regulation, but they are protected by those privileges and immunities afforded by international law, ad hoc arrangements, and operation-specific stationing agreements. For this reason, it is preferable during a Chapter VI operation to have some arrangement or agreement with the receiving state to determine the status of the members of the force and to exempt the force itself from unnecessary regulation and expense. Id.
96 The 1925 Geneva Protocol for the Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, June 17, 1925, 26 U.S.T. 571, T.I.A.S. No. 8061 [hereinafter Gas Protocol]. The Gas Protocol bans wartime use of asphyxiating, poisonous, or other gases, and all analogous liquids, materials
and devices. The United States ratified the Protocol, but reserved the right to use chemical weapons in response to a chemical attack.

97 1993 Convention on the Prohibition of the Development, Production, Stockpiling and use of Chemical Weapons and on Their Destruction, January 13, 1993, 32 I.L.M. 800. [hereinafter Chemical Weapons Convention]. The United States signed the Convention on January 13, 1993 and ratified it on April 25, 1997. The Convention went into effect on April 29, 1997. Organization for the Prohibition of Chemical Weapons (OPCW) Home Page (last modified June 10, 1997) <http://www.opcw.nl/>. The Chemical Weapons Convention may impact the use of herbicides and Riot Control Agents (RCA). RCAs are defined in Article III of the Convention as any chemical not listed in a schedule, which can produce rapidly in humans sensory irritation or disabling physical effects which disappear within a short time following termination of exposure. Executive Order 11850 deals with the use of RCAs and states the United States will not use RCAs first during war except for defensive purposes to save lives. Non-warfare uses of herbicides and RCAs may include crop control and law enforcement, e.g., the EO allows the domestic use of RCAs and herbicides, and their use to control vegetation around "immediate defensive perimeters." Id. Note that in a letter to the Senate on June 23, 1994, President Clinton clearly indicated that the CWC does not apply to operations other than war. Therefore, its restrictions are inapplicable to peacetime operations such as peacekeeping operations, humanitarian and disaster relief operations, counter-terrorist and hostage rescue operations, and Noncombatant Evacuation Operations. Judge Advocate General's School, Department of the Army, Law of War Workshop Materials 8-28 (on file with authors).

98 THE LAWS OF ARMED CONFLICTS: A COLLECTION OF CONVENTIONS, RESOLUTIONS AND OTHER DOCUMENTS 164-165 (Dietrich Schindler & Jiri Toman eds., 3d ed. 1988). On 5 October 1978, ENMOD came into force. The Convention prohibits engaging in military or any other hostile use of environmental modification techniques (defined in Art II as "any technique[s] for changing, through the deliberate manipulation of natural processes, the dynamics, composition or structure of the Earth, including its biota, lithosphere, hydrosphere and atmosphere, or of outer space having widespread, longlasting [sic] or severe effects as the means of destruction, damage or injury to any other State Party." Id. See also James P. Terry, The Environment and the Laws of War: The Impact of Desert Storm, XLV Naval War College Rev. 64 (1994) [hereinafter Terry]. The definitions provided in the Convention make it clear that what is anticipated are very "high-tech" modifications. For example, "widespread" is defined as encompassing an area on the scale of several hundred square kilometers, "long-lasting" is defined as lasting for a period of months, or approximately a season; and "severe" is defined as involving serious or significant disruption or harm to human life, natural or economic resources or other assets. Id.

99 Operation Joint Endeavor was officially activated on December 19, 1995 with the passing of United Nations Security Council Resolution 1031, establishing a multinational military implementation force of some 60,000 troops in ground, air, and maritime units from over 25 NATO and non-NATO nations to implement peace in Bosnia. American Forces Press Service, 9539 Main Body Deployed for NATO Operation Joint Endeavor, (last modified July 2, 1997) <http://www.dtic.mil/vafs/>. On December 17, 1996, alliance officials signed the activation orders for the second phase of the multinational peace mission, Operation Joint Guard, with a stabilization force of about 31,000 troops, including about 8,500 U.S. troops. Id.


101 Lessons Learned, OIE, supra note 28, at 4. While negotiating a solution to the dispute over how hazardous waste would be transported across national borders for disposal, several emergency shipments of hazardous waste were made using U.S. military transportation assets, which was not the preferred means of transportation for environmental and safety reasons. Id.

102 Id. at 3.

103 Id.
104 Basel Convention, supra note 100, at art. 4, para. 5.

105 Id. at article 11. See also Lessons Learned, OJE supra note 28, at 3 (the special agreement would have required a lengthy negotiation process).

106 Lessons Learned, OJE, supra note 28, at 4.

107 Interview with Lt Col Phelps, Chief, Environmental Law Division, Headquarters United States Air Forces in Europe, (HQ USAFE/JA), 18 June 1997. Neither the SOFAs nor the transit agreements mentioned hazardous wastes specifically. However, the U.S. position was that the clause in the Croatian SOFA (below) and the clause in the transit agreements with, or in the letters from the governments of, the transit states (below) were broad enough to include hazardous wastes. Croatia disagreed with the U.S. position because the provisions didn't clearly include contractors of NATO forces and, therefore, didn't clearly apply to the U.S.'s transport of hazardous wastes. Id.

Croatian SOFA, para. 9: "NATO personnel shall enjoy, together with their vehicles, vessels, aircraft and equipment, free and unrestricted passage and unimpeded access throughout Croatia."

Language generally present in the transit agreements or letters received from transit states: "The Government of shall allow the free transit over land, railroad, water or through air of all personnel and cargo, equipment, goods and materials of whatever kind, including ammunition required by NATO for the execution of the operation ...... Id. (copy of SOFA on file with HQ USAFE/JA).

108 Lessons Learned, OJE, supra note 28, at 4.

109 Id. This is especially true during short notice operational deployments to less developed countries. Transit of hazardous wastes will become more complicated with the impending ratification by African nations of the Bamako convention, which further restricts movement of hazardous wastes among African countries.

110 The international law of armed conflict has two main sources: customary international law (arising out of the conduct of nations during hostilities and binding upon all nations), and treaty law (arising out of international treaties and binding only upon those nations which have ratified a particular treaty). The main areas of treaty law are Hague law (named for treaty conventions held over the years at The Hague, Netherlands), and Geneva law (named for treaty conventions held over the years at Geneva, Switzerland). Hague law consists of the various Hague Conventions of 1899 as revised in 1907, plus the 1954 Hague Cultural Property Convention and the 1980 Conventional Weapons Convention, and is concerned mainly with the means and methods of warfare. Geneva law consists of the four 1.949 Geneva Conventions:

1) The Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field [hereinafter GC I];

2) The Amelioration of the Condition of the Wounded, Sick and Shipwrecked Members of Armed Forces at Sea [hereinafter GC II];

3) Convention Relative to the Treatment of Prisoners of War [hereinafter GC III]; and


Geneva law also includes the 1977 Protocols Additional to the Geneva Conventions, December 12, 1977, 16 I.L.M. 1391, [hereinafter GP I and GP II]. Geneva Law is concerned with protecting persons involved in conflicts. To further complicate the analysis, the Hague Conventions of 1899 and 1907, the Geneva Conventions of 1949, and some Articles of the 1977 Protocols are so widely accepted that they are considered customary international law. As such, they bind even nonsignatories. Note that the United States has not ratified GP I or GP II. However, the United
States does recognize that virtually all the Articles of Protocol II and many provisions of Protocol I are reflective of customary international law. See McCoubrey, supra note 110.


112 Annex to Hague Convention No. IV, I.8 October I.907, embodying the Regulations Respecting the Laws and Customs of War on Land (Article 23 (g)) [hereinafter H.IV.R]; GC IV, Arts 53 and I.47; G.P.I. Arts. 35.3 and 55. See supra note 110 for status of U.S. ratification of GP I and II.


114 DONALD A. WELLS, THE LAWS OF LAND WARFARE: A GUIDE TO THE U.S. ARMY MANUALS 90-91 (1992). Mr. Wells first states proportionality prohibits injury or damage to civilians and non-military targets, which is disproportionate to the military advantage sought by an action. Id. However, he later states that "[u]nfortunately, no criteria exist by which the assessment of what is 'disproportionate' or 'excessive' can reasonably be made." Id. at 96.

115 G P I, supra note 110, at arts. 48, 52 and 57.

116 Id. at Art. 35(3).

117 GC I, supra note 110, at art 49; GC II, supra note 110, at art 50; GC III, supra note 110, at art 129; GC IV, supra note 110, at arts. 53 &147; GP I, supra note 110, at arts. 35.3 & 55.

118 GC I, supra note 110, at art 49; GC II, supra note 110, at art 50; GC III, supra note 110, at art 129; GC IV, supra note 110, at art 146. (For "grave breaches" of the conventions, as opposed to "simple" breaches, the High contracting parties, among other things, are obliged to search for such persons alleged to have committed, or to have ordered such grave breaches and to bring such individuals before its own courts or to hand them over to another High Contracting Party.) For a more in depth analysis, see Tanja, supra note 111.

119 Through "common" Article 2 (so-called because this article exists in each of the four Geneva Conventions), the Geneva Conventions apply "to all cases of declared war or any other armed conflict which may arise between two or more of the High Contracting parties, even if the state of war is not recognized by one of them." GCI, supra note 110; GC II, supra note 110; GC III, supra note 110; GC IV, supra note 110, at art 2.

120 Non-international conflicts are defined in GP II as "all armed conflicts which are not covered by Article I of the Protocol Additional to the Geneva Conventions ... which take place in the territory of a High contracting Party between its armed forces and dissident armed forces or other organized armed groups which, under responsible command, exercise such control over a part of its territory as to enable them to carry out sustained and concerted military operations and to implement this Protocol." GP II, supra note 110, at art 1.

121 Although the United States has not ratified Protocol II, it views virtually all the provisions of Protocol II to reflect customary international law. See supra note 110.

122 GP II, supra note 110, at art. 14.
Chairman of the Joint Chiefs of Staff Instruction 3121.01 Standing Rules of Engagement for U.S. Forces (1 October 1994), CH-1 (22 Dec. 1994) [hereinafter CJCSI 3121.01]; Department of Defense Directive 5100.77, DoD Law of War Program, para. E(1)(a) (10 July 1979) [hereinafter DODD 5100.77]; Chairman of the Joint Chiefs of Staff Instruction, 5810.01, Implementation of the DoD Law of War Program (12 Aug. 1996) [hereinafter CJCSI 5810.01]. Each of these state that the armed forces of the United States will comply with the law of war during the conduct of all military operations and related activities in armed conflict, however such conflicts are characterized, and, unless otherwise directed by competent authorities, will apply law of war principles during all operations that are categorized as Military Operations Other Than War. See also, Joint Chiefs of Staff Pub. 3-07, Joint Doctrine for Military Operations Other Than War (16 June 1995).

During the Nuremberg Trials following WWII, the International Tribunal found the Annexed Regulations to be "declaratory of the laws and customs of war," and therefore applicable to all nations whether parties to Hague Conventions IV or not. See Terry, supra note 98, at 62.

Articles 50 of GCI and 51 of GCII provide it is unlawful to commit extensive destruction and appropriation of property that is not justified by military necessity and is carried out unlawfully and wantonly. Article 53 of GCIV bans destruction by the occupying power of property in absence of clear military necessity. Id.

The comprehensive scheme of environmental legislation was drafted largely in the 1970's but continues to be amended and rigorously enforced through various levels of federal, state and local regimes. See generally Phelps, supra note 4.

The Eighth Circuit held the Act extends to all agency actions affecting endangered species, whether within the United States or abroad and requires agencies to consult with the Fish and Wildlife Service before taking actions in foreign countries and on the high seas that may jeopardize endangered species. Defenders of Wildlife, Friends of Animals v. Lujan, 911 F.2d 117 (8th Cir. 1990), petition for rehearing en banc denied, December 10, 1990. The Supreme Court dismissed for lack of standing without reaching the issue of extraterritoriality. 112 S.Ct. 2130 (1992). Note that current Interior Department regulations limit the consultation requirement to only federal actions "within the U.S. or on the high seas." (50 C.F.R. §402.01) (1995).

The Eighth Circuit held the Act extends to all agency actions affecting endangered species, whether within the United States or abroad and requires agencies to consult with the Fish and Wildlife Service before taking actions in foreign countries and on the high seas that may jeopardize endangered species. Defenders of Wildlife, Friends of Animals v. Lujan, 911 F.2d 117 (8th Cir. 1990), petition for rehearing en banc denied, December 10, 1990. The Supreme Court dismissed for lack of standing without reaching the issue of extraterritoriality. 112 S.Ct. 2130 (1992). Note that current Interior Department regulations limit the consultation requirement to only federal actions "within the U.S. or on the high seas." (50 C.F.R. §402.01) (1995).

Interview with Lt Col Andrea Andersen, HQ AFLSA/JACE, 22 May 1997.

See Phelps, supra note 4, at 50-51 (case involved an injunction action by the Environmental Defense Fund (EDF) against the National Science Foundation (NSF). The EDF alleged the NSF violated NEPA by failing to prepare an environmental impact statement before incinerating food wastes at its McMurdo Station research facility in Antarctica. Court reasoned Antarctica is a continent without a sovereign over which the United States has a measure of legislative control).

EO 12114, supra note 33.
140 Id. at para. 2-1.

141 Id. NEPA creates a documentation requirement to ensure agency decision-makers consider the environmental impact of federal actions.

142 Id. at para. 2-3. The "environment" concerned is only the natural and physical environment, and excludes social, economic and other environments. Id. at para. 3-4.

143 EO 6050.7, supra note 10.

144 Id. at encl. 1, para. C.1. An EIS contains an analysis of the likely environmental consequences of a proposed action. This includes a review of the affected environment, a description of any adverse environmental effects that cannot be avoided if the proposal is adopted, alternatives to the proposed action, actions taken to avoid environmental harm or otherwise to better the environment, and environmental considerations and actions by the other participation nations, bodies or organizations. Id. at encl. 1, para. D.5.

145 Id. at encl. 2, para. A.

146 Id. at encl. 2, para. B.2. This is true for federal actions that do not involve providing products or physical projects, producing principal products emissions, or effluents that are prohibited or strictly regulated by federal law in the United States, or resources of global importance that have been designated for protection. Id.

147 Id. at encl. 2, paras D. La. and D. Lb.

148 Id. at encl. 2, para. E. La. and E. Lb.

149 EO 12114, supra note 24, at para. C.5.

150 Id. at para. 2-5.

151 Id. at para. 2-4 (c).

152 Exhibit 1 to Tab B to Appendix 5 to Annex D to USCINCEUR OPLAN 4243, Environmental Assessments, para. 4. Lessons Learned OJE, supra note 28, at 2.

153 Id.

154 DODD 6050.7, supra note 34, at encl. C, para. 3 b. (The Department of Defense is authorized to establish additional exemptions that apply only to the Department's operations).

155 Involved constructing a migrant camp at Guantanamo, Cuba as ordered by the President through the Secretary of Defense, in accordance with national interests, to prevent migrants from attempting to sail to the United States. The camp was to be built in Cuba for the direct benefit of the Cubans, but the Castro government did not endorse the effort. See Memorandum from the Secretary of Defense, for Director, Joint Staff, "Exemption from Environmental Review Requirements for Cuban Migrant Holding Camps at Guantanamo, Cuba (Operation SEA SIGNAL, Phase V)," December 5, 1994 [hereinafter Sea Signal].

156 Id. Under DODD 6050.7, Enclosure C, para. 3 B(1) case-by-case exemptions maybe based on emergencies, national security considerations, exceptional foreign policy requirements, or other special circumstances. DODD 6050.7, supra note 34. Concerning Operation SEA SIGNAL, Dr. Kaminski specifically found that the construction of the camps was in the national interest. See Sea Signal, supra note 155.

157 Sea Signal, supra note 155.

159 Applies to remediation of environmental contamination caused by DoD operations, including training, that occur off a DOD installation or facility and within the territory of a nation other than the United States. However, the instruction does not apply to operations connected with actual or threatened hostilities, security assistance programs, peacekeeping missions, or relief operations, nor to actions to remedy environmental contamination that are covered by requirements in environmental Annexes to operations orders and similar operations directives. See DoDI 4715.**, paras. B(1)(b) - (c) (draft document on file with the authors).

160 DODD 4715.1 supra note 10.

161 Information compiled from EO 12114, paras. 2-3, 2-4 (a), and 2-4(b)(i) - (iv). See EO 12114, supra note 33.
Shoe Clerk (shoo klurk) n. generally speaking, a person with close-set eyes, a sloping forehead, and thick spectacles; one who does not fly jets; a fighter pilot wanna-be; placed into groups, they constitute a FPLSS (fighter pilot life support system). "The pilot looked on with disgust as the shoe clerk, a man with cokebottom glasses, eagerly filled out the paperwork." See Paper Pusher, Lesser Being, Pencil-necked Geek.

Fighter Pilot (fi-tur pi-let) n. one who flies airplanes to avoid work; a graduate of pilot training, a program for ego-maniacs who aren't smart enough to get into law school; obsessed with fashion, wears a leather jacket to distinguish himself from shoe clerks; sells insurance to shoe clerks upon retirement. "The judge advocate looked on with compassion as the fighter pilot, crippled by attention deficient disorder, struggled to understand the issue." See Prima Donna.

I. INTRODUCTION

Shoe Clerk?!! Alas, the old fighter pilot term for "those who aren't" still haunts the hallowed halls of fighter squadron ops centers across the Air Force. There is, however, a growing recognition that executing the mission is a team effort, one that requires both fighter pilots and, well ... shoe clerks. The reason is simple. Today's military operations are, politically and legally, highly surgical endeavors - they are Clausewitzian to the core. One minor misstep in the execution of a mission can have disastrous political and international ramifications. At the same time, they can be extremely complex. It is not unusual for forces from around the world to deploy to remote locations with little notice. Whether it be guarding jets in the desert, refining rules of engagement (ROE), scrubbing target lists for compliance with the law of armed conflict (LOAC), building tent cities, or ensuring troops take advantage of the combat zone tax exclusion, shoe clerks have come of age!

That said, a great divide sometimes separates the flyers from the non-flyers, a divide deeper than mere leather flying jacket envy. The tongue in cheek definitions set forth above still reflect the subconscious (and not so "sub") opinions of some military members. If they didn't, you wouldn't have grinned knowingly while reading them. In this article, we will try to bridge this divide by offering a primer on fighter operations for shoe clerks, particularly the judge advocate (JAG).

Our goals are three-fold. First, we hope that armed with a better understanding of what the fighter community does, you will enjoy greater credibility within that seemingly exclusionary group. This will, in turn, make them more receptive to what you bring to the fight.

Second, we want to enhance the quality of what you can contribute. It is a basic premise of law, or any other support function for that matter, that service will improve if you understand the customer (client), his product, and the environment in which he operates. This is no less true in fighter ops. A JAG reviewing a Master Attack Plan who simply chants the "minimize collateral damage" mantra doesn't
offer much value added to the mission planning process. By contrast, one who understands the differing capabilities and limitations of weapons systems can offer meaningful, practical advice on meeting collateral damage legal standards or developing ROE. The knowledgeable JAG will be able to apply, vice simply recite, the law; he'll be a key player in the "iron on target" process.

Finally, it is our hope that by realizing how complex, time-consuming, and potentially dangerous fighter operations are, you will gain a greater appreciation for those who conduct them. In the same way that we want to increase the credibility of, and respect for, "shoe clerks," so too do we want to increase your understanding of fighter pilots. Everyone in the Air Force brings something pretty unique to the fight; the better we understand that, the more effective we will all be. After all, the desired end state is "one team - one fight."

Our approach is simple. First, we outline what it is that fighters do, i.e., their missions. Next, we describe what the Air Force conducts those missions with - the aircraft and their weapons. Finally, we take you through fighter operations, from flying considerations, to planning and executing a typical mission. Our article concludes with appendices designed to help the non initiate break the "fighter-speak" code, a unique language rivaling ancient Aramaic in difficulty. The goal isn't fluency. It's merely to offer up enough translations to avoid your marginalization in a fighter environment.

A few caveats before we begin. First, we have left a great deal out; this article is a primer, not a textbook intended to make you mission ready (MR) for the F-16. Second, lest the article become an unmanageable behemoth, we only discuss fighter operations from the Air Force viewpoint. Third, much of this is frankly tedious. Flying looks pretty alluring as jets jump off the end of the runway in the morning's first light with afterburners ablaze, but to make that happen right, operators have to master a quantum of facts, procedures and acronyms that would put a bar review course to shame. That being so, those who really want to understand fighter ops must have a handle on an awful lot that's not very flashy. Finally, despite valiant efforts by the Air Force to standardize terminology and procedures, differences exist between aircraft, commands, and, in alliance or coalition operations, countries. Though we have tried to use the most generic iterations, you must be sensitive to the fact that those prevalent in your unit or operation may differ slightly from what you see here.

II. MISSIONS

In 1995, the Air Force initiated a long range planning process that led to the identification of our "core competencies." /1/ Core competencies are what the Air Force does, what we bring to the joint fight. At the Fall 1996 CORONA conference, the Air Force's senior leadership articulated six core competencies:

- Air and Space Superiority
- Global Attack
- Precision Engagement
- Information Superiority
- Rapid Global Mobility
- Agile Combat Support /2/

It is useful to keep the core competencies in mind because planners on joint staffs use them in thinking through when and how fighter assets may be brought to bear. Current Air Force
doctrine, on the other hand, defines the operational art of employing aerospace forces in terms of roles and missions. AFM 1-1 outlines four basic roles:

- Aerospace Control
- Force Application
- Force Enhancement
- Force Support

Fighter operations, or missions, traditionally fall under the first two roles. Fighters may also be used in the third, force enhancement, to provide surveillance and reconnaissance, support special operations activities, or even conduct combat search and rescue.

While it might be rare to hear fighter operators at the unit level speak in terms of core competencies, missions are a common subject of discussion. Because a solid grasp of mission terminology and acronyms is essential to effective interaction with fighter pilots and commanders, we begin by outlining those missions in which fighters engage, and those which play key roles in supporting them. Absent a complete understanding of missions, the judge advocate will be unable to effectively participate in two critical fighter ops activities - mission planning and the development/application of rules of engagement.

A. Aerospace Control.

The role of aerospace control is currently broken into defensive and offensive control of both air and space. Fighters train for and execute the missions of Defensive Counterair (DCA), Offensive Counterair (OCA), and Suppression of Enemy Air Defenses (SEAD), which can be considered a subset of OCA. Reduced to basics, counterair missions are designed to achieve air superiority by destroying or neutralizing enemy air forces, their associated infrastructure and their munitions. They enable friendly forces the freedom to attack, while providing freedom from attack by the enemy.

In offensive counterair missions, the fight is taken to the enemy to destroy his aircraft, surface-to-surface missile sites, and the infrastructure for generating, flying, and controlling strikes against friendly forces. OCA includes any mission against targets which might pose an offensive threat to US or friendly forces/territory from the air. For instance, F-15C/D and F-16s may be used to "sweep" the skies of enemy aircraft. Similarly, F-16s, F-15E Strike Eagles, and F-117 Nighthawks might attack enemy aircraft, surface-to-surface missile sites, munitions, and supporting infrastructure on the ground.

In its SEAD variant, OCA includes attacking enemy surface-to-air missile (SAM) and anti-aircraft artillery (AAA) facilities in what are labeled "wild weasel" missions. Performed valiantly by the F-4G for many years, these missions recently became the responsibility of specially equipped Block 50 F-160s. SEAD missions also encompass standoff electronic jamming performed by the EA-6B and the EF-111 (soon to retire from the AF inventory), as well as standard physical strikes by aircraft such as the F-15E and F-117 (although the F-117 is more likely to be used for strategic attack).

By contrast, DCA is classic air defense and generally occurs over friendly held territory. While any mission to identify and destroy an incoming threat falls within the DCA category, the most
common methods are "strip alert" and "combat air patrol" (CAP). In strip alert, aircraft and pilots are readied to launch within a set period - measured in minutes - if a threat appears. CAP, on the other hand, involves actually putting aircraft into "orbits" where they remain ready to intercept incoming aircraft. Whether strip alert or CAP is used usually depends on the severity and imminence of the threat. The F-15C/D and F-16 are DCA fighters.

B. Force Application

The role of force application is currently broken into three missions: strategic attack, air interdiction, and close air support. They are conducted at the strategic, operational, and tactical levels of war, respectively. A strike against an enemy's command and control system would be a typical example of force application.

C. Strategic Attack

Strategic attacks are operations against key targets that will affect an enemy's overall war effort. They should be distinguished from missions which are designed to affect specific military operations, either the enemy's or our own. For example, an attack against a bridge to cut resupply would not be a strategic attack; its effect is too narrow. However, an attack against an electrical generating facility to disrupt power to an entire region would be, as would a strike against a communications node, critical factory, or national command and control facility. Efforts to disrupt the morale of a nation or discredit its leader, both of which occurred during Desert Storm, would also be strategic attacks. Bear in mind that it is not a mission defined by the type of weapon or weapon system used. In the past, the term strategic was often deemed synonymous with the use of nuclear weapons; that is not the sense in which it is used here. Nor are strategic missions limited to long-range bombers, cruise missiles or ballistic missiles. Any attack capable aircraft can perform a strategic attack function; it is simply a matter of what it is attacking and why. Strategic attack capable fighters are the F-16, F-15 E, and F-117.

D. Interdiction

Interdiction missions are those whose purpose is to disrupt and destroy enemy ground forces, and/or their support, before they can be brought to bear against friendly forces. This allows friendly forces to halt an enemy offensive and seize the initiative, thereby rendering the enemy reactive, rather than proactive. Interdiction sorties usually target second and third echelon forces. In many cases, however, they take the form of attacking enemy lines of communication (LOCs) in order to separate its tooth (fighting power) from its tail (logistic support). Interdiction targets may also include personnel and supplies that have not reached the front and assets used to transport them (trains, trucks, etc.). Likewise, attacks against command and control facilities (except those with national responsibilities) are interdiction missions because they disrupt the enemy's ability to maneuver and direct forces to, from, and around the theater of operations. Interdiction missions are performed by the F 16, F-15E, A-10, and (occasionally) F-117.

E. Close Air Support

Close air support (CAS) consists of operations against enemy forces in contact with or in the vicinity of friendly ground operations. They have immediate effect at the tactical level. Because it is flown in support of ground operations, and because of the need to closely coordinate with ground commanders to ensure responsiveness and
the avoidance of friendly fire incidents, CAS is conducted under the positive control of the ground force commander being supported. /9/ Typical targets include maneuver forces or positions where enemy ground forces have dug in. As in strategic attack, it is neither the aircraft nor the category of the target that renders a mission close air support; instead it is the intended effect that is determinative. /10/ The primary CAS fighters are the A-10 and F-16.

**F. Supporting Missions**

Numerous missions are flown in direct support of fighter operations, some as part of the same direct effort, others in broader roles. Command and control (C) aircraft, for instance, are present in almost any combat operation flown in today's environment. The primary aircraft performing the aerial battle management function is the E-3 Sentry Airborne Warning and Control System (AWACS). A related command and control system for the ground battle is the E-8 JSTARS, which can "feed" information to the AWACS. /11/ Key support missions also include air refueling, a service provided by the KC-10A Extender and KC-135 Stratotanker. Finally, important as any mission to the crew member is combat search and rescue (CSAR). CSAR platforms include the MH-60 and MH-53 helicopters and a number of Special Operations Forces (SOF) aircraft, as well as the fighters supporting the rescue as the on-scene CSAR commander ("Sandy") or providing OCA/DCA protection for CSAR forces. /12/

**III. AIRCRAFT AND WEAPONS**

Missions are what fighter operations consist of, what fighters do. To fully grasp fighter ops, however, you must also be familiar with the jets themselves and the weapons they employ. This is particularly true for judge advocates because without understanding the nature of the capabilities and limitations of the means by which force is used in armed conflict, it is impossible to provide meaningful advice on whether that force complies with the legal requirements of proportionality, necessity, and discrimination. The summaries below should get you moving in the right direction.

**A. Aircraft**

The aircraft itself is the at the heart of the weapon system. Each brings differing assets and liabilities to the fight. Therefore, when planners decide what types and numbers of aircraft to task against an objective, there are very specific reasons for their choices. Since those reasons often remain unarticulated, the JAG, absent a game of 100 questions, may have to piece together a plan's rationale that is quite obvious to the other players. Of course, the choice of aircraft has important legal ramifications. For instance, planners often weigh factors such as survivability against accuracy in selecting aircraft to execute a mission.

Similarly, in a properly functioning task force, the judge advocate will be heavily involved in ROE development, explanation and application. Since they involve both self-defense and mission accomplishment, knowing the capabilities of the aircraft is a basic prerequisite to effective involvement. "After all, the ability of an aircraft to defend itself or to execute the assigned mission in accordance with the ROE is dependent on what that aircraft can, and cannot, do (in light of the threat, weather, etc.). For reasons that are self-evident, then, understanding the assigned aircraft is "Job One" for the operational judge advocate.

1. **F-117 Nighthawk**
The F-117 was the first aircraft specifically designed to take advantage of low-observable (LO), or "stealth," technology. It became operational in 1983, but its existence and basing remained classified for nearly a decade. During Desert Storm, F-117s flew nearly 1,300 sorties without a single loss.

A single-seat fighter, it is an interdiction and strategic attack aircraft designed to penetrate enemy airspace without being detected, especially at night. Its ability to do so derives from a number of features which reduce "radar signature," i.e., the radar return created by the aircraft. In particular, the airframe "skin" is faceted; it consists of a multitude of flat panels which reflect radar signals at differing angles. Further, the aircraft's surface is made of radar absorbent materials. Adding to the F-117's stealth capabilities is its black color, which makes it difficult to see at night, and placement of the engine intakes and exhaust on the top portion of the aircraft, which reduces its heat signature, thereby providing it greater protection against infrared (heat) guided weapons (e.g., certain SAMs). Of course, night attack also facilitates the objective of penetrating undetected.

The F-117 is also renowned for its accuracy. Equipped with an inertial navigation system (INS) and the global positioning system (GPS), the aircraft maintains precise information on its position and the location of its target’s. Additionally, it has a steerable turret mounted in the fuselage underside that incorporates both forward and downward looking infrared (FLIR and DLIR) systems. These allow the F-117 to use the IR spectrum to safely navigate and successfully find and destroy targets at night or in conditions of reduced visibility. Combined with the ability to designate targets with a laser and then automatically track them, the F-117 enjoys true precision attack capability.

An air-refuelable aircraft, the F-117 has an unfueled range of approximately 650 miles. With a maximum speed of 650 miles per hour (subsonic - or slower than the speed of sound), it is relatively slow in comparison to its fighter brethren; it relies on stealth technology, not speed, to evade threats. The F-117 is capable of carrying an array of precision weapons, including laser guided bombs, the AGM-65 Maverick and the AGM-88 Harm. Though it can mount the air-to-air AIM 9 Sidewinder externally, it does not usually do so. Overall, its ability to defend itself is minimal; hence its reliance on stealth.

2. F-15 Eagle

The F-15 comes in two general variants, the air-to-air F-15 C (single seat) and D (two-seat) Eagle and the dual-role (both air-to-air and air-to-ground) F-15E Strike Eagle. It enjoys an impressive acceleration capability resulting from the high thrust-to-aircraft weight ratio generated by its engines, while its large wing surface area provides a maneuverability advantage, particularly at high altitude. Combined with a speed of 1,875 miles per hour (Mach 2.5+), it is faster than most of the aircraft it might encounter. An unfueled range (with three external fuel tanks) of nearly 3,450 miles further enhances the versatility of the aircraft in a counterair role.

The flying characteristics of the jet are complemented by its fighting capabilities. The F-15 is equipped with a long range, "look down" radar (either the APG-63 or 70) that can track small fast moving targets even when they are at low altitudes ("low level" or "on the deck"). This is an important capability because in older radar systems reflections (radar returns) from the ground itself (ground clutter) often masked the presence of low-flyers.
Eagles possess a state-of-the-art armament computer system which allows them to employ the advanced versions of the AIM 7 Sparrow, AIM 9 Sidewinder, and AIM 120 AMRAAM air-to-air missiles. Internally, the F-15 is armed with a 20 millimeter (mm) Gatling Gun (a weapon with multiple rotating barrels), useful for close-in engagements. During a fight, the Eagle's heads up display (HUD) places the information a pilot needs to track enemy aircraft on a transparent glass screen directly in front of him. This keeps him from having to divert his attention from his opponent to look down at the controls.

Enhancing its defensive abilities are a first-rate radar warning receiver (ALR-56C) and recently upgraded electronic countermeasures set (ALQ-135). The former allows the pilot to know the general direction of the enemy, as well as when the enemy (either ground based or on enemy aircraft) is looking for him with search radar or engaging him with fire control radar. The latter permits him to jam most search, fire control, or missile guidance radar systems. During Desert Storm, the F-15's prowess was aptly demonstrated when it scored 36 of the Air Force's 39 air-to-air kills./18/

The two-seat dual-role F-15E Strike Eagle is designed for high-speed, deep penetration of enemy territory, while retaining its air-to-air role. Its air-to-air capability is particularly important as it allows this aircraft to fight its way to and from targets deep in enemy territory. During the Gulf War, the then new F-15E was deployed early and performed with impressive results throughout the air campaign.

In a high-threat environment, the terrain-following capable Strike Eagle can ingress at a very low altitude, although the tactical situation will determine whether or not doing so is prudent. "Terrain following" means that the jet has the ability to follow the shape (nap) of the earth, thereby taking advantage of "terrain masking," or the use of terrain to shield the aircraft from enemy radar. The inertial navigation system transmits position information to a digital map in the cockpits of both crew members. GPS equipment is currently being installed on the F-15 fleet to further refine its location monitoring accuracy. For targeting, the aircraft has a radar system (APG-70) that allows it to identify ground targets from as far away as 80 miles (depending on their size). Once the target has been located, the image can be frozen on the cockpit radar screen; this permits the radar itself to be turned off, thus making it more difficult for the enemy to locate the aircraft. The F-15E's can carry most of the air-to-ground weapons the Air Force possesses, to include the 5000 pound penetrator bombs that previously only the F-111 (a fighter no longer in the inventory) could carry. Its air-to-air armament is identical to the F-15 C/D.

High speed, low altitude penetration at night and in poor weather is made possible by the Low Altitude Navigation and Targeting Infrared for Night (LANTIRN) system. It consists of two pods - one for navigation and one for targeting - that are attached to the aircraft. A special terrain following radar and a forward looking infrared (FLIR) sensor which feed data directly into the pilot's HUD is contained in the navigation pod. The pilot can either fly the aircraft using this cueing information or turn on the aircraft's autopilot, and thereby let the aircraft fly itself in the terrain following mode. The targeting pod has an infrared sensor that detects and displays a high resolution image of targets as far as 10 miles away back to the pilot. A target can then be designated by a laser and the pilot can command the pod to automatically track it. The laser derives accurate range information for the weapons delivery computer while it illuminates the target with laser energy that the laser-guided bomb (LGB) uses for terminal homing." Targeting information can also be used to "cue" infrared-guided air-to-surface missiles, such as the AGM-65D/G Maverick, for tracking and attacking ground targets.
As noted, both the F-15 D and E models are two seat aircraft. However, the rear seat in the D model has no combat purpose. Instead, it is used for pilot training and evaluations, and even occasional "incentive" rides for shoe clerks. By contrast, the back seat of the F-15E is designed as a combat position for a weapons system officer (WSO), a navigator with extensive additional training in weapons and fighter tactics. The WSO has multiple screens on which navigational, targeting, and threat information is displayed. He is the one who actually designates the target and fires the weapons in the F-15E, except for close-in air-to-air combat or visually delivered bombs.

3. F-16 Fighting Falcon

The Air Force's "workhorse," and most prevalent fighter in the inventory, is the multirole, single-seat, single-engine F-16 Falcon. Indeed, it flew more sorties in Desert Storm than any other aircraft. Due to its small size and single engine, the F-16 is more maneuverable, harder to see, more fuel efficient, and less expensive than other fighters. As a result, the F-16 is also the fighter of choice for the air forces of approximately 20 nations around the world, making it by far the most popular US export fighter. Like the F-15, there is a single-seat C model and a two-seat D model. Both the C and D model F-16s are fully combat capable. The D's second seat enables it to be used for training and evaluation purposes, although at the expense of a portion of its fuel capacity, range, and endurance.

A "fly-by-wire" flight control system contributes to the F-16's unmatched maneuverability. In a fly-by-wire system the control stick, which in the F-16 is mounted on the right console of the cockpit instead of through the center of the floor, sends pilot control input directly to the flight control computer. The computer then transmits commands to the various flight control surfaces of the aircraft (flaperons, horizontal stabilators, and rudder) via electrical wires rather than cables and pulleys. Enhancing the Falcon's combat effectiveness is a bubble canopy which gives the pilot unparalleled visibility through 360 degrees of view. Additionally, the seat is reclined 30 degrees to enhance the pilot's ability to withstand and sustain the extremely high G-force maneuvering (9 Gs) that the aircraft can produce and sustain.
The F-16 enjoys a top speed of Mach 2+ (1,500+ miles per hour) and an unfueled range of 2,000 miles. Of course, as with any fighter aircraft, its load, altitude, speed, maneuvering, and use of the engine's afterburner affect fuel consumption. For example, an aircraft carrying external tanks and a full load of bombs and missiles while ingressing and egressing a target area at high speed and low altitude would have a fraction of the range of one flying at much higher (optimum) cruise altitudes and speeds typical of a deployment profile.

Lovingly referred to as the "Viper" by those in the F-16 community, the Falcon has been produced in many versions, called "Blocks." Blocks 5, 10, 25, and 30 were general purpose multi-role fighters: proficient in all missions, specialized in none. Starting with Block 40, the F-16 became "missionized," although it still retains all of its multi-role capabilities. Block 40 is optimized to perform the night, terrain-following LANTIRN role, and is particularly adept at delivering precision-guided munitions. Block 50 is optimized for the Wild Weasel/SEAD mission. Most blocks have the laser gyro INS and GPS, while all blocks have a HUD display, an excellent low down radar, sophisticated RWR, and can employ almost the entire USAF inventory of weapons. An external pod (ALQ-135 or ALQ-184) provides electronic countermeasures (jamming) ability for the Falcon.

Internally, the F-16 has a 20 mm cannon. Externally, it can be configured in whatever combination of munitions or fuel tanks is needed to accomplish its assigned mission. The Falcon can carry six air-to-air missiles (AIM-120 AMRAAMs or AIM-9 Sidewinders): Some air defense versions have been modified to mount AIM-7 Sparrow missiles as well. Air-to-surface munitions are carried on stations located along the bottom of the wings and fuselage. The Air Force's most versatile fighter, the F-16 is also capable of conducting tactical reconnaissance by mounting a pod (the Advanced Tactical Airborne Reconnaissance System - ATARS) on the center station. No other fighter in the Air Force inventory today performs the tactical reconnaissance mission.
4. A-10 Thunderbolt (Warthog)

The A-10 is the Air Force's only aircraft dedicated almost entirely to close air support. Its design gives it an impressive ability to perform that task. In order to hit mobile enemy positions with the accuracy and reliability that the presence of friendly troops in the target area requires, the A-10 operates at low altitudes (typically under 1,000 feet). Unfortunately, this makes it very susceptible to enemy ground fire. To address this vulnerability, the cockpit is surrounded by titanium armor and the structure of the aircraft is such that it can survive direct hits by high explosive projectiles of up to 23 millimeters and remain flyable. Additionally, the fuel tanks are self sealing, and if the hydraulic flight control system is damaged the flight controls can still be manipulated manually.

Warthog’s are not only survivable, they represent a potent weapon system. Though necessarily slow (420 miles per hour max) because of the need to acquire ground targets at low altitude, the aircraft is very maneuverable. It can loiter (stay) in the target area for extended periods to provide on-call support to ground troops, and has a short take off and landing ability that permits its deployment to locations very near the front. For example, it can fly 150 miles and then loiter for over an hour.

The A-10's equipment is equally impressive. It has a HUD, uses an INS system, and can activate countermeasures against both infrared and radar guided SAMs. Its night capabilities are greatly enhanced, through the use of night vision goggles, the Night Vision Imaging System (NVIS), while a Pave Penny pod mounted under the fuselage allows the pilot to "see" a laser designated target by placing a cue in his HUD. At particular risk of hitting the ground given the altitude and the environment in which it flies, the A-10 is equipped with the Low Altitude Safety and Targeting Enhancement (LASTE) system, which provides ground collision avoidance cues and audible warnings.

At the heart of the aircraft is a 30 mm internal Gatling gun that can fire 3,900 rounds per minute; it is powerful enough to destroy tanks. With eight under wing and three under fuselage stations, it can carry up to 16,000 pounds of ordnance, from rockets to bombs or missiles. Since it is often employed, in an anti-tank role, the AGM 65 Maverick is commonly used by A-106. During Desert Storm, for example, A-10s launched 90% of all Mavericks.

5. Support Aircraft

Though fighters can perform in a wide array of roles, they almost always require the support of non-fighter aircraft. Given the distances from which aircraft deploy, the difficulty of finding operating bases near the immediate area of operations, and the requirement during missions such as no fly zone enforcement to maintain coverage of an area for extended periods, tankers have become a particularly critical part of the team. The Air Force flies two, the KC-135 Stratotanker and the KC-10 Extender:

The KC-135 is the predominant tanker in the inventory. First delivered to the Air Force in 1956, today's KC-135 have been extensively modified to increase fuel load, improve fuel efficiency, and extend the life of the airframe. To refuel most aircraft, the KC--135 lowers a "boom" (large fuel transfer pipe) from the rear of the aircraft. The end of the boom is then maneuvered by a crewmember (the "boomer") into a special receptacle on the aircraft to be refueled. Some aircraft (e.g., most Navy airplanes) have a probe extending from the front of the aircraft which takes on fuel. When the KC-135 is refueling these, it uses a "drogue," or basket
attachment which replaces part of the boom and must be configured prior to flight. The aircraft taking on fuel flies its probe into this funnel shaped device and fuel is passed. Stratotankers are also capable of transporting cargo and up to 80 personnel.

First deployed in the 1980s, the KC-10 Extender is the newest tanker. The Air Force currently has just over 50 KC-10s in the active fleet, compared to nearly 250 KC-135s. Like the KC-135, it can transfer fuel either through a drogue or boom, but is capable of switching back and forth in flight without any reconfiguration. With a capacity of 356,000 pounds, the KC-10 can carry nearly twice the fuel of a KC-135. The Extender can also transport over twice the weight in cargo (approximately 170,000 pounds), as well as 75 passengers.

On a typical "fighter drag," or deployment, four to six fighters will fly with and refuel from one tanker. For long distances or larger numbers of fighters, more tankers will be added to the flight. During combat operations and exercises, where the aircraft are not simply trying to get from "A" to "B," tankers will typically establish an "orbit" and multiple fighter flights will join up on them, "cycle through" for gas, then leave the 'orbit to continue on with their prescribed missions:

Fighter operations are also increasingly dependent on the E-3 Sentry Airborne Warning And Control System (AWACS). A modified Boeing 707, the E-3 is distinguishable by its rotating dome mounted on top of the aircraft. The dome is a radar system that allows the AWACS to locate and track low flying aircraft (and ships) for 200+ miles over both land and water. AWACS also possesses an identify friend or foe (IFF) system which can interrogate and receive IFF transmissions (squawk) from friendly aircraft to help distinguish them from enemy aircraft. On board the E-3, a crew of between 13 to 19 mission specialists (in addition to a flight crew of four) monitors, the aerial situation and provide communications support. Their battle management functions range from passing general threat information to controlling complex multi-flight engagements:

E-3s are equipped with the Joint Tactical Information Distribution System (JTIDS). It is used to pass digitized information about friendly and enemy aircraft locations and other important command and control information to ground stations and participating aircraft. A newer, more powerful system, the Tactical Data Information Link-Joint (TADIL-J), is scheduled to replace JTIDS over the next few years. Other upgrades underway include improved electronic support measures (ESM), in particular a passive (receive-only) detection system that can pick up electrical signals (usually radar) emitted by other aircraft. This will supplement the location and surveillance capabilities of the dome radar. The E-3 is capable of flying unrefueled for over eight hours. Since it is air-refuelable, its potential time on station is limited only by the endurance of its crew. There are just over 30 AWACS in the active Air Force inventory, with an additional 18 flown by NATO crews.

Complementing the E-3 is the E-8 Joint Surveillance and Target Attack Radar System (Joint STARS). JSTARS is a joint Army-Air Force program developed to do for ground forces what AWACS does for the aerial fight. The E-8 is equipped with a multimode side looking radar that can locate stationary or slow moving targets (such as vehicles) on the ground out to over 150 miles. The radar data is transmitted for analysis to a mobile JSTARS Ground Station Module (GSM), which is present at the brigade level and above, where the operator determines location, speed, direction and classification of the target. Either ground or air assets can then be tasked, as necessary, to destroy it.

The overall abilities of the JSTARS aircraft are impressive. During an eight hour flight at 30-40,000 feet, the E-8 can cover in excess of 350,000 square miles of territory. Though JSTARS
was originally developed for surveillance, targeting and battle management of ground operations, today the E-8 can perform battle damage assessment (BDA) to determine the need to restrike targets. It can also be used to locate surface-to-air mobile missile launchers (or fixed sites).

Finally, the **EA-6B Prowler** merits mention. This Navy aircraft is used jointly by Air Force and Navy pilots to perform the electronic jamming and SEAR mission formerly done by the EF-111 for the Air Force. It accompanies attack aircraft into enemy territory where electronic warfare pods mounted on its wings jam enemy - radar, electronic data links, and communications. Carrying a crew of four, a pilot and three electronics countermeasures officers, it has an unrefueled range of approximately 1,100 miles and a top speed of 575 miles per hour. The EA-6B can be armed with an AGM-88 HARM missile for use against enemy radar and SAM sites.

**B. Weapons /23/**

Many judge advocates are familiar with aircraft; one who understands weapons, however, is a rare bird indeed. The problem is that the most fundamental advice a judge advocate offers in armed conflict is whether or not the destruction or death being contemplated is lawful. That advice cannot be rendered effectively without some sense of how the weapon works, the available alternatives to its use, the destruction which occurs when it is employed, and what its possible collateral effects are. For example, it is useful to know that a laser guided bomb delivery is more accurate than a high altitude radar delivery. But if the target area is badly clouded over, it is even more important to know that laser guided bombs cannot see through weather, or that another option, infrared systems, are "colorblind" and cannot guide under certain weather conditions. The point is that the JAG who doesn't understand the basics of aerial weaponry will be hard put to offer situation specific legal advice.

**1. Air-to-Air Missiles**

Air Force fighters currently carry three types of air-to-air missiles. The newest generation variant is the Aerial Intercept Missile (AIM) **J20A Advanced Medium Range Air-to-Air Missile (AMRAAM)**, a follow-on to the AIM 7 series. AMRAAMS employ "fire and forget" technology. The aircraft's radar, which provides the target's position and flight direction to the missile, "locks on" to the target and the missile is fired. /24/ If unthreatened, the fighter may continue to track the target and provide update information by data link to the in-flight missile. However, the pilot may also elect to quit tracking the target and turn rapidly away from a threat. When this occurs, the missile's on-board computers will navigate it to a point approaching the target (estimated from the target's last track data) where the missile's "seeker" (guidance system) will go "active." In this step, a small radar on the missile automatically activates to acquire and track the target through intercept. The beauty of the system, which is carried by both the F-15 and 16, is that the pilot can engage multiple targets at once. An AMRAAM, with a range of 30+ miles, is beyond visual range (BVR) capable, as are the AIM-7 and AIM-9./25/ At Mach 4+, it is also extremely fast.

The **AIM-7M Sparrow**, AMRAAM's predecessor, remains in wide use with the Air Force, many allied air forces and the US Navy. It is radar guided, but unlike the AMRAAM is not a "fire and forget" missile, which means that the launching aircraft must continue illuminating the target with its radar until the missile impacts the target. A new version, the AIM-7R, adds an infrared seeker to improve the missile's homing ability for environments in which the enemy is employing electronic countermeasures. The missile has a range of just under 30 miles and a speed of approximately Mach 4. Like the
AMRAAM, the Sparrow is an all-aspect missile, i.e., it can attack the target from any angle. During the Gulf War, AIM-7s accounted for 22 air-to-air kills.

For close-in engagements, Air Force fighters employ the AIM-9 Sidewinder. The AIM-9 is a heat seeking infrared guided missile. The pilot can either point his aircraft (and hence the missile seeker) at a visually acquired target or he can command the missile seeker to look at a target being tracked by the radar until the missile's seeker head detects the heat generated by the opponent's engine or airframe. When this heat signature is strong enough to track, a tone sounds in the pilot's headset and the missile can be launched. Because the missile itself tracks the target, once launched the pilot can take evasive measures or engage another target. Though earlier versions of the missile could not reliably track a target in a head-on engagement (commonly referred to as a "face shot"), current models are all-aspect. The AIM 9 has a range of over ten miles and a speed of Mach 2+.

2. Air-to-Ground Missiles (AGM)

Air-to-ground missiles are distinguished from other air-to-ground ordnance by the fact that they are powered and guided. Most common is the AGM-65 Maverick, a missile that can be carried on all fighters. The A and B models are electro-optical guided, i.e., a video display is used to direct the missile to target. In the front of the missile is a camera which transmits a picture into the cockpit. Using this picture, the pilot (WSO in an F-15E) selects where he wants the weapon to strike, and then launches it. The missile homes in on the image using its internal camera. Because the guidance equipment is in the missile itself, it is a fire and forget system. This allows the aircraft, which can carry multiple Mavericks, to quickly acquire and attack other targets. D and G model (IIR-imaging infrared) Mavericks are similar, but have an infrared guidance system that displays infrared video in the cockpit. As a result, they can be fired at night and in low visibility conditions. AGM 65s can be used against many different targets - tanks, ships, trains, SAM sites, etc. - from most altitudes and from as far away as 14 miles.

A second key guided missile is the AGM 88 HARM. It is designed to destroy radar equipped air defense systems, and is the primary weapon used by F-16s operating in the wild weasel role. The HARM contains a seeker head that homes in on the radar emissions of the target. With a potential range of over 80 miles (dependent upon aircraft delivery altitude), it gives the F-16 a stand-off (fire from a distance) capability that in most cases exceeds that of the SAMs being targeted. HARM equipped aircraft create a true "Catch-22" situation for the enemy. If he turns on the radar looking for penetrating aircraft, the radar itself becomes a prime target; on the other hand, if he does not the penetrating aircraft will get through.

Used by the F-15E, the AGM 130 is a GBU-15 (see below) with a rocket motor added for propulsion. Effective against most targets, there are both television and imaging infrared variants that transmit images to the WSO. Upon identifying the target, the WSO locks the system onto, it. The missile is then self-homing (fire and forget). Alternatively, the WSO may elect to manually guide it to target using images sent back from the missile to the aircraft. Though the range of the AGM 130 is classified, it does have a significant stand-off ability and can be launched at low level. Both of these capabilities enhance the F-15E's survivability.

3. Bombs

General purpose (GP) bombs are both unguided and unpowered; hence their label of "dumb" or "iron" bombs. They are aimed by maneuvering the aircraft to a precise location determined by the on-board computers and dropping the bombs ballistically onto the target. /27/
For example, in some cases dive bombing, or releasing the bomb(s) from the airplane as it is flying down at the target, is used. In others, the aircraft flies level, simply dropping the bombs. Their momentum carries them forward and down into the target. In another technique, the bomb is "tossed" at the target. The pilot pulls the aircraft up out of low level flight at a point based upon computer cues, and the fire control computer automatically releases the bomb (with the pilot's consent) while the aircraft is still in the climb, effectively "tossing" it onto the target. The delivery technique selected depends on factors such as desired accuracy, threats or weather conditions in the target area, and size of the bomb(s) being dropped.

Bombs come in a variety of sizes (weight) and explosive force. The MK-82 (Mark 82) is a 500 lb. bomb with almost 200 lb. of explosive. It is low-drag, meaning it has no deceleration devices to retard its descent. This limits the altitude at which it can be dropped, for the aircraft must be able to escape the blast of its own bomb. The MK-82S Snake-Eye is a MK-82 with fins which can be opened to create drag, thus slowing the bomb behind the aircraft and giving the aircraft a chance get beyond the blast pattern envelope before detonation. Similar to the MK-82S is the BSU-50, which instead of fins has an air inflatable "retarder" (AIR) resembling a small parachute to create high drag. More powerful are the MK-83 1,000 lb. and MK-84 2,000 lb. (approximately 900 lb. of explosive) low drag bombs. The latter's high drag AIR variant is the BSU-49. Finally, the BLU-109 is a 2,000 pound bomb that is designed to penetrate hardened targets.

GP bombs are just that - useful against a wide variety of targets (except the BLU-109). They are often a weapon of choice when bombing fixed facilities like buildings and power stations, cratering runways to keep aircraft from launching, or attacking vehicles, tanks, SAM sites and mobile transporters. Though other systems might actually be more precise, iron bombs are cheap and plentiful; thus, they are generally used when the limited supply of more sophisticated weapons must be preserved for select high priority targets.

Although they are guided, Guided Bomb Units GBU's, unlike AGMs, are not powered, but instead "glide" to the target. They are maneuvered by wings (which look like fins) and flaps attached to the rear of the unit that are controlled by an internal flight control system. In addition to the tail assembly at the rear, the GBU consists of a bomb and a guidance system. The guidance module is affixed to the front of the unit. As an example, the GBU 8 has an electro-optical guidance system attached to a MK-84 bomb. The GBU-10, by contrast, is a MK-84 or BLU 109 that uses laser guidance. The target is designated by a laser contained in either the delivery aircraft, another airborne source, or from a targeting team on the ground. Though the weapon is dropped using "dumb bomb" delivery techniques, when it gets close enough to the target to detect the laser, it will home in on it; the GBU-12 is its 500 lb. bomb equivalent. The GBU 24 Paveway, a laser guided MK-84/BLU-109 variant, is the weapon of choice in almost any delivery situation due to its standoff capability and options. It the best solution when an extremely low altitude delivery is required due to weather or threats. However, the GBU-24 is much more expensive than the GBU-10 or general purpose bombs.

Certain GBUs have unique uses. The GBU-15, for instance, is an F 15E system that employs either television guidance for daytime delivery or IIR for night or adverse weather conditions. In a direct delivery mode, the GBU15 is locked onto target before launch. This allows the aircraft to depart as soon as it is dropped. In the indirect mode, however, the WSO guides the GBU to the target based on the images displayed in his cockpit. Using a screen in the cockpit, the WSO guides the weapon to target. Another unique system is the GB U-27, a laser-guided 2,000 lb. weapon designed for the F-117. Finally, the GBU-28 is a nearly 5,000 lb. laser guided weapon that has the ability to penetrate 20 feet of concrete or 100 feet of dirt. Thus, it is used
against hardened targets such as command bunkers. The weapon can only be employed by the F-15E.

Cluster bomb units (CBUs) are weapons which contain a dispenser filled with bomblets. The bomblets are released at set altitudes causing them to be spread over a large area. Some explode immediately, while others have delayed fuzes. The explosive force and number of bomblets varies by type of CBU. Two early versions, the CBU 52 and CBU:58, have bomblets (220 and 650 respectively) which detonate upon impact, while the CBU-71 contains 650 bomblets that detonate randomly over a fixed time period following delivery. Typical CBU 52 and 58 targets include parked aircraft, fixed SAM sites and electronic installations, whereas the CBU 71 is especially effective against troops in the open. More complex is the CBU-87, Combined Effects Munition (CEM). It employs a mixture of fragmentary, incendiary, and armor-piercing bomblets which are effective against a multitude of targets using blast, heat, and penetration.

Some CBUs dispense mines. For example, the CBU 89 spreads either anti-tank or anti-personnel mines. The anti-tank version detonates when the mine's internal magnetic sensor detects a large metal object (or when it is disturbed). By contrast, the anti-personnel version spreads tripwires upon delivery and detonates whenever an individual activates the tripwire or the mine is disturbed. In both case, the mines self-destruct after a preset period. Another anti-tank weapon is the CBU-97, which is new and expensive. It dispenses 10 submunitions, each containing four high velocity, infrared sensing bomblets, over the target area. The 10 submunitions (components of a single weapon) separate from the CBU at a set altitude and drop by parachute. This increases the, dispersal pattern and permits staggering the release to minimize any interference they may cause each other. At a preset altitude, the descending submunitions release the four warheads, which in turn seek a target with their infrared sensors. The BL-755, with 147 armor-piercing bomblets, is also used for tank hunting. Another common system employed in the anti-tank role is the MK-20 Rockeye. Its 247 anti-tank bomblets contain a shaped charge which directs the force of the explosion forward upon detonation; by directing the force, the explosive effect is greatly multiplied.

There are a number of weapons under development which should be in the inventory in the not too distant future. The Joint Direct Attack Munition (JDAM) is being fielded in a three-phase program. In phase I, the MK-83, MK-84 and BLU-109 will be modified to be more accurate in adverse weather through addition of an INS/GPS guidance kit. Phase II will focus on the munition itself by enhancing the blast and fragmentation effect of the 500 lb. explosive. The final phase will include the development of terminal (last stage of "flight") guidance for poor weather conditions. JDAM will be carried by the F-15E, F-16 and F-117.

Also in development is the AGM-154A Joint Standoff Weapon (JSOW). Intended as a low cost stand-off weapon that is day/night and adverse weather capable, it will have a high altitude range of 45+ miles and a low level range of 17 miles. There are two variants being designed. One will carry the same bomblet as the Combined Effects Munition CBU-87. The other will contain the BLU-109 concrete piercing bomb described above.

IV. THE PLANNING PROCESS
(or death by acronyms)

Now familiar with the aircraft and weapons used in fighter operations, attention can turn to the operations themselves. Step One is planning. In macro terms, planning occurs in one of two
ways - through deliberate or crisis action planning. /30/ Though judge advocates are certainly key players in the deliberate planning process, it is in crisis action planning that their mettle is truly tested. After all, the crisis planning process is designed for situations when deployment and/or employment of forces in response to an international flare-up is imminent. The event has moved from the hypothetical to the real, and getting the law wrong at this point is a failing of potentially international proportions. A plan without judge advocate input from start to finish is a plan at risk.

In a crisis, receipt of a warning order kicks off a planning process that ultimately results in an Operation Order (OPORD). The OPORD sets forth the mission, the Commander's concept of operations (how he sees the operation unfolding from start to finish), tasked units and their responsibilities, instructions on coordination between assigned units, logistics and administration, and command and control relationships. If the President decides to take military action, the Chairman of the Joint Chiefs of Staff (CJCS) will be authorized by the Secretary of Defense to issue an Execute Order. This launches the operation, which will usually be conducted by a joint task force (JTF), i.e., an organization composed of units from more than one service:

TFs are organized either functionally or by service (see figure 2). In both cases, the Joint Force Commander (JFC) will designate a Joint Force Air Component Commander (JFACC). /31/ The JFACC will flesh out a Concept of Operations - the "how to accomplish the mission" phase of planning. It is at this point that the JFC prioritizes targets, either individually or by type (target set). For instance, during Desert Storm initial high priority targets included enemy air defenses and command and control. It was only after Coalition forces enjoyed air superiority that the weight of effort shifted to Iraqi ground forces.

![JOINT FORCE ORGANIZATION](image)

*Figure 2. Typical JTF Organization*
This highlights a second purpose of the concept of operations, phasing. In phasing, the JFACC determines the steps by which the campaign will progress. During Desert Storm the phases (broadly stated) proceeded from seizure of air superiority and disruption of command and control, to laying the groundwork for the land campaign, and finally to supporting ground operations. Of course, these phases overlapped throughout the campaign. The concept of operations also helps delineate the types of missions needed - SEAD, interdiction, close air support, etc.

Ultimately, the concept of operations results in a "Joint Air Operations Plan" (JAOP), sometimes referred to as the "air campaign plan." It incorporates those factors considered in the concept of operations: prioritization, phasing of operations, and the play of the various missions. The plan also includes a description of the situation; the "strategic concept," i.e., the overall campaign plan for deploying, employing, and sustaining air power; the command, control, and communications setup; and a description of the logistics system that will be used to support the operation.

Joint air operations plans are actually executed through Air Tasking Orders (ATO). An ATO organizes and sequences all flying missions for a particular 24-hour period. Normally developed by the JFACC and his staff, final approval of the ATO rests with the JFC. Reduced to basics, an air tasking order is the detailed game plan that sets out who is flying where and when, with whom, and for what purpose.

Building an ATO is an incredibly complex process requiring analysis of a vast array of information. For example, the average daily ATO during Operation Desert Storm tasked 3,000 sorties and was 170 pages long. Generally, ATOs are built on a 48-hour cycle. As a result, at any one time there are two in the works and another being "executed." The process begins at launch (execute) day minus 48 hours with "apportionment," the JFC's decision as to the weight of effort to be dedicated to certain types of operations or geographic areas. To make his apportionment decision, the JFC can resort to the Joint Integrated Prioritized Targeting List (JIPTL), a compilation of prioritized targets built by the JFACC's
staff based upon guidance received from the JFC's Joint Targeting Coordination Board (JTCB). These boards exist to coordinate and deconflict the desires and recommendations of commanders, all of whom are competing for finite resources. The end result is a JFC apportionment decision expressed in either percentages (e.g., 50% close air support) or priority (e.g., 1st priority is close air support). An apportionment decision is valid until the JFC determines it requires revision, e.g., after air supremacy is achieved and air operations pass into the next phase. Once apportionment is complete, a Master Attack Plan (MAP) is built. This marks the first step in the actual mission planning cycle. The MAP sets out the sequencing of operations, targets, and the type aircraft that will be used over a 24-hour period. Thus, it is the foundation for the Air Tasking Order (ATO), the most important planning document from the perspective of a flying unit.

Based on the Master Attack Plan and the JFC's apportionment decision, the JFACC now engages in a process labeled "allocation." Allocation involves matching available sorties (in a macro sense) to the missions they are to support. The ATO continues the process of refining the game plan into its definitive form. Most importantly, it is here that the planners determine which specific units will cover which targets. These decisions are often driven by the need to build a "package" (i.e., types and numbers of missions and aircraft) to achieve a particular objective. A package tasked with the destruction of an enemy command and control facility, for instance, might include various aircraft to strike the target, provide cover against aerial threats, attack ground based defenses that threaten the strike aircraft, jam enemy radar, provide airborne command and control, and refuel those participating. Factors considered in deciding on package composition range from enemy defenses and topography to weather and desired result (e.g., destroyed, neutralized, neutralized for a specific period, etc.).

In addition to timing and target location data, the ATO sets forth communications frequencies and IFF (identify friend or foe) mode squawks (codes). In many cases, it also includes a suggested weapons load. Further, airspace control and air defense information can be contained in an ATO.

At times, subordinate flying units may be granted the authority to either decide upon, or change, ATO directions which do not impact other units. One example might be weapons configurations on aircraft. However, certain aspects of the ATO cannot be changed absent authorization from the JTF commander. For instance, the time on target (TOT) is generally firm because an alteration of the fighter TOT will cause the timing of the myriad supporting missions to shift as well. It may also result in endangering aircraft from other packages operating in the area due to uncoordinated bomb blasts (frag deconfliction).

After approval, the ATO is transmitted in either message or computer format to all affected organizations and units. This should occur not later than 12 hours prior to launch of the first mission. Obviously, tasked flying units receive a copy of the ATO. So too do entities responsible for controlling airspace and aircraft. Such agencies may either be ground based (e.g., an aerial tactical operations center - ATOC) or airborne (e.g., an airborne warning and control system AWACS). Additionally, air defense units require ATOs to avoid friendly fire incidents, whether through an inadvertent "blue on blue" aerial intercept or mistaken surface to air missile (SAM) firing.
In addition to the ATO, the JFACC may issue Special Instructions (SPINS). A SPIN sets forth operational constraints or procedures. Search and rescue information is often contained in SPINS, as is any required routing of missions (ingress and egress) to provide for safe passage through friendly air defense nets or to provide for deconfliction between missions and target areas. They may also establish no-fly areas or highlight special information regarding potential collateral damage, such as proximity of targets to hospitals, religious centers, cultural landmarks, and the like. SPINS can be "long" (in effect until rescinded) or issued daily. If JFACC operations are spread over multiple airfields, local SPINS can be issued by the commander at a specific location setting forth procedures in effect there. Examples might include directives on where to park or where to arm aircraft weapons.

As noted, the flying unit (usually a wing) receives the ATO electronically. Immediately on receipt, the group and squadron commanders will convene to look at the wing's overall tasking. It is also at this point that "mission (in actuality package) commanders" will be selected. Usually, the ATO indicates which mission numbers the package commander will fly. However, it is still necessary to determine who that individual will actually be. In many cases, the ATO may involve several "goes" (the sequenced launch of groups of aircraft comprising multiple packages) throughout the day. This occurs as aircraft land (recover), are rearmed and refueled, and then are launched again (turned).

The actual nuts and bolts planning at the wing level is generally performed by a Mission Planning Cell (MPC). Members of the cell typically come from the operational support squadron, the wing operations group staff, or the flying squadrons. The mission commander is present at the outset to get the group moving in his intended direction. He makes such determinations as routing to and from the target (ingress and egress) and the sequence of attack by the various aircraft. The mission commander also makes critical placement and timing decisions. It is his call, for example, as to where SEAD assets will be located to suppress enemy defenses and when and where air-to-air aircraft will enter the area to clear it of enemy planes (the fighter sweep). After providing this broad guidance, he will usually retire to avoid "busting" crew rest requirements (12 hours).

At this point, the weapons officers (typically two or three Fighter Weapons School graduates) take over to do much of the nuts-and-bolts weaponeering. Weaponeering involves ensuring selected weapons are appropriate to the target and calculating where they need to strike (aimpoint) to achieve the best results. These officers will also determine the best attack tactics to employ given the type of weapon to be used, the target area defenses, and the requirement to minimize collateral damage. Throughout the process, the MPC receives weather updates and intelligence on the threat. The team, assisted by targeting intelligence experts, then translates their game plan for executing the ATO into combat mission folders (CMFs). The CMF is taken by the pilot into the cockpit to guide him through the mission. Among its contents are a route map, line up card (i.e., the list of pilots and aircraft in the flight), communications frequencies, weapons delivery data, search and rescue (SAR) information, and other items unique to each aircraft.

The MPC works day and night to have the mission planning completed by the time the crews come out of crew rest. When they do, there are one to two hours to study the mission and double check the work that has been done by the MPC. This phase usually begins with a mass brief of all those in a "go" that outlines the overall operation and how the various packages fit together, describes who is performing what function, sets call signs and other necessary communications information, and reminds crews of airfield operating procedures (and any changes thereto). Wing, group, and squadron commanders
are usually present, as are representatives from maintenance, air traffic control, weather, intelligence, security police, and ground controllers. The goal is to address those issues common to the flying operation as a whole.

Once completed, the crews break into packages, flights (those flying a particular mission number), or groups of those performing similar functions (e.g., air defense). It is here that any last minute fine tuning occurs with others in, or in support of, your flight. This is also the time when secure telephone, "e-mail," or "chat" coordination takes place with "players" in or supporting your package from other bases or locations. These players typically include pilots and aircrews tasked with fighter sweep, CAP, jammers, SEAR, tankers, AWACS, JSTARS, and so forth. Topics can range from coordinating specific tactics to setting the flying formations that will be used. Once this process is completed, the crews are prepared to launch.

\[\text{Figure 4. Notional Targeting Cycle}\]

V. THE ART AND SCIENCE OF FLYING COMBAT MISSIONS

"Know your client." There is no more basic truism in the successful practice of law. It is a truism no less apropos in the practice of operational law. If you don't know what the fighter pilot is thinking about as he's executing the mission, it will be incredibly difficult to help him work through the self defense ROE, develop tactics that will minimize collateral damage and incidental injury, or even pick viable, and legal, targets.

Flying in a combat strike package like the one which will be described below is not unlike a pass-fail final examination. It requires long and constant training, extensive preparation, and an ability to anticipate the unexpected. In this section, we will describe what is on the pilot's mind as he prepares and executes his mission. Of course, the actual flying of a mission varies depending on an array of factors: mission type, aircraft used, supporting aircraft available, enemy defenses, weather, terrain, whether the mission is flown at day or night,
distance to target, and so forth. That said, there are certain constants, five of which are cardinal. /33/

Five Cardinal Rules of Flying

1) Maintain aircraft control;
2) Never hit the ground (or anything attached to it);
3) Never hit anything in the air;
4) Never run out of fuel; and
5) Never let anything shot from the ground or air hit your airplane.

A. Basics

Formation flying - keeping in position, "checking six" (watching out for threats coming up behind his or his wingman's aircraft), and "checking twelve for rocks" (making sure that he does not become so preoccupied that he runs into the ground) - is at the heart of what a fighter pilot does. On combat sorties, though, the act of simply "flying" the aircraft has to be second nature because the pilot's mental activity must be focused on gaining and maintaining "situational awareness" (SA) of the mission and what is happening around him. Should he fail to do so, the pilot risks becoming "task saturated" and, as a result, a combat statistic. Therefore, while flying in large formations, or at least as part of a large, coordinated force package, pilots must carefully apportion their attention among the complexities of communications, navigation, enemy threats, and his ultimate task - locating the target and precisely delivering his weapons.

B. Communications and IFF

At least until the "push" (discussed below), communications present a constant challenge as flights rapidly change frequencies to talk with various controlling and informational agencies. Complicating matters is the need to regularly use "secure" (scrambled) modes and the "Have Quick" (jam-resistant frequency hopping) system to keep the enemy from becoming aware of your intentions. Needless to say, getting everyone up on their designated frequencies is a task that requires repeated practice.

Perhaps even more critical is the importance of determining when and where to "squawk" (transmit) the IFF (Identify Friend or Foe) codes and what the proper codes are at any given time. The IFF system provides an electronic means of telling friendly ground agencies and aircraft who you are. For example, air supremacy aircraft such as the F-15 have the ability to "interrogate" the IFF systems of other aircraft to determine their identity. As might be expected, a "successful" interrogation is a major factor in their determination of how to apply the Rules of Engagement (ROE). Different IFF modes (there are four) mean different things. Mode I is a code, usually designated in the ATO, that is often used to signal friendly air superiority forces that you are a "friendly." By contrast, Mode II identifies your specific aircraft to ground control (GCI) or AWACS controllers. Mode III is the identification and tracking code - normally issued by the controlling agency, such as air traffic control (ATC) or AWACS - that civilian and military aircraft use for flight separation. It provides aircraft position and, when enabled, altitude data. Finally, Mode IV is a classified and controlled code that identifies you as a friendly force; it is set by maintenance prior to flight, as is Mode II. The pilot can set Modes I and III inflight. Understandably, failing to enter the proper IFF code can be an unforgiving error in a combat environment.

C. Navigation
Navigation and timing are the keys to achieving the hoped-for synergistic effect of a well-synchronized strike package. That said, a number of factors can foil synchronization: takeoff delays, refueling problems, difficulty rejoining the flight after tanking, and encountering weather or threats (airborne or surface) along the route. Hopefully, the strike plan has accounted for the need to be able to adapt to delays. Since that is not always so, some delays will necessitate a timing adjustment (a complicated proposition following launch) or possibly even cancellation of the attack. Fortunately, many of the newer model fighters are equipped with excellent systems (computers, inertial navigation systems, or even global positioning systems) to help the pilot get back on time and on track after a problem pops up.

Also problematic are night operations; some units are better equipped and trained to operate at night than others. For example, certain fighters (Block 40 F-16s and F-15E Strike Eagles) have infrared navigation and targeting systems (LANTIRN) that are specifically designed to ease night operations. Pilots in these and certain other aircraft may use night vision goggles (NVGs) to fly at night, even though NVGs provide less than perfect vision and pose their own unique problems for pilots in flight.

D. Air-to-Air Threats

Modern fighters are superbly equipped to detect and engage enemy fighters. Given the added capabilities of the AWACS aircraft and ground control agencies, there should be little cause for surprise, and even less for failure to accomplish a successful intercept and engagement. That said, there are still a number of ways the fighter pilot can find himself in trouble.

The successful "multi-bogey" close-in dogfight is a well-rehearsed communication and flying drill based on an understanding of who has "engaged" which opponent, and who is "supporting" whom in the individual dogfights. This requires complex internal and inter-flight radar/visual sorting and targeting. The difficulty of accomplishing these tasks increases exponentially when the fight "gets into the phone booth," i.e., becomes an overlapping array of close-in engagements in the same airspace. It is here that the fighter pilot's basic fighter maneuver (BFM) flying skills are put to the test. This is the essence of the fighter pilot's art and science. Once victory is achieved, or determined to be unachievable prior to "bingo fuel" (the fuel necessary to make it home), the fighters "bug out" (leave) for "home plate" (their base).

Of course, a major concern of fighter pilots is getting "shot in the lips," or hit in the face by a missile fired by an enemy before meeting at "the merge"; thus, they strive to take the first shot whenever possible. Obviously, if the ROE require a "visual" identification in order to shoot, the pilot may be at significant risk of getting shot first. As a result, much effort is going into research, development, and integration of "combat ID" systems that enable pilots to positively identify friendly and enemy aircraft beyond the range of the enemy's weapons.

Not surprisingly, compliance with the Rules of Engagement (ROE) is often a significant cause of concern (though it is the best way to contain conflict within prescribed political limits). For example, while the aircraft systems may indicate the presence of an enemy aircraft (bandit) many miles away, the ROE might require the pilot to visually confirm the contact as hostile prior to engaging it. Therefore, despite advanced systems which give the pilot the ability to detect and engage an opponent from over 30 miles away, pilots may have to withhold their shots until they are well inside the enemy's missile engagement zone - perhaps even until one is heading their way. That said, the rules are usually logical, for the alternative is even less tenable - mistakenly engaging a friendly aircraft. Fratricide is a particular concern in a dense combat environment.
where hundreds of aircraft are up at once. In such cases, the ability to reliably distinguish friend from foe with the aircraft's long range detection systems is marginal at best.

E. Surface Threats

Somewhere enroute to or from the target area, the flight is likely to encounter surface-to-air missiles (SAMs), anti-aircraft guns (AAA), or small arms fire. Good intelligence and route planning can often minimize these ground-based threats (or highlight the need to task other assets against them in advance of the ingress). Because many SAMs and all AAA are mobile or portable, the best approach is to stay outside of their threat envelope, i.e., at a distance or altitude they cannot reach. However, as this tactic is neither 100% reliable nor always conducive to mission accomplishment, the pilot must be constantly prepared to take appropriate defensive actions if a threat does surface.

For radar-guided threats, he may get an audible indication on his radar warning receiver, or "RWR" (pronounced "raw"), that he is being "painted," or detected. Of course, a pilot may also detect the threat visually. In response to a SAM launch, he may "jink" (a hard turn) or perform other similarly choreographed maneuvers. This will usually be accompanied by the use of expendable decoys, such as "chaff" (metallic filaments that cloud a radar by providing returns) or "flares" (to distract a heat seeking missile). The precise response differs depending on the fighter's proximity to target and the type of missile or gun encountered. In the target area, weapons delivery may take priority over self-defense: After all, if a pilot or aircrew doesn't concentrate on weapons delivery, the whole mission may be wasted. It is a basic cost-benefit risk assessment.

F. Delivering Weapons

As briefly mentioned earlier, pilots (and/or WSOs in Strike Eagles) can drop bombs in a number of ways. They can be eyeballed (released at a precomputed location), radared, lasered, IR'd, IIR'd, or aided by GPS/INS. Depending on the method selected, the aircraft might be climbing, diving or flying straight and level at weapons release. In most cases, the process involves first locating the target and positively identifying it, either visually or by using some radar or video display. Once located, a "piper" (target indicator) is lined up on the target. This helps the pilot maneuver his aircraft to the precise weapons release point, where he "mashes" the appropriate switches to release his ordnance. Throughout this process, Murphy is often hard at work, particularly for young (or exceptionally old) pilots.

There is always a risk of "fragging" yourself with your own bomb, i.e., releasing at too low of an altitude and then flying through the bomb's "frag (fragmentation) pattern." While possible, this is a common problem for the delivery aircraft; indeed, avoiding your own frag is a basic component of fighter air-to-ground training. However, it is a significant problem with multiple aircraft in a common target area, all of whom, in the fog and friction of war, must ensure sufficient vertical, horizontal, or time separation from everyone else's bombs.

Another problem with dropping a bomb too low or otherwise out of parameters is that it might not be able to properly arm itself due to built-in safety features, and thereby malfunction - a "dud" results. While duds are seldom dangerous to anyone, the mission fails. This could, depending on the target, increase the risk to other aircraft in the package or necessitate a reattack at a later time.

Finally, there is a danger of misidentifying a surface target. Therefore, pilots devote as much time and preparation as possible to studying target area photos, maps, and descriptions. Additionally, each target run is briefed in detail prior to take-off to highlight potential identification problems and ensure the pilot knows exactly what to look for as he attacks. Nonetheless, trucks, tanks, and even small
buildings or infrastructure nodes may appear no larger than a small "dot" when viewed from typical bomb release ranges - somewhere between one and four miles away. While modern aircraft and navigation systems are reaching an impressive degree of accuracy, they are not, despite CNN film footage from the Gulf War, fail safe; the systems neither always work, nor do the munitions always properly guide. Collateral damage is still a facet of conflict we cannot eliminate completely.

G. Recovery to Landing

Beyond the target lies the egress point and the route back home. Basically, the operation is reversed, e.g., by conducting an outbound sweep and sanitization along the egress route. Supporting aircraft also head home unless required to support other packages in the vicinity. The resulting congestion in the home base's air traffic pattern is not unlike driving on the DC Beltway, with the exception that everyone returning from a combat mission is probably low on fuel. This places very definitive limits on delays in landing. While running out of gas on the Beltway would be an embarrassing nuisance, doing the same while airborne is an infinitely more stressful event. Complicating matters are three conditions which can significantly impair the base's ability to recover aircraft quickly: heavy weather, a runway closed due to battle damage (or currently under attack), or an aircraft emergency. When these occur, a divert to another base becomes necessary if the recovering aircraft have insufficient fuel to orbit until the airfield is reopened. Once recovery is complete, the entire process starts over, as both the aircraft and pilot are prepared for another "go" - very likely one of several that day.

VI. A HYPOTHETICAL MISSION

In this final section, we will put all the pieces together through the use of a hypothetical mission designed to illustrate typical key events and considerations. Though purely fictional, we hope that it gives non-flyers a feel for the employment of the aircraft and weapons described earlier, as well as the execution of a typical tasking. The JAG who understands the how and why of this mission is ready for fighter based operational law taskings.

A. The Mission

Our hypothetical scenario occurs on the Jagmanian Peninsula. Hostilities broke out after military forces of North Jagmania attacked South Jagmanian outposts along the border between the two adversaries. The UN condemned the action and the Security Council has authorized member States to use "all necessary means" to expel the North Jagmamans. At the moment, the United States has the lion's share of military force capable of immediate response in the region, primarily air assets at three locations: permanent bases located in South Jagmania pursuant to a mutual defense pact, naval air afloat, and aircraft stationed in other countries of the region, all of which have granted authorization for US forces to conduct combat operations from their territory.

It is early in the conflict and North Jagmanian forces have not penetrated deeply into friendly territory. Intelligence estimates indicate that the North Jagmanians possess an effective SAM network and a potent air force, and Coalition forces do not yet enjoy air superiority. Therefore, the JFACC's immediate goal is to seize control of the air. In order to do so, a large percentage of allied assets have been tasked as offensive counter-air missions, or are being flown in support of them.

Our particular package of missions is directed against an airfield approximately 150 miles north of the forward edge of the battle area (FEBA). The key target sets are the aircraft maintenance facilities/warehouses and the weapons storage area (WSA - "bomb dump"). Additionally, the package will be striking an SA-6 (short range radar-guided surface-to-air
missile) site and a 57mm anti-aircraft gun that together provide point defense of the airfield. This should suppress target area defenses while the primary objectives are attacked; it will also facilitate any restrike of the targets that may prove necessary.

The entire mission will be flown in a heavy threat environment. Tasked aircraft will pass through the threat envelope of an SA-5 long-range radar guided missile, as well as medium range radar guided SA-2s and SA-3s. Other ground-based threats include numerous portable short range electro-optical and infrared SAMs (often shoulder launched), and small arms fire from ground forces.

North Jagmanian MiG-23 Floggers and MiG-29 Fulcrums (in addition to a variety of older, less capable aircraft) comprise the aerial threat. The Flogger is a small, difficult to see interceptor with late 1960s-early 1970s era technology, whereas the newer Fulcrum has 1980s era capabilities not dissimilar those of the F-16 or F/A-18. Though a dual-use aircraft, its primary role is aerial combat. Both the Flogger and Fulcrum are armed with infrared and radar guided air-to-air missiles and internal guns.

**B. The Package**

Given the threat and the distance to be traveled into enemy territory, a fairly robust package has been assembled; a total of 49 aircraft are either involved in the strike or in supporting it. Tasked against the maintenance facilities and the warehouses are two four-ship flights of F-16s flying out of Happy Air Base, each armed with two MK-84 2,000 lb. general purpose bombs. A third four-ship of F-16s from Glad AB will attack the 57mm AAA and the SA-6 SAM site with CBU-87 CEMs. For self-defense (or enemy targets of opportunity), each of the F-16s is configured with two AIM 120 AMRAAMS, two AIM-9 Sidewinders, and the 20mm gun. Because the weapons storage area is hardened, thereby requiring greater accuracy to destroy, it will be attacked by a four-ship of F-15E Strike Eagles, deployed to the theater from Coldcountry AFB, and a four-ship of Marine F/A (fighter/attack)-18Ds based at Semper Marine Corps Air Station (MCAS). In order to penetrate the WSA, each F-15E will carry four GBU-10s, while the F/A-18s will be armed with six BSU-50s per aircraft. Air-to-air capabilities for the F-15s include two AIM 7 Sparrows and four Sidewinders; the F/A-18s will carry two of each missile. Completing the OCA contingent will be four F16s and four F-5s of the South Jagmanian Air Force. Their mission is to attack aircraft parked in the open and bomb taxiway chokepoints, i.e., locations whose destruction can block airfield operations. The South Jagmanians will be armed with six MK-82 500 lb. iron bombs and two AIM-9s.

<table>
<thead>
<tr>
<th>Callsign</th>
<th># Type</th>
<th>Location</th>
<th>Mission</th>
<th>Munitions</th>
<th>Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viper 01</td>
<td>4 F-16</td>
<td>Happy AB</td>
<td>OCA Strike</td>
<td>Mk 84</td>
<td>Mx Facilities</td>
</tr>
<tr>
<td>Viper 11</td>
<td>4 F-16</td>
<td>Happy AB</td>
<td>OCA Strike</td>
<td>Mk 84</td>
<td>Warehouse</td>
</tr>
<tr>
<td>Falcon 01</td>
<td>4 F-16</td>
<td>Glad AB</td>
<td>SEAD</td>
<td>CBU-87</td>
<td>57mm, SA-6</td>
</tr>
<tr>
<td>Striker 01</td>
<td>4 F-15E</td>
<td>Forward AB</td>
<td>OCA Strike</td>
<td>GBU-10</td>
<td>WSA</td>
</tr>
<tr>
<td>Hornet 01</td>
<td>4 F/A-18</td>
<td>Semper MCAS</td>
<td>OCA Strike</td>
<td>BSU-50</td>
<td>WSA</td>
</tr>
<tr>
<td>Pakman 01</td>
<td>4 F-16</td>
<td>Jagman AB</td>
<td>OCA Strike</td>
<td>Mk-82</td>
<td>Acft in Open</td>
</tr>
<tr>
<td>Landy 01</td>
<td>4 F-5</td>
<td>Jagman AB</td>
<td>OCA Strike</td>
<td>Mk-82</td>
<td>Taxiways</td>
</tr>
<tr>
<td>Weasel 01</td>
<td>4 F-16CJ</td>
<td>Seafog AB</td>
<td>SEAD</td>
<td>AGM-88</td>
<td>A/R</td>
</tr>
<tr>
<td>Shooter 01</td>
<td>4F-15</td>
<td>Tally Ho AB</td>
<td>Sweep</td>
<td>AIM-x</td>
<td>A/R</td>
</tr>
<tr>
<td>Longbow 01</td>
<td>4F-15</td>
<td>Tally Ho AB</td>
<td>Sweep</td>
<td>AIM-x</td>
<td>A/R</td>
</tr>
<tr>
<td>Zapper 01</td>
<td>2 EA-6B</td>
<td>USS Unobtrusive</td>
<td>ESM/SEAD</td>
<td>EW/AGM-88</td>
<td>A/R</td>
</tr>
<tr>
<td>Exxon 01</td>
<td>2 KC-10</td>
<td>Snorkle AB</td>
<td>AAR</td>
<td>JP8</td>
<td>-</td>
</tr>
<tr>
<td>Arco 01</td>
<td>4 KC-135</td>
<td>Snorkle AB</td>
<td>AAR</td>
<td>JP8</td>
<td>-</td>
</tr>
<tr>
<td>Cluebird 01</td>
<td>1 E-3B</td>
<td>Snorkle AB</td>
<td>AWACS</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
The support portion of the package is equally impressive. OCA "sweep" (see below) missions will be handled by two four-ship flights of F15Cs deployed from Snorkle AB. Each Eagle's air-to-air missile complement will include two AMRAAMs, two AIM 7 Sparrows and four AIM-9 Sidewinders. Part of the SEAD support is a four-ship of F-16s from Seafoog AB, each with two AGM-88 HARMs. As with the F-16s above, they will also have a full complement of air-to-air missiles, enabling them to assist the F 15Cs in providing air cover for the package as necessary. Two EA-6B Prowlers will launch from the USS Unobtrusive, a Navy carrier located off the coast of Southern Jagmania, to provide electronic countermeasures (jamming) capability to the package. Tanker support will come from two KC-10 Extenders and four KC-135 Stratotankers, also based out of Snorkle AB. A single AWACS is tasked with battle management.

C. Concept of Operations

First to launch are the tankers and the AWACS. The tankers will fly to a point off the east coast of South Jagmania where an orbit will be established. The orbit point was selected because it is outside of any North Jagmanian threat envelope, yet close enough to the target area to provide the fighters plenty of fuel as they ingress. This is essential, for should the fighters become involved in any extended air-to-air engagements, they could burn far more fuel than planned. Planners chose a combination of KC-10s and KC-135s because while 135s are more numerous, only the KC-10s can refuel the Marine aircraft. The ATO sets forth which aircraft take which tanker. Depending on fuel availability, the tankers may refuel missions other than those assembled for our package.

All aircraft in the package will join up on the tanker and refuel (except the South Jagmanian fighters, which generally do not refuel while airborne) before proceeding to push points located slightly further north and east off the South Jagmanian coast. Push points are preset locations and altitudes where the various components of the package orbit while awaiting their specific time to start (push) toward their targets (ingress). This coordinated approach is necessary because the attacks are synchronized by location, approach axis, effects, and time. While enroute to the push point, each flight commander will check in with the package commander. This ensures everyone is there, on time, operating on the right frequency, etc. In the event all is not proceeding as planned (e.g., if a flight is late coming off the tanker), the package commander may have to make adjustments, such as slipping everyone's assigned time over-target (TOT) or, in rare cases, aborting the mission.

To develop a "picture" of the threats and to furnish command and control, not only for this package, but for others across the day, the AWACS will already be in orbit before the launch of the first fighter. In this particular case, the orbit is over central South Jagmanian territory (a relatively secure location) for an eight hour window. All of our aircraft will talk to AWACS up to the push point to acquire a general sense of what AWACS is seeing. On board the AWACS there are multiple mission controllers (under the direction of a mission director) whose responsibilities have been divided functionally. Thus, air-to-air mission commanders talk primarily with those controllers responsible for monitoring the air-to-air picture, ground attack mission commanders will be in touch with controllers tasked with supporting them, and so forth. This division of labor is necessary because different missions require different types and quantities of information.

As the flights begin ingress from the push point, all aircraft switch their frequency to the appropriate ground or air (AWACS) controller. Even though they are all now tied into a specific controller's frequency, the information passed to the flight remains general in nature, for the controller
is occupied with working multiple missions or packages simultaneously. It is only when the air to ground flights arrive in the immediate vicinity of the target, interceptors engage, or an aircraft gets in trouble that controllers provide an aircraft specific-"tactical" picture.

First to "push North" from the push point are the SEAD four-ship of F 16CJ "wild weasels" and one flight of four F-15Cs. The F-16s will move in and assume a "sniff and shoot" orbit at a predetermined location. A number of factors go into selection of the position. For instance, the orbit is generally outside the immediate threat envelope of enemy SAMs, but close enough to them to detect (sniff) when their search or fire control radars are activated. If that happens, the weasels need to be positioned to quickly fire an AGM-88 HARM (shoot), which homes in on the SAM site's radar signal. Meanwhile, the F-15s will sweep the area of operations to identify and engage any enemy aircraft, but in the process attempt to avoid potential threats by flying around SAM threat rings or high enough to avoid them if fired. The second flight of F-15Cs remain in an off-shore combat air patrol (CAP) orbit ready to engage enemy aircraft if any rise to challenge the package.

EA-6Bs will precede the main strike portion of the package in order to provide jamming support to cover (hide) its ingress. The next flight to push north consists of the F-16s and South Jagmanian aircraft tasked against the airfield's air defenses (SA-6, 57 mm AAA, and aircraft) and chokepoints. This occurs very soon (a couple of minutes) after the sweep and is time-coordinated with the weasel and jamming operations. The objective is to render target area defenses impotent as the core onslaught begins.

With enemy defenses down, the F-16s will attack the airfield's maintenance and warehouse facilities. Once this phase is complete, the F-15Es and F/A18s will begin their attack on the WSA. This occurs after the other attacks are complete because great accuracy is needed to strike a hardened facility. Such accuracy depends on sufficient time to "lase" (designate) the target for the laser guided weapons. Remaining stable during weapons guidance makes the flight path of the designating aircraft somewhat predictable, which is not conducive to survival if under fire.

Once complete, the attack formations and the air-to-air aircraft will head home. Whether they "hit the tankers" again on the outbound leg of the mission depends on their distance from home base. The EA-6Bs may stay in the area to provided support to other in-bound packages; so too, in certain cases, might the F-15s providing sweep and CAP. If the latter do so, they will likely refuel before resuming their orbit. The tankers will maintain their orbit as long as needed providing they still have fuel, and the AWACS, as noted, remains airborne for an eight hour block. Upon return to their bases, the F-16s and F-15s will be turned, i.e., prepared for another sortie and launched. Ultimately, the air portion of the JFC's campaign proves successful and North Jagmanian forces withdraw back over the border in defeat.
**Figure 6. Deep Interdiction**

**Typical Deep Interdiction Mission**

- **Air Refuel**
- **Fighter Sweep**
- **SEAD**
- **Airborne Jammer**
- **AWACS**

**Figure 7. Close Air Support**

**Typical Close Air Support**

- **CAP**
- **Inflight Refuel**
- **J-STARS**
- **Target Movement Detected**
- **FLOT**
- **Target Acquisition and Destruction**

- **GPS**
VII. CONCLUDING THOUGHTS

By now your head is surely spinning. Yet, you must understand that, Nevertheless, if you do not understand the basics of fighter ops, you will very like law, the flying game seems complex ... because it is complex. quickly find yourself marginalized in the operational environment. And given the complexity of international relations in the 1990s and beyond, every judge advocate must expect to be called on to provide operational law advice at some point in his or her career. Whether it be Northern Watch, Southern Watch or some unforeseen operation on the horizon, your ability to do so will be directly dependent on your understanding of how we fly and fight. That makes you obligated to do everything you can to become a participant, not a spectator. Good luck and aim high!

APPENDIX I

SAMPLE COMBAT MISSION PLANNING CHECKLIST /37/

I. COLLECT INFORMATION

A. Current readiness posture (alert state)
B. Frag
1. Mission number
2. Target or mission objective
3. Force structure
4. Ordnance
5. Routing factors
   a. AAR
   b. Rendezvous point
   c. CAP points
   d. Mandatory penetration points, altitudes
   e. Chaff corridors
6. TOT/vulnerability period
7. Frequencies
8. IFF procedures
9. Coordination/points of contact
C. Read file/SPINS (ROE)
D. Intelligence
   1. Home base threats
   2. Location of the FLOT/FEBA
   3. Location of suspected/known SAMs and AAA
   4. Fighter threat, GCI capability
   5. Comm jam
   6. E & E procedures
   7. Location of friendlies
   8. Enemy capabilities
      a. Readiness
         b. Aggressiveness
         c. Order of battle, tactics
E. Your resources
1. Aircraft - number and configurations
2. Munitions and fuzes
3. Pilots:
   a. Number, experience, proficiency
   b. Crew rest
4. Time available for planning
5. Ground support
   a. Personnel, AGE
   b. Runways (barriers)
   c. ATC facilities
6. GCI/AWACS

F. Mission environment

1. Day/night
2. Weather
   a. Cloud cover
   b. Visibility (haze)
   c. Sun angle
   d. Contrails
3. Terrain
   a. Type
   b. Ground cover

G. Deconflict with other forces

H. Firm up timing at control points (takeoff, AAR, jump-off)

II. CREATE ADMINISTRATIVE PLAN

A. Ground ops

1. Life support considerations (exposure suit)
2. Times - brief, step, start, takeoff
3. Taxi/ marshaling (comm out?)
4. Aborts/spares

B. Airborne ops

1. Takeoff sequence (takeoff data, weight)
2. Join up
3. Departure/recovery
   a. Routing
   b. Airspeed
   c. Altitudes
   d. Formations
   e. Systems checks (switches)
   f. R/T
   g. Threats and contours
4. Rendezvous with escorts
5. AAR data (pre/post strike)
6. Joker/bingo fuels (for target, AAR, alternate fields)
7. Go/no-go decisions
a. Systems  
b. Forces  
c. Weather  
8. Code words (fuels, abort, IFE, chattermark, freq)  
9. Inflight reports  
10. Recall/divert procedures  
11. Air aborts  
12. Emergency fields  
13. SAR  

III. CREATE TACTICAL PLAN  

A. Target Destruction  
1. Target vulnerabilities  
2. Appropriate munitions, fuzes  
   a. types and numbers (JMEM)  
   b. fuze settings  
3. Impact angle and spacing  
4. Delivery mode  
5. Attack axis  
6. Flight frag deconfliction  
7. Weaponeering (complete worksheet to get release altitude that will ensure fuze arming and safe escape)  
8. Delivery parameters  
9. Backup delivery, parameters  

B. Target area tactics  
1. Select definable IP  
2. IP-to-target routing (threat avoidance, DR)  
3. Aimpoints (first impacts downwind)  
4. Attack plan  
   a. Airspeeds (use of burner)  
   b. Formations  
   c. Sequence, timing  
5. Delivery considerations  
   a. Employment limits  
   b. Techniques  
6. Flight reform after delivery  
   a. Airspeed  
   b. Maneuvering, calls  
   c. Visual pickup point  
7. Timing considerations  
8. Use of support forces  
9. Threats - counters, ECM/ECCM  
10. Contingency plans  
   a. Missed IP or missed target (reattack)  
   b. Battle damage  
   c. No release (dump target, higher fuel flows)  

C. Ingress/ Egress tactics  
1. Routing (deconflict from other forces)  
2. Altitudes (deconflict from other forces)  
3. Airspeeds (timing)  
4. Formations  
5. Responsibilities
a. Navigation  
b. Formation  
c. Visual, radar lockout  
d. R/T (discipline)  

6. Counters/reactions  

a. Comm jam (chattermark freq)  
b. Threats  
   1) Flight maneuvering  
   2. Use of RWR, ECM  
   3) Defensive ordinance (switches)  
c. Store limitations  
   1) Carriage  
   2) Jettison  

IV. COORDINATE WITH  
A. Base units  
   1. Maintenance and weapons  
   2. Intel  
   3. Weather (brief)  
   4. Air base defenses  
   5. Command post  
   6. ATC facilities  
B. Off-base units  
   1. GCI/AWACS  
   2. Tankers  
   3. Escort  
   4. Supporting units (weasels, FAC)  
   5. SAM forces  

V. ASSEMBLE PILOTS AND COMPLETE MISSION PLANNING  
A. Assign duties to accomplish  
   1. Map preparation and weaponeering  
   2. Form 70 or equivalent /39/  
   3. Photo study  
   4. E & E materials  
   5. Authenticators  
B. Allow adequate time for route and target area study  
C. "What if" the plan -  
   1. Aborts, IFEs  
   2. Weather  
   3. Takeoff delays (single runway)  
   4. Late or no-shows  
      a. Tanker  
      b. AWACS  
      c. Escort  
      d. CAP  
      e. FAC  
   5. Comm out plan  

VI. BRIEFING  
VII. POST-MISSION DUTIES
## APPENDIX II
### ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AAA</td>
<td>anti-aircraft artillery</td>
</tr>
<tr>
<td>AAR</td>
<td>air-to-air refueling</td>
</tr>
<tr>
<td>ABCCC</td>
<td>airborne battlefield command and control center</td>
</tr>
<tr>
<td>AGE</td>
<td>aircraft ground equipment</td>
</tr>
<tr>
<td>AGL</td>
<td>above ground level</td>
</tr>
<tr>
<td>AGM</td>
<td>air-to-ground missile</td>
</tr>
<tr>
<td>AI</td>
<td>air interdiction</td>
</tr>
<tr>
<td>AIM</td>
<td>air intercept missile</td>
</tr>
<tr>
<td>AMRAAM</td>
<td>advanced medium range air-to-air missile</td>
</tr>
<tr>
<td>ATC</td>
<td>air traffic control</td>
</tr>
<tr>
<td>ATO</td>
<td>air taking order</td>
</tr>
<tr>
<td>AWACS</td>
<td>airborne warning and control system</td>
</tr>
<tr>
<td>BDA</td>
<td>battle damage assessment</td>
</tr>
<tr>
<td>BFM</td>
<td>basic fighter maneuver</td>
</tr>
<tr>
<td>BVR</td>
<td>beyond visual range</td>
</tr>
<tr>
<td>CAS</td>
<td>close air support</td>
</tr>
<tr>
<td>CBU</td>
<td>cluster bomb unit</td>
</tr>
<tr>
<td>CEP</td>
<td>circular error probable</td>
</tr>
<tr>
<td>CSAR</td>
<td>combat search and rescue</td>
</tr>
<tr>
<td>DNIF</td>
<td>duty not involving flying (temporarily grounded, usually medically)</td>
</tr>
<tr>
<td>DR</td>
<td>dead reckoning</td>
</tr>
<tr>
<td>ECM/ESM/EW</td>
<td>electronic countermeasures/electronic support measures/electronic warfare</td>
</tr>
<tr>
<td>ECCM</td>
<td>electronic counter-counter measures</td>
</tr>
<tr>
<td>E&amp;E</td>
<td>escape and evasion</td>
</tr>
<tr>
<td>EO</td>
<td>electro-optical</td>
</tr>
<tr>
<td>FAC</td>
<td>forward air controller</td>
</tr>
<tr>
<td>FEBA</td>
<td>forward edge of the battle area</td>
</tr>
<tr>
<td>FLIR</td>
<td>forward looking infrared</td>
</tr>
<tr>
<td>FLOT</td>
<td>forward line of own troops</td>
</tr>
<tr>
<td>FRAG</td>
<td>fragmentation (also portion of the ATO)</td>
</tr>
<tr>
<td>FSCL</td>
<td>fire support coordination line</td>
</tr>
<tr>
<td>GBU</td>
<td>guided bomb unit</td>
</tr>
<tr>
<td>GCI</td>
<td>ground controlled intercept</td>
</tr>
<tr>
<td>GPS</td>
<td>global positioning system</td>
</tr>
<tr>
<td>IFE</td>
<td>inflight emergency</td>
</tr>
<tr>
<td>INS</td>
<td>inertial navigation system/set</td>
</tr>
<tr>
<td>IP</td>
<td>initial point or instructor pilot</td>
</tr>
<tr>
<td>IR/IIR</td>
<td>infrared/imaging infrared</td>
</tr>
<tr>
<td>JMEM</td>
<td>Joint Munitions Employment Manual</td>
</tr>
<tr>
<td>LANTIRN</td>
<td>low altitude navigation and targeting infrared night</td>
</tr>
<tr>
<td>LAT/LONG</td>
<td>latitude/longitude</td>
</tr>
<tr>
<td>LOC</td>
<td>line of communication</td>
</tr>
<tr>
<td>MPC</td>
<td>mission planning cell</td>
</tr>
<tr>
<td>NM</td>
<td>nautical miles</td>
</tr>
<tr>
<td>Pk</td>
<td>probability of kill</td>
</tr>
<tr>
<td>ROE</td>
<td>rules of engagement</td>
</tr>
<tr>
<td>R/T</td>
<td>receive/transmit (communicate)</td>
</tr>
<tr>
<td>RWR</td>
<td>radar warning receiver</td>
</tr>
</tbody>
</table>
SA................................. surface attack or situational awareness
SAM................................. surface-to-air missile
SEAD............................... suppression of enemy air defenses
TFR................................. terrain following radar
TGT................................. target
TOT................................. time over target
UHF................................. ultra high frequency (radio)
VHF................................. very high frequency (radio)
VID................................. visual identification
WSO................................. weapons system operator
WVR................................. within visual range

APPENDIX III
GLOSSARY

ATTACK RESTRICTION - Ingress, ordnance delivery, or egress restrictions depending on situation, i.e., threats, weather, terrain, training rules, etc.
CAP - Combat Air Patrol; Refers to either a specific phase of an air-to-air mission or the geographic location of the fighter's surveillance orbit during an air-to-air mission prior to committing against a threat.
CHAFF - A passive form of electronic countermeasures consisting of expendable metallic fragments used to deceive airborne or ground based radar.
CLOCK CODE - Description of position using the aircraft as a reference; the nose is twelve o'clock, the tail in six o'clock.
COMM JAMMING - Attempt to interrupt communications.
ELEMENT - A flight of two aircraft.
ENGAGEMENT - Maneuvers by opposing aircraft attempting to achieve/prevent weapons firing positions.
HOSTILE - A contact positively identified as enemy in accordance with command rules of engagement.
HUNTER-KILLER - Flight mix of Wild Weasel and strike aircraft employed in SEAD operations.
INTERCEPT - A phase of an air-to-air mission between the commit and engagement. To cut off an enemy's advance.
JINKING - Aircraft maneuvers designed to change the flight path of the aircraft in all planes at random intervals (usually to negate a gun attack).
LETHAL ENVELOPE - The envelope within which the parameters can be met for successful employment of a munition by a particular weapons system.
LINE UP - List of aircraft and pilots in a flight.
MERGE - The meeting of adversarial aircraft. An intercept leading to an engagement where some or all of the aircraft are in the same area.
ON-STATION - In position, ready for mission employment.
POPEYE/IMC - Flying in clouds or area of reduced visibility.
SANITIZE - Clear the area of threats.
SCRAMBLE - Takeoff as quickly as possible.
SEPARATION - Distance between an attacker and defender; can be lateral, longitudinal, or vertical.
SORTING - Using all available information such as radar presentation, GCI information, etc., to determine which flight member will keep track of (and usually target/attack) which bandit.
WILD WEASEL - Dedicated radar defense suppression aircraft.
APPENDIX IV
CODE AND BREVITY WORDS

The following is a list of code and brevity words for use during flight to minimize radio transmissions. They are often also used in regular conversation among flyers.

ABORT - Direction to cease action/attack/event/mission.
ARM/ARMED (Safe/Hot) - Select armament (safe/hot), or armament is safe/hot.
AS FRAGGED - Fighter, FAC, mission package, or agency will be performing exactly as stated by the air tasking order.
AUTHENTICATE - To request or provide a response for a coded challenge as a means of identification.
BANDIT (Radar/Heat/Striker) - Known enemy aircraft and type ordnance capability, if known.
BINGO - Fuel state at which return to base must commence.
BOGEY - A radar/visual contact whose identity is unknown.
BREAK (Right/Left) - Directive to perform an immediate maximum performance turn in the indicated direction. Assumes a defensive situation.
BROKE LOCK - Loss of radar/IR lock-on (advisory).
BUGOUT (Direction) - Separation from that particular engagement/attack; no intent to reengage.
BURNER - Directive to select/deselect afterburner.
CHATTERMARK - Begin using briefed radio procedures to counter comm jamming.
CLEAN - No radar contacts.
CLEARED - Requested action is authorized (no engaged/support roles are assumed).
CLEARED HOT - Ordnance release is authorized.
CLOSING - Bandit/bogey/target is getting closer in range.
COMMITTED/COMMIT - Fighter intent to engage/intercept; weapons director continues to provide information.
CONTACT - Radar/IR contact at the stated position; should be in bearing, range, altitude (BRA), bull's eye, or geographic position format.
ENGAGED - Maneuvering with the intent of achieving a kill or negating the threat. If no additional information is provided (bearing, range, etc.), engaged implies visual/radar acquisition of the threat.
EXTEND (Direction) - Directive to gain distance with the possible intent of returning.
FEET WET/DRY - Flying over water/land.
FURBALL - A turning fight involving multiple aircraft.
GO SECURE - Directive to activate secure voice communications.
GORILLA - Large force of indeterminable numbers and formation.
HIT - Radar return in search (air-to-air). Weapons impact within lethal distance (air-to-ground).
HOME PLATE - Home airfield.
JOKER - Fuel state above bingo at which separation/bugout should begin.
KILL - Clearance to fire on target.
KNOCK IT OFF - Stop attacking / defending and recover to a safe altitude and vector.
LOCKED (BRA/Direction) - Final radar lock-on (bearing/range/altitude).
NO JOY - Aircrew does not have visual contact with the target/bandit; opposite of "TALLY."
PAINT - Interrogation of another aircraft's IFF return indicates that it is friendly.
PARROT - IFF transponder.
PICTURE - Situation briefing which includes real-time information pertinent to a specific mission.
PRESS - Directive to continue the attack; mutual support will be maintained. Appropriate engaged and supporting roles will be assumed.
ROGER - Indicates aircrew understands the radio transmission; does not indicate compliance or reaction.
SHOOTER - Aircraft designated to employ ordnance.
SICK - Described equipment is degraded.
SPIKE - RWR indication of AI threat.
SPLASH - Target destroyed (air-to-air); weapons impact (air-to-ground).
SPOOFING - Notification that voice deception is being employed.
SQUAWK ( ) - Operate IFF as indicated or IFF is operating as indicated. (mode __).
TALLY - Sighting of a target/bandit; opposite of "NO JOY."
**TUMBLEWEED** - Indicates limited situation awareness; no tally, no visual, a request for information.
**VISUAL** - Sighting of a friendly aircraft; opposite of "BLIND."
**WEEDS** - Indicates that aircraft are operating close to the surface.
**WILCO** - Will comply with received instructions.
**WINCHESTER** - No ordnance remaining.
APPENDIX V

ROB AND MIKE'S GUIDE TO FIGHTER SPEAK

(phrases fighter pilots use in normal conversation that no one else understands)

CHECK SIX/WATCH YOUR SIX - Be alert to a threat behind you; figuratively, be alert to someone trying to take advantage of you.
CRASH AND BURN - Fail miserably.
CUT TO THE CHASE - To get straight to the point.
DRIVER - Pilot.
ENGAGE - To involve oneself.
FIGHT'S ON - An event/intercept/air-to-air practice engagement; figuratively, to begin.
GO BALLISTIC - To lose control, as in becoming extremely angry.
IN THE FIGHT - Involved.
IN THE WEEDS - Dealing with minutiae.
HARD BROKE - Very difficult to correct; not repairable.
HIGH UP ON MY SCOPE - Of much importance to me.
KNOCK IT OFF - Stop.
LAWN DART - F-16.
NO TALLY/NO CLUE - Does not understand/no knowledge.
PITCH OUT - To uninvolve oneself.
PRESS - Continue.
PULL CHOCKS - Leave.
SA (SITUATIONAL AWARENESS) - To understand the context in which an event is occurring.
SHAKE THE STICK - Take charge.
SHOE CLERK - Non-flyer.
SH_T HOT - Most excellent.
TENNIS COURT - F-15.
THROTTLE BACK - Slow down; take it easy.
VFR DIRECT - To go straight to someplace or someone.
* Colonel (select) Rob Coe (MS, National Defense University; MMAS, Army Command and General Staff College; BA, Washington State University) is a Professor in the United States Naval War College's Joint Military Operations Department. He is also a fighter pilot.

** Lieutenant Colonel Mike Schmitt (LL.M, Yale University; JD, University of Texas; MA, Naval War College; MA, BA, Southwest Texas State University) is a Professor of International Law and the Assistant Director for Aerial Warfare in the United States Naval War College's Center for Naval Warfare Studies. He is a member of the Texas Bar. He is also a shoe clerk.

* The authors would like to thank Mr. Andy Small of the Naval War College's Graphics Arts Department for his untiring efforts in preparing all graphics used in this article.


2 Air and space superiority is control over what moves through air and space. It is this control which shields friendly forces from attack through the air or from space, while allowing us to attack the enemy in and from those media. Global attack is the Air Force's capability of attacking anywhere at any time. Precision engagement is the ability to surgically apply force in a very discriminating fashion. Information superiority involves the acquisition of quality information and intelligence ranging from weather to the enemy order of battle, while denying the same to the enemy. Though the catch phrase "information warfare" is often associated with information superiority, it might also include such traditional operations as attacks on enemy radar facilities. Rapid global mobility reflects the ability to quickly deploy combat forces worldwide, whereas agile combat support involves logistics issues (the "tail" in the tooth to tail relationship).


4 The recently activated Air Force Doctrine Center at Maxwell AFB is developing a series of Air Force Doctrine Documents (AFDD) which will redefine roles, missions, and functions to better match the definitions in DOD and JCS publications.

5 Air superiority should be distinguished from air supremacy. Superiority occurs when one side is clearly dominant. Supremacy, by contrast, is a degree of superiority that implies total control of the skies; enemy air forces have been rendered essentially impotent.

6 The aircraft may also be tasked with cruise missile defense, though this is not often done.

7 The level of war is determined by the objective to be achieved by the specific strike or action. Strategic strikes are designed to have impact upon the enemy's national or theater war making capability. Operational level strikes, in this case air interdiction, are synchronized and integrated with other operational level activities to achieve theater objectives of a large scale, which would decisively affect the outcome of a major operation or campaign. Tactical strikes, such as CAS or specific air-to-air engagements, contribute to the success of a regional battle.

8 LOCs are simply routes of transport; attacking a port, a rail head or bridge are all examples of strikes against LOCs.

9 As such, it, is under the tactical control of the Joint Force Land Component Commander (JFLCC) if one is designated Tactical control, or TALON, is the command authority over forces made available for tasking, and is limited to the direction and control necessary to accomplish assigned missions. TALON provides authority to control and direct tactical use of combat support assets, but does not provide authority over organization, administration; or logistics. Operational Control, or OPCON, exceeds TALON in its authority to command subordinate forces; it, include all aspects of military operations, training, organization and logistics.

10 For example, B-52s were used for CAS purposes in the defense of Khe Sanh during the Vietnam War.
As can other intelligence, surveillance, and reconnaissance (ISR) platforms, such as the U2/TR-1 and the RC-135 "Rivet Joint."

F-16s performed the CSAR "Sandy" role in Southwest Asia (SWA).

See article by Professor Jack Grunawalt, Naval War College, in this edition of the A.F.L. REV.

In actuality, the F-117 functions more in strategic bomber than in classic fighter roles.

Inertial navigation systems derive an aircraft's position and velocity vectors based upon knowing its initial position and adding the movements of the aircraft over time. Those movements are determined by precisely measuring subtle (and not-so-subtle) changes in the inertia of the aircraft relative to a stable nearly-frictionless mass. Older systems used a spinning mass, while newer systems use a laser gyro. The Global Positioning System measures an aircraft's position relative to a constellation of navigational satellites, and derives velocity vector information based upon changes in measured position. In many of the newer fighter aircraft, the INS and GPS information is integrated into the aircraft's navigation and fire control computers to provide extremely accurate navigation and weapons delivery information to the pilot.

In statutory miles (5,280 feet per mile). The reader should be aware that in planning missions, nautical miles (6,076 feet) are used.

"Mach" is a measure of the speed of sound. Therefore, Mach 4 equals four times the speed of sound. Mach varies with temperature, which is a function of altitude. At sea level, Mach 1 is about 750 miles per hour.

Including Iraqi helicopter kills. The overall record of the F-15 world-wide in air-to-air engagements is approaching 100-0. The F-16 has a similarly impressive record in combat aircraft engagements.

Laser designation illuminates, much like a tightly focused flashlight, a coded beam of laser light onto the specific desired aimpoint of a target. The seeker on the front of the laser-guided bomb (LGB) sees and recognizes the coded beam's reflection and steers the bomb exactly to the illuminated point.

The aircraft is also used for forward observation (using the nomenclature "OA-10"), and combat search and rescue.

"Flares" are typical countermeasures for IR threats; ejected from canisters mounted along the lower surface or pylons of the aircraft, their short-lived but intense heat signature decoys IR missiles away from the aircraft. "Chaff," or bundles of reflective material cut into measured strips to provide a return to enemy radars, can be ejected from the same canisters to confuse or decoy radar-guided threats (missiles or AAA).

450 if Air National Guard (ANG) and Air Force reserve (AFRES) aircraft are included.

In that, the topic of weapons is extremely complex, the discussion here should be considered illustrative, not exhaustive. Additionally, there are weapons other than those cited; only the ones most likely to be encountered have been included, and then only in their most common configuration.

During normal "search" operations, a fighter's radar antenna "sweeps" from side to side, allowing it to "paint" targets throughout a usually large, designated area. The pilot can "lock on" his radar to a specific target, which focuses the antenna and its radar beam only on that target. Once that target is "locked," the radar will automatically follow that target, usually in spite of his maneuvers or countermeasures, until the pilot "breaks lock" or the target exceeds the limits of the radar antenna's range of motion. A locked condition provides the most accurate information to the fire control computer for missile firing. Recent updates to fighter radars allow accurate missile employment in a "track-while-scan" (TWS) mode without a lock-on.
25 Since all air-to-air missiles in the inventory are BVR capable, the decision to take a shot BVR or WVR (within visual range) is often driven by the ROE.

26 Most infrared, or IR, seekers track a distinct contrast of a hot target against a cooler background or a cold target against a warmer background. The newer Maverick seekers are imaging infrared, or IIR (commonly called "double IR"). With this technology, an image is displayed digitally and the seeker can match the scene without requiring distinct contrasts.

27 When bombs are dropped ballistically, their course is determined by the laws of physics (gravity, speed, direction, etc.)

28 Nominally out to 1/2 mile from detonation.


30 For an extensive discussion of deliberate and crisis action planning, see The Joint Staff Officer's Guide, Armed Forces Staff College Publication 1, chs. 6-7 (1993). See also JCS, Doctrine for Planning Joint Operations (Joint Publication 5.0) (1995).

31 On the role and functions of the JFACC, see Deputy Chief of Staff, Plans and Operations, Headquarters, USAF, JFACC Primer (2d ed. 1994).

32 In some Joint Task Forces, the JTCB builds the JIPTL. Whatever the case, it is an important tool for the JFACC in making his apportionment recommendation to the Joint Force Commander. Note that not all joint/combined task forces employ a JTCB. For example, a no fly operation generally would not, absent related ground operations. It is a need based entity.


34 The US Navy uses Mode II to identify aircraft type for carrier operations.

35 Two different Mode IV settings, "A" & "B," are loaded into the aircraft, and the pilot must switch from one to the other if his sortie continues through midnight (local) or 2400 (zulu) as determined by the SPINS in the ATO.

36 Usually, the newer fighter aircraft can fly five or six sorties each day, but the pilots are normally limited to three in order to stay within the twelve hour duty day and reasonable stamina limits. Therefore, there will usually be two sets of fighter aircrews to cover the combat flying period.

37 Adapted from the 432 Tactical Fighter Wing Weapons Guide (Change 1), May 1986, at A1 A5. Unique details would be added or changed for specific aircraft types, missions, munitions, etc.

38 Only the air-to-ground variant is included.

39 A Form 70 is a flight planning form used to provide the pilot with the headings, distances, time, and fuel computed to fly the planned route.

**International Agreements: A Primer for the Deploying Judge Advocate**

LIEUTENANT COLONEL ARTHUR C. BREDEMEYER, USAF /*/
Currently, the Air Force is increasing the role of expeditionary forces to maintain its global engagement capability. In the future, capabilities based in the continental United States will likely become the primary means for crisis response and power projection as long-range air and space-based assets increasingly fill the requirements of the Global Attack core competencies. /1/

I. INTRODUCTION

After World War II, U.S. military strategy for achieving national security objectives included a large, forward-deployed, permanent military presence in strategic overseas locations. As a result of the end of the Cold War, the drawing down of U.S. military forces, and the changing international environment, the size of the United States' permanent overseas presence has remarkably decreased /2/ The need to quickly deploy U.S. military forces abroad, both permanently and temporarily, is still essential to U.S. national security strategy and will be into the foreseeable future. /3/ During the 1990s alone, the United States has been involved in one major regional conflict (MRC) (i.e., the Gulf Conflict) and a wide range of "contingencies short of war" (CSOW) in support of U.S. interests. /4/ Examples of these new contingencies include: smaller-scale combat operations, multilateral peace operations, counterdrug operations, counterterrorism operations, sanctions enforcement, noncombatant evacuation operations (NEOs), humanitarian operations and disaster relief operations./5/

Considering the current state of affairs, it is prudent for all judge advocates (JAGS) to be prepared to deploy to another country and advise a deploying military force on operational law issues. Even if you are not deploying with the force, you still need to be prepared to advise forces on a number of varied pre-deployment legal issues. While there are a number of operational law issues with which you must be well versed, one of the most important is an understanding of international agreements. Today, JAGs face ever more complex operational law issues because of the growing use of joint forces. In the future, most deployments will be part of a Joint Task Force (JTF), a Coalition force involving more than one country, a United Nations sponsored force, or a NATO-sponsored force.

This article is a primer on international agreements and a tool for the Air Force judge advocate deploying with a military force or advising a deploying military force. It provides a general overview and basic understanding of international agreements, reviews the questions and issues that must be addressed when dealing with them, educates you on the legal requirements within the Department of Defense (DOD) and the Department of the Air Force for negotiating and concluding international agreements, and discusses their interpretation and implementation. The effective use of international agreements will greatly enhance the probability of a deployed military force's mission success.

II. INTERNATIONAL AGREEMENTS

A. Fundamentals

Except where a deployment to another country is covered by the contemporary and conventional laws of armed conflict, the deploying military force cannot operate within the territorial boundaries of another country without some sort of legal authority. In peacetime, whether the military force is permanently deployed in a country or temporarily deployed for a contingency short of war or military exercise, the United States deploys its military forces into a country only with the country's permission. /6/ Such permission, plus the terms and conditions of the deployment, are usually contained in a multilateral
or bilateral international agreement. These agreements are important because they define the rights and obligations of the deploying military forces. In countries where U.S. forces are permanently based or frequently deployed, you will usually already find a Status of Forces Agreement (SOFA) in existence. However, with more and more crisis deployments in support of contingencies short of war, you will most likely not find an international agreement in place concerning the deployment.

Advance preparation is essential to advising commanders and the deploying military forces. You must have a basic understanding of international agreements, the process for negotiating and concluding them, the legal reporting requirements, how to interpret and implement them, and where to get expert assistance when necessary. Armed with this basic understanding, you should begin your pre-deployment analysis by familiarizing yourself with the proposed mission and anticipating the deployment's problems that should be resolved through an international agreement. You should then determine whether a SOFA or other international agreement currently exists that answers the anticipated problems. If no agreement currently exists, or the current agreement is inadequate, you should try to get an acceptable agreement negotiated and concluded prior to the deployment. Negotiating international agreements for permanent deployments involve many issues and usually take a long time to accomplish. However, the United States is occasionally able to expedite the negotiation and conclusion of international agreements covering most temporary deployment concerns, especially in contingencies short of war where the receiving country urgently wants the deployed force in place. Finally, if deployed, you will have to continually follow a similar analysis process to identify potential or existing problems that need to be addressed by an international agreement.

B. General Background

Before examining the procedural directives on negotiating and concluding international agreements, it is important to have a basic understanding of international agreements and the applicable law. There are two types of international agreements commonly recognized by U.S. law, and there are significant differences between them. The two types of agreements are treaties and executive agreements. The most notable difference between the two is that a treaty must undergo the "advice and consent" process by the U.S. Senate and receive a two-thirds vote for approval. Executive agreements, on the other hand, do not require Senate approval. They can be negotiated by the President or his designee and go into effect upon Presidential approval. Although not expressly stated in the U.S. Constitution, the President's authority for executive agreements is well established in U.S. law. Another difference between the two is that once a treaty receives Senate approval, and as long as it does not violate the U.S. Constitution, it is the supreme law of the land per the U.S. Constitution's supremacy clause. This means the treaty takes precedence over executive orders, regulations, and laws passed by the individual states.

There may be a treaty affecting your deployment. However, the majority of international agreements affecting your deployment will be executive agreements. They are negotiated and concluded by an authorized representative of the President, acting under one of at least three types of recognized substantive authority: (1) an existing treaty; (2) existing U.S. law (or subject to legislation to be enacted by Congress); or (3) pursuant to the President's constitutional authority.

C. Status of Forces Agreements (SOFAs)
The most commonly recognized international agreement for defining the status of military forces present within the territorial boundaries of another country is the SOFA. A SOFA can be in the form of either a treaty or an executive agreement. It may be a long-standing arrangement or a short-term one. The arrangement can be created by a separate document, or it may be imbedded in any number of broader agreements, such as mutual defense agreements (MDAs), defense and economic cooperation agreements (DECA), or defense cooperation agreements (DCAs). Keep in mind, however, that SOFAs are not basing or access agreements, and do not by themselves authorize the presence of the military forces.\(^{15}\)

Generally, there are three arrangements for establishing the rights and responsibilities of our temporarily or permanently stationed military forces within the territorial boundaries of another country: (1) Administrative and Technical (A&T) Status; (2) the SOFA; and (3) the mini-SOFA. Determining which arrangement is best under the circumstances depends upon the nature and duration of the military activity within the host country, the maturity of the relationship between the sending and receiving states, and the prevailing political situation in the host nation. \(^{16}\)

A&T status provides the deployed military forces with certain immunities, the most important of which is complete immunity from the receiving state's criminal jurisdiction and immunity from their civil jurisdiction to the extent that the act giving rise to the action was done in the performance of official duty. \(^{17}\) A&T status is usually only available for temporarily deployed military forces, such as those involved in joint military exercises and humanitarian relief operations. The process of obtaining A&T status is very simple and can be accomplished merely through an exchange of notes. \(^{18}\) A&T status can also be granted in the context of the overall agreement authorizing the activity itself. The Department of Defense (DOD) requests A&T status with such frequency that they have been granted a blanket delegation of authority from the U.S. Department of State (DOS) to negotiate and conclude international agreements on A&T status. \(^{19}\) While the process is easy to accomplish, A&T status is not always easy to obtain because it provides such broad immunities.

The SOFA is the most extensive of the three types of status arrangements and is most often used when there is a large temporarily deployed military force or a permanently deployed military force in the receiving country. In both these cases, there is usually a need for a number of support services. \(^{20}\) The standard SOFA will usually try to address the following areas: (1) respect for law and sovereignty, (2) entry and departure procedures, (3) wearing of the uniform, (4) the carrying of arms, (5) driving licenses and registration, (6) criminal jurisdiction, (7) civil jurisdiction, (8) arrest and service of process, (9) claims, (10) duties, taxes, and other charges, (11) importation, use and exemption of personal property, (12) personal tax exemption, (13) morale, welfare, and recreation activities, (14) health care, (15) postal services, (16) use of transportation, (17) use of currency and banking facilities, (18) contractor employees, (19) local procurement, (20) utilization of local labor, (21) customs, (22) governing agreement, and (23) duration and termination. \(^{21}\) The United States always requests legal protection for our military forces being deployed to foreign countries, especially in a bilateral situation. The North Atlantic Treaty Organization (NATO) SOFA, which is a treaty, and the Partnership for Peace (PfP) SOFA are the United States' only fully reciprocal SOFAs, meaning their protections and responsibilities are reciprocal among the signatories. \(^{22}\)

The third type of status arrangement is the mini-SOFA. It is designated as such because it does not address all the areas commonly contained in a full SOFA agreement. At a minimum, the mini-SOFA will usually address: (1) respect for law and sovereignty, (2) entry and departure procedures, (3) carrying of arms, (4) criminal jurisdiction, (5) civil jurisdiction, (6) claims, (7)
duties, taxes, and other charges, (8) local procurement, (9) customs, and (10) duration and termination. /23/ The mini-SOFA is ideal for small scale deployments and those of short duration, not requiring large support services. It is excellent for use in exercises and is sometimes referred to as an "exercise SOFA."

Lately, there has been a blurring of the distinction between requesting A&T status and the mini-SOFA. Officials are now trying to achieve mini SOFA status via requests for A&T status. While A&T status provides the deploying force with certain immunities, its key protection is immunity from the receiving state's criminal and most of its civil jurisdiction. /24/The DOS recently sent a request for A&T status via a draft message forwarded through its embassies to the governments of Botswana, Mali, Namibia, and Senegal. The message requested A&T status for military personnel deploying into those countries for the FLINTLOCK 1997 Exercise. In this message, the United States requested much broader rights than traditional A&T status. The request included authorization from the receiving state for entrance and exit privileges, wear of the uniform, the right to carry arms while on duty, duty free importation and exportation, exemption from internal taxation, and for vessels to be exempt from port fees and landing, parking, navigation or overflight charges. /25/ Although the request was for A&T status, officials now appear to be folding as many status issues as possible into such requests.

With worldwide U.S. military commitments, the United States is constantly negotiating status arrangements. As of 2 June 1997, the United States is negotiating some form of status arrangement with Argentina, Bangladesh, Botswana, Benin, Brazil, Cameroon, Congo, Czech Republic, Ecuador, El Salvador, Eritrea, Fiji, France, Gabon, Ghana, Guyana, Ivory Coast, Jordan, Kenya, Korea, Malaysia, Mali, Namibia, Paraguay, the Partnership for Peace countries, the Philippines, Russia, Saudi Arabia, Singapore, United Arab Emirates, and Zaire. /26/ Currently, the United States has some form of formal SOFA with 87 countries. /27/ When the content of a SOFA is politically sensitive for the receiving state's government, the agreement may be classified. The United States is party to classified SOFAs with ten nations, including four in Southwest Asia. The very fact a SOFA exists may be classified, although none currently are.

Generally, Air Force JAGs will not represent the United States as negotiator during a SOFA negotiation. They may, however, be assigned as members of a negotiating team. Because SOFAs are considered agreements with "policy significance," there is no delegation of authority for such negotiations. This is due to the important impact a SOFA can have on the international relations between the United States and the receiving country. /28/ DOS has authority to negotiate SOFAs and DOD must request authority using the Circular 175 Procedure. /29/ The process is designed to ensure substantive legal authority exists for the agreement, appropriate departments and agencies get timely consultation, the proper person signs at the proper time, and all reporting requirements are satisfied. /30/ Whether you are involved in the negotiation of a complete SOFA or merely establishing a less comprehensive status agreement, you still must obtain Circular 175 authority.

III. NEGOTIATING, CONCLUDING, REPORTING, AND MAINTAINING INTERNATIONAL AGREEMENTS

Although you may not be directly involved in a SOFA or other type of status negotiation, there is a high likelihood that while deployed with a military force you will be involved in negotiating other types of international agreements and implementing and interpreting them. Other areas where international agreements are usually needed include logistics support, prepositioning of material, cryptological support, personnel exchange programs, and security assistance programs. /31/
A. Authority to Negotiate

To properly negotiate an international agreement or advise someone that is doing so, you must know the type of international agreement sought, the type of military force being deployed, and the chain of command. You must ask yourself whether you are a single-service force or a joint force? Is the military force part of a coalition operation? Is this a United Nations-sponsored or NATO-sponsored operation? Once these questions are answered, you will be able to identify the proper procedural guidance applicable to your negotiation. Guidance for DOD personnel is contained in a number of procedural directives, however, they are very similar because they all derive their authority from DOD Directive 5530.3. /32/

DOD Directive 5530.3 is the main source for DOD personnel negotiating international agreements. There are additional specific directives which govern certain specialized agreements. Most, however, would not apply to the deployment of a military force. Also, each separate Service and the Joint Chiefs of Staff (JCS) have its own directive based upon DOD Directive 5530.3 and should be consulted in appropriate deployments. /33/ DOD Directive 5530.3 assigns responsibility within DOD for negotiating and concluding international agreements with foreign governments and other international organizations. It also establishes the procedures for complying with the reporting requirements of the Case-Zablocki Act. /34/ This Act requires the Secretary of State (SECSTATE) to report to the Congress all international agreements other than treaties within 60 days after their entry into force with respect to the United States. All directives within DOD dealing with international agreements have a Case-Zablocki Act reporting requirement. /35/ Also, remember that all DOD directives pertaining to international agreements are only procedural. Substantive legal authority for each obligation assumed by the United States must be found in constitutional, statutory, or other legal authority applicable to the subject matter of the proposed agreement. /36/

The authority to negotiate and conclude most international agreements involving DOD has been delegated in DOD Directive 5530.3 to the Service Secretaries for Service-specific agreements, various DOD agencies, and the Chairman of the Joint Chiefs of Staff (CJCS) for joint operations agreements. /37/

This authority has been redelegated by the Service Secretaries within their respective Services and by the CJCS to the Unified Command Commanders-in-Chief (CINCs). /38/ There are, however, limitations on these delegations of authority, /39/ the most significant being a prohibition on agreements "having policy significance." /40/ This term should be interpreted broadly. Similar restrictions are contained in the redelegations of authority within DOD." Thus, it would be prudent when embarking upon a negotiation to insure that the person negotiating for DOD has the proper authority for the subject matter being negotiated.

In the Air Force, the Secretary of the Air Force, has redelegated authority to negotiate and conclude international agreements for predominantly Air Force matters within their authority and responsibility to commanders of major commands (MAJCOMs), field operating agencies (FOAs), and the heads of major Air Staff organizations. /42/ This authority can be further delegated to subordinate commanders, but it does not relieve the delegating authority from responsibility. /43/ One of the most frequently used categories of international agreements available to the delegate involves "[t]echnical, operational, working, or similar agreements or arrangements, to be concluded pursuant to a treaty or executive agreement that entails implementing arrangements." /44/ This category is useful when the proposed agreement is merely implementing an already existing agreement. Although this can be broadly interpreted, especially by a creative judge
advocate, the directive contains warnings against an overbroad interpretation of this delegation. /45/ The other listed categories may also be encountered when deploying with a military force. /46/ Whenever exercising the delegated authority to negotiate and conclude an international agreement, you must involve and consult with all Air Force and DOD organizations that have an interest in the subject matter of the agreement. /47/

B. Procedures for Negotiating and Concluding an International Agreement

Prior to negotiating /48/ with any foreign government or international organization, either orally or in writing, you must obtain the written concurrence of either the Secretary of the Air Force's Assistant General Counsel for International Matters and Civil Aviation (SAF/GCI) or the responsible staff judge advocate. /49/ The Air Force Judge Advocate General's International and Operations Law Division (HQ USAF/JAI) should also be contacted and copied on all communications from the field with SAF/GCI. In addition, any international agreement which includes a financial obligation or has any other cost or fiscal implication must be submitted to the comptroller at the level of negotiating authority. /50/

When the proposed international agreement must be dealt with at the Secretarial or Air Staff level, you must submit a request for authority to negotiate or conclude the agreement to the appropriate Office of the Secretary of the Air Force (OSAF) or functional Air Staff element. They will ensure that SAF/GCI and HQ USAF/JAI get copies of all communications. It would be greatly appreciated, however, if copies were sent from the requester directly to each of the two legal offices. /51/ Such a request must be made by letter or message and include: (1) a draft text, outline, or complete description of the proposed international agreement; (2) a legal memorandum stating the Constitutional, statutory, or other legal authority for each proposed obligation that the United States would assume in the agreement and an explanation of other relevant legal considerations; (3) a fiscal memorandum stating the estimated cost of each proposed obligation that the DOD would assume in the agreement, the source of funds to be obligated, and reference to foreign currency payment provisions, if applicable; (4) a Technology Assessment and Control Plan per DOD Directive 5530.3, Section I, paragraph 3d; and (5) a quid pro quo analysis that fully addresses the benefit to be derived by each signatory to all proposed agreements involving cooperative research, development, testing, evaluation, technical data exchange, and related standardization matters. /52/ If you already have the authority, or you have received written authority from the appropriate authority, the international agreement can be negotiated and concluded. The conclusion occurs when both parties indicate its acceptance of the international agreement by signing, initialing, responding, or otherwise indicating its acceptance. /53/

C. Additional Issues, Reporting and Maintaining the International Agreement

When negotiating and concluding the international agreement, no matter at which level of authority, you should remember that amendments to an existing international agreement must be approved in the same manner as the agreement being amended. /54/ Also, oral agreements can constitute binding international agreements and, therefore, must comply with the same directive requirements as a written agreement. /55/ In addition, the international agreement cannot be in a foreign language unless it contains provisions that expressly provide that the English text version controls any conflicts, or the agreement expressly provides that the English text and the foreign
language text are equally authentic and certified as such. /56/ Note that there are Congressionally mandated limitations on advance payments to foreign governments. /57/

The Case-Zablocki Act requires that all nontreaty international agreements be reported to Congress. Each organizational element of the Air Force that concludes an international agreement must send the original or certified copies of the agreement to the Office of the Assistant Legal Advisor for Treaty Affairs, Department of State, not later than 20 days after signature of the agreement. /58/ AFT 51-701, Attachment 3, contains a list of addresses as well as what must be contained in the letter of transmittal. Note that Unified Commands with geographical authority should also receive a copy.

The organization that negotiates an international agreement is responsible for compiling and maintaining the negotiation history. /59/ HQ USAF/JAI is the single office of record for the Air Force and maintains copies of each agreement covered by AFT 51-701. /60/

D. Acquisition and Cross-Servicing Agreements

When deployed, acquisition and cross-servicing agreements will be very important to the logistic support of your military force. As you know, without sufficient logistic support the deployed military force will usually not accomplish its mission. In any deployment of more than a few people, it is likely that logistic support, service, and supplies will have to be obtained at the deployed site through the receiving state. This used to be a difficult process because of certain legislative restrictions /61/ which were eliminated by the passage of the NATO Mutual Support Act of 1979 (NMSA). /62/

With the passage of the NMSA, DOD obtained the authority to acquire logistic support without the restraint of complex domestic U.S. law. /63/ Additionally, it authorized DOD, after consultation with DOS, to enter into cross-servicing agreements with NATO allies and subsidiary organizations for reciprocal logistic support. While originally geographically restricted, subsequent changes to the NMSA have made its application world-wide and expanded the list of eligible countries to include the United Nations and many non-NATO countries. /64/ NMSA legislation provides three types of legal authority: (1) acquisition; (2) cross-servicing; and, (3) waiver. /65/ However, this authority is not without limitations. For example, DOD cannot use NMSA authority to procure goods or services reasonably available from U.S. commercial sources. In addition, it cannot be used to purchase goods or services that DOD is already prohibited by law from purchasing, and the contracts must be free from self-dealing, bribery, and conflict of interests. /66/

E. What Are Not International Agreements

Just as important as knowing what constitutes an international agreement and the procedures that must be followed when dealing with them, is knowing what does not constitute such an agreement. There are a number of different agreements the deploying force will usually make within the receiving state or with the receiving state that do not constitute international agreements. These include: (1) contracts made under the Federal Acquisition Regulation (FAR); (2) Foreign Military Sales Credit Agreements; (3) Foreign Military Sales Letters or any authorized substitute document; (4) certain Standardization Agreements; (5) certain types of leases; (6) agreements concluded solely to establish administrative procedures; and (7) acquisitions or orders pursuant to cross-servicing agreements made under the authority of NMSA or DOD Directive 2010.9./67/ In the case of non-
international agreements, you must still comply with the appropriate procedural requirements for the agreement being negotiated and concluded.

IV. DEPLOYED

Section II of this article briefly discussed a pre-deployment and deployment analysis for determining the need for an international agreement, especially regarding status and the adequacy of any existing applicable international agreement. This section will examine this analysis in more depth. Again, prior to deployment you need to know whether or not a status agreement exists that covers the deploying military force that you are advising. Also, you need to anticipate other deployment issues and determine if an existing international agreement resolves those issues. This is true no matter what the size or type of deployment. If a status agreement exists, you must determine whether it is applicable to your deploying force and whether the coverage is adequate. If no agreement exists, you must explore whether one can be obtained prior to the deployment. If not, you should be aware and advise the deploying military force that there is great risk associated with deploying into the territorial boundaries of another country without the protection of a status agreement. It is the consensus of The Judge Advocate Generals (TJAGs) and their International Law staffs that we should not deploy into a receiving state without a status arrangement. This also appears to be the direction in which the Office of the Secretary of Defense (OSD) is going on this important issue. /68/

Clearly, it is dangerous to deploy into a receiving state without a status arrangement protecting the deploying military force. It is U.S. government policy to maximize the exercise of criminal jurisdiction by U.S. forces over its personnel assigned to duty in foreign countries through the negotiation of a status arrangement, /69/ but sometimes it is impossible to obtain one. In such cases, the decision to deploy without the status agreement is a policy decision to be made at the highest level of command. In rare instances, where past experience has proven both the good will and the effective authority of the receiving state's government, the U.S. will accept an oral understanding that things will be worked out if a problem occurs. A continuing example of such a relationship is with Thailand and the Air Force's annual Cobra Gold exercises. Even without such assurances, if the U.S. considers the deployment of significant importance, it will sometimes forego a status arrangement. Some receiving states, especially in the case of major exercises, have little incentive to conclude a status agreement. This is because the United States is unlikely to cancel the exercise even when the deploying force has no legal protection. Many countries that will not agree to a status arrangement are using their refusal as leverage in other negotiations. Also, many are fearful of the political backlash they feel will occur should a deployed military member commit an offense and they be forced to turn the "criminal" over to the sending state. If faced with a situation where the deploying military force does not have the protection of a status agreement, you should consult with the higher headquarters staff judge advocate or HQ USAF/JAI. Also, you should brief the deploying force on their lack of protection and what to do if they are involved in a criminal or civil legal action within the receiving state.

Once deployed, there may be issues that can only be resolved through an international agreement. In such instances, you should be mindful of the regulatory requirements for negotiating, concluding, and reporting international agreements. Whenever possible, however, you need to be proactive. This includes discovering what international agreements already exist, and anticipating what issues will need to be addressed by new international agreements. It is always better to try and resolve these issues
prior to deployment because of the availability of resources and support. Also, the deployed force's mission is more likely to succeed with the issues already resolved. Poor advance preparation results in needless energy and resources being spent focusing on these issues, rather than on the deployed mission.

There are a wealth of resources available to assist you in discovering the existence of applicable international agreements, interpreting them, or when accomplishing new international agreements. The first place you should look for international agreements applicable to the deployment is the Unified Command having geographical authority for the receiving state. In addition, you can contact HQ USAF/JAI which is the repository for all Air Force-related international agreements completed under the guidance of AFI 51-701. A recently added resource to the HQ USAF/JAI inventory of resource tools is a compilation of status agreements onto CD-ROM disks. Some of these CD ROM disks have been distributed to MAJCOMS. If you cannot locate one in the field, you can get access to them through HQ USAF/JAI or FLITE. Of course, other available resources include various Internet sites, WESTLAW, and LEXIS-NEXIS.

Your duties will include reviewing proposed international agreements prior to requesting authority to negotiate and conclude. An excellent checklist for your evaluation is contained in the Army's Operational Law Handbook. Although the checklist is helpful, you are still responsible for complying with the requirements of the applicable directive on international agreements. Additionally, you are responsible for assisting the deployed military force in interpreting existing international agreements as well as with resolving disputes. When resolving disputes, you should attempt to get them resolved at the lowest possible level. This may include informal discussion between the affected parties. If it cannot be resolved at this level, you should send a report to SAF/GCI, with a copy to HQ USAF/JAI. Remember, you have no authority to resolve issues having "policy significance."

V. CONCLUSION

Being deployed as a judge advocate or advising a deploying military force can be the ultimate test for a judge advocate and is what sets them apart from non-military lawyers. One of your most important deployed missions is to assist the commander and military force in accomplishing their operational mission. As stated in the beginning of the article, one of the most important areas in either assisting operational mission accomplishment or impeding it is the area of international agreements. Now that you are armed with a basic background in international agreements, you are primed and ready to use international agreements for operational mission success.

*Lieutenant Colonel Bredemeyer (B.S., Illinois College; M.P.A., University of Oklahoma; JD., Washburn University; LL.M., College of William and Mary) is the Deputy Staff Judge Advocate for United States Atlantic Command. He is a member of the Virginia and Kansas State Bars.


4 Id. at 6. "Contingencies short of war" is defined as "[m]ilitary operations that go beyond the routine deployment or stationing of U.S. forces abroad but fall short of large-scale theatre warfare." Id. CSOW appears to be the term in use for what was commonly referred to as "Operations Other Than War" or OOTW. One military expert, General Hartzog, Commander, U.S. Army Training and Doctrine Command (TRADOC), has stated that the military should stop using catch-all terms like OOTW and use instead more precise terms which describe the operation, such as "peace keeping" or "disaster relief." See OPERATIONAL LAW HANDBOOK, Army Judge Advocate General's School publication JA 442, CHAPTER 13, pg. 13-1, n.3. (1996) [hereinafter ARMY HANDBOOK].

5 Defense Report, supra note 3, at 6-10.

6 Does not include what are now referred to as "Peace Enforcement" operations (PEO). CHAIRMAN OF THE JOINT CHIEFS OF STAFF, JOINT PUBLICATION 3-07, JOINT DOCTRINE FOR MILITARY OPERATIONS OTHER THAN WAR, III-13 (16 June 1995) defines PEO as "[t]he application of military force, or threat of its use, normally pursuant to international authorization, to compel compliance with resolutions or sanctions designed to maintain or restore peace and order ... [s]uch operations do not require the consent of the states involved or other parties to the conflict."

7 See infra text accompanying notes 15-30.

8 Department of Defense Directive 5530.3., encl. 2 (11 June 1987) defines "international agreement" as: Any agreement concluded with one or more foreign governments (including their agencies, instrumentalities, or political subdivisions) or with an international organization, that: (1) is signed or agreed to by personnel of any DOD Component, or by representatives of the Department of State (DOS) or any other Department or Agency of the U.S. Government; (2) signifies the intention of its parties to be bound in international law; and (3) is denominated as an international agreement or as a memorandum of understanding (MOU), memorandum of agreement (MOA), memorandum of arrangements, exchange of notes, exchange of letters, technical arrangement, protocol, note verbal, aide memoire, agreed minute, contract, arrangement, statement of intent, letter of intent, statement of understanding or any other name connoting a similar legal consequence."

Id. [hereinafter DOD 5530.3]. Furthermore, DOD 5530.3 states that any oral agreements meeting the above criteria are also international agreements. Id. See generally Air Force Pamphlet 110-20, (27 July 1981). This pamphlet is a compilation of the most important treaties. Unfortunately it is no longer in print; however, some copies are still available at base legal offices.


10 U.S. CONST. art. 11, § 2, cl. 2.

11 Erickson, supra note 9, at 53-54, n.26-31.

12 U.S. CONST. art. VI, cl. 2.

13 Erickson, supra note 9, at 47-51.


16 id. at 141 - 143.

17 Id. at 142. See also Vienna Convention on Diplomatic Relations of April 18, 1961, 22 U.S.T. 3227, T.I.A.S. 7502, 500 U.N.T.S. 95. A&T status is also appropriate when the presence involves only a few persons on a permanent basis, and a SOFA does not otherwise exist. An example would include military personnel assigned to the U.S. Military Group and Security Assistance Offices located in many U.S. Embassies.

18 The exchange of notes process usually begins with a request from DOD to the Department of State (DOS). The request indicates the activity requiring the note, its duration, and has a legal memorandum attached. DOS is responsible for coordinating the request with its regional bureaus, political-military section, its legal department, and any other interested agencies. The vehicle for this coordination process is the Circular 175 action memorandum. After proper coordination, DOS sends a cable to the appropriate U.S. Embassy containing the text of the note to be exchanged. The U.S. Embassy and the host country's Foreign Ministry then discuss the note and if willing, they exchange the note which creates a binding international agreement. The U.S. Embassy reports conclusions of the exchange to DOS, who reports to DOD.

19 Erickson SOFA, supra note 15, at 142.

20 Id. at 143.

21 Id. at 147-152. See also ARMY HANDBOOK, supra note 4, at 3-1 to 3-34. Compare Major Manuel E. F. Supervielle, The Legal Status of Foreign Military Personnel in the United States, THE ARMY LAWYER (Department of the Army Pamphlet 27-50-258), 3 (May 1994) (discussing status treatment by United States of foreign military personnel serving within U.S. territory).

22 Supervielle, supra note 21, at 3. See also Erickson SOFA, supra note 15, n.45; and North Atlantic Treaty, Apr. 4, 1949, 63 Stat. 2241, T.I.A.S. 1964, 34 U.N.T.S. 243; and Partnership for Peace SOFA originally signed by initial participants on 19 June 1995 (United States is not a party to the Additional Protocol which prohibits the imposition of the death penalty). See ARMY HANDBOOK, supra note 4, at 3-33, n.34.

23 Erickson SOFA, supra note 15, at 143.

24 See sources cited supra note 17.

25 Draft message from DOS to the American Embassies in Gaborone, Windhoek, Dakar, Bonn, and Bamako (17 April 1997) (on file with author).


27 HQ USAF/JAI SOFA Report (2 June 1997) (on file with author). The United States has some sort of formal SOFA with Albania (Partnership for Peace or PFP SOFA), Antigua and Barbuda, Ascension Island, Australia, Bahamas, Bahrain, Belgium, Bermuda (lend lease), Bosnia-Herzegovina (respecting IFOR), Brunei, Bulgaria (PFP SOFA), Cambodia, Canada, Chad (activity specific), Colombia, Croatia (respecting IFOR), Czech Republic (PFP SOFA), Denmark, Diego Garcia (with the United Kingdom), Dominica (activity specific), Dominican Republic, Egypt, Estonia (PFP SOFA), Ethiopia, Federated Republic of Yugoslavia (respecting transiting IFOR), Federated States of Micronesia (Compact with the U.S.), France, Germany, Greece, Grenada (activity specific), Haiti, Honduras, Hungary (PFP SOFA), Iceland, Iran (activity specific), Israel, Italy, Jamaica (lend lease), Japan, Jordan, Kazakhstan (provisional application of PFP SOFA), Kenya, Korea, Kuwait, Latvia (PFP SOFA), Lithuania (provisional application of PFP SOFA), Luxembourg, Malaysia, Marshall Islands (Compact with the U.S.),
Moldova (provisional application of PFP SOFA), Mongolia (pending entry into force), Morocco, The Netherlands, New Zealand, Norway, Oman, Panama, Papua New Guinea, Paraguay, Peru (activity specific), Portugal, Qatar, Romania (PFP SOFA), Russia (nuclear activity specific), St. Kitts and Nevis, St. Lucia (lend lease), Saudi Arabia, Singapore, Slovak Republic (PFP SOFA), Slovenia (PFP SOFA), Solomon Islands, Somalia, Spain, Sri Lanka, Sudan, Switzerland (arms control delegations), Tonga, Trinidad and Tobago (lend lease), Turks and Caicos Islands, Turkey, Union of Soviet Socialist Republics (INF), United Arab Emirates, United Kingdom, Uzbekistan (provisional application for PFP SOFA), Western Samoa, and Zaire. Id.

28 Erickson SOFA, supra note 15, at 144.

29 Id. See also 11 FAM, supra note 14, at 720. According to Dr. Erickson, the Circular 175 process sets forth the issue to be decided, factors to be considered, and proposes a recommendation to the Secretary of State or his designated approval authority. The Circular 175 process takes the form of an action memorandum to the Secretary of State (SECSTATE) or their designee requesting authority to negotiate and conclude an international agreement. It is initiated by DOD in an action memorandum detailing the need for the agreement with an attached legal memorandum. DOS coordinates the request through its bureaus, political military affairs section, and legal documents. DOS will also coordinate with other interested U.S. agencies, e.g., Immigration and Naturalization Service (INS). The Circular 175 contains background information, the proposed text for the international agreement, a legal memorandum, and a recommended negotiation strategy. Once approved, DOS will work with DOD to organize the negotiating team (when negotiation is required). The head of the team will serve as chief negotiator and their authority is derived from SECSTATE.

30 Erickson SOFA, supra note 15, at 144 -147 (describing Circular 175 authorized negotiation process).

31 See ARMY HANDBOOK, supra note 4, at 3-5 to 3-6.

32 DODD 5530.3, supra note 8.

33 See Chairman of the Joint Chiefs of Staff Instruction 2300.01, International Agreements, (15 September 1994) [hereinafter CJCSI 2300.01]; Air Force Instruction 51-701, Negotiating, Concluding, Reporting, and Maintaining International Agreements, (6 May 1994) [hereinafter AFI 51-701]; Department of the Army (DA) Regulation 550-51, Authority and Responsibility for Negotiating, Concluding, Forwarding, and Depositing of International Agreements, (1985) [hereinafter DA Reg. 550-51]; Secretary of the Navy Instruction (SECNAVINST) 5710.25A, International Agreements, (2 February 1995) (applies to Secretariat Staff only); Operations Naval Instruction (OPNAVIST) 5710.24, International Agreements Navy Procedures, (28 April 1978); and OPNAVIST 5710.25, International Agreements OPNAV Procedures, (28 April 1978) (both apply to Chief of Naval Operations and Navy, but note that they are currently under revision as OPNAVIST 5710.25A).

34 Case-Zablocki Act, 1 U.S.C. § 112(b).

35 See, e.g., AFI 51-701 Para. 7, supra note 33.

36 DODD 5530.3, supra note 8, at 5; see also, similar provisions in directives supra note 33.

37 Id. at 12-14.

38 See, e.g. CJCSI 2300.01, supra note 35, at Encl. A (stating this includes such as USACOM, USSOUTHCOM, USEUCOM, USCENTCOM, and USPACOM, etc.); see also, AFI 51-701, supra note 35, at Para. 1.1.1.

39 See, e.g. DODD 5530.3, supra note 8, at 5-8; see also, similar provisions in directives cited supra note 32.

40 DODD 5530.3, supra note 8, at 7. Agreements "having policy significance" include those agreements that: (1) specify national disclosure, technology-sharing or work-sharing arrangements, coproduction of military equipment or offset commitments as part of an agreement for international cooperation in the research, development, test, evaluation, or production of defense articles, services, or technology; (2) because of their intrinsic importance or sensitivity, would directly and significantly affect foreign or defense relations between the United States and another
government; (3) by their nature, would require approval, negotiation or signature at the Office of the Secretary of
Defense (OSD) or the diplomatic level; and (4) would create security commitments currently not assumed by the
United States in existing mutual security or other defense agreements and arrangements, or which would increase
U.S. obligations with respect to the defense of a foreign government or area. The list is not exhaustive and the term
"having policy significance" should be read very broadly. Id.

41 See, e.g. AM 51-701, supra note 33, at Para. 1.1.4.1. (providing nonexhaustive list of agreements having "policy
significance" and indicates that any subject which has reached the Assistant Secretary of Defense level in either
government is included). A definition of agreements having "policy significance" is also provided by the Instruction.
Id. at sec. C "Terms."

42 AFI 51-701, supra note 33, at Para. 1.1.1. Note that any international agreement concerning operational
command of joint forces requires prior approval from CJCS.

43 Id. at 1.1.3.

44 Id. at 1.1.1.

45 Id. DODD 5530.3 warns against "[a]ssuming that if an agreement merely implements an existing agreement it is
not a new international agreement and the requirements of DOD Directive 5530.3 do not apply, or that authority to
negotiate has already been delegated. The delegation of authority for this category of agreements is to be very
narrowly interpreted (emphasis added). In particular, authority is not delegated for implementing agreements which
in any way expand or deviate from the basic agreement, or which address SOFA rights or place restrictions on
operating rights." DODD 5530.3, supra note 8.

46 Other categories include: (1) cooperative or reciprocal operational, logistical, training or other military support
including the shared use or licensing of military equipment, facilities, services, or nonphysical resources; (2)
combined military planning, command relationships, military exercises and operations, minor and emergency force
deployments, or exchange programs (personnel exchange agreements must be approved by the Office of the Under
Secretary of Defense for Policy (USD(P))); (3) collection and exchange of military information or data, other than
military intelligence; (4) health and medical matters, including cooperative research, development, testing,
evaluation, technical data exchange, and related standardization agreements concerning health and medical matters,
provided that such agreements are not to be implemented through the Security Assistance Program; and (5)
sharing or exchange of DOD communications equipment, facilities, support, services, or other communications
resources with a foreign country or alliance organization such as NATO, the use of U.S. military frequencies or
frequency bands, and the use of U.S. communications facilities and systems by foreign organizations, whether
overseas or in the United States (such agreements must be approved in advance by the Assistant Secretary of
Defense for Command, Control, Communications and Intelligence (ASD[C3I]) if such agreement does not consist
mainly of Air Force matters.).

47 Id. at Para. 1.1.2. Note that any international agreement that involves significant changes in logistic support for
U.S. Armed Forces and affects joint plans and programs (including base adjustments) should be coordinated with
the Joint Chiefs of Staff (JCS).

48 DODD 5530.3 defines "negotiation" as:

Communication by any means of a position or an offer, on behalf of the United States, the
Department of Defense, or on behalf of any officer or organizational element thereof, to an agent or
representative of a foreign government, including an agency, instrumentality, or political subdivision
thereof, or of an international organization, in such detail that the acceptance in substance of such
position or offer
would result in an international agreement. The term "negotiation" includes any such communication
even though conditioned on later approval by the responsible authority. The term "negotiation" also
includes provision of a draft agreement or other document, the acceptance of which would constitute an
agreement, as well as discussions concerning any U.S. or foreign government or international
organization
draft document whether or not titled "agreement." The term "negotiation" does not include preliminary
or exploratory discussions or routine meetings where no draft documents are discussed, so long as such
discussions or meetings are conducted with the understanding that the views communicated do not and
shall not bind or commit any side, legally or otherwise." (emphasis added).

DODD 5530.3, supra note 8, at enclosure 2. See also AM 51-701, supra note 32, at sec. C "Terms."

49 AFI 51-701, supra note 33, at Para. 2.

50 Id.

51 Id.

52 Id. at atch. 2.

53 Id. at sec. C "Terms."

54 Id. at Para. 3.

55 Id. at Para. 4.

56 Id. at Para. 5.

57 Id. at Para. 6.

58 Id. at Para. 7.

59 Id. at Para. 8.

60 Id. at Para. 9.

61 ARMY HANDBOOK, supra note 4, at 3-14.


63 See generally Pribble, A Comprehensive Look at The North Atlantic Treaty Organization Mutual Support Act of
1979, 125 MIL. L. REV. 187 (1989) and Wheaton, The NATO Mutual Support Act in the USCENTCOM Area of
Operations: A Primer, THE ARMY LAWYER (Department of the Army Pamphlet 27-50-211) 3-9 (July 1990). See
also Department of Defense Directive 2010.9, Mutual Logistic Support Between the United States and Governments
of Eligible Countries and NATO Subsidiary Bodies, (30 September 1988) (currently under revision).


65 ARMY HANDBOOK, supra note 4, at 3-15. Acquisition-only authority is found at 10 U.S.C. § 2341; Cross-
servicing authority is found at 10 U.S.C. § 2342; and Waiver authority at 10 U.S.C. §§ 2343 and 2344.


67 AFI 51-701, supra note 33, sec. C "Terms."

68 Memorandum from Walter B. Slocombe, USD(P), (17 January 1997) (suspects military activity in the
Philippines except on a case-by-case basis until the two governments reach a status agreement) (letter on file with
author). See also Message from SECSTATE (051527Z Jan.1996) that prohibits post-1995 U.S. participation in
combined exercises in PfP countries that do not have formal status arrangements, either through adherence to the
PfP SOFA on a provisional basis, formal ratification of that document, or a legally binding diplomatic exchange of 
notes granting A&T status. Exceptions are limited and require the Unified Command CINC to initiate the process by 
determining that the risk of an unfair trial or inhumane treatment is minimal in comparison to the value of an 
exercise in the particular country. Waiver can only be granted through the CJCS by the SECDEF or DEPSECDEF. 
Also, the USD(P) can initiate the waiver process (message on file with author). Currently, DOD is working on a 
similar worldwide policy.

69 Id. at SECSTATE MESSAGE Section 3.

70 AFI 51-701, supra note 33. Other research tools available for identifying applicable international agreements 
include: Treaties in Force (an annual DOS publication containing unclassified treaties and executive agreements); 
United States Treaties and Other International Agreements (UST), as supplemented by Treaties and Other 
International Acts Series (TIAS) (basic sources for locating published texts of U.S. treaties and executive 
agreements); Air Force Pamphlet 110-20, Selected International Agreements (27 July 1981); International Legal 
Materials (ILM) (published bimonthly by the American Society of International Law); and D. SCHINDLER & J. 

71 ARMY HANDBOOK, supra note 4, at 3-10 to 3-12.

72 AFI 51-701, supra note 33, at Para. 10.

73 Id.
The Law of the Sea and Naval Operations

COMMANDER JOHN ASTLEY III, USCG /*/
LIEUTENANT COLONEL MICHAEL N. SCHMITT, USAF /**/

I. INTRODUCTION

Today, more than ever before, military operations are joint, that is, conducted cooperatively by multiple armed services. Indeed, it is quickly becoming the era of combined operations, in which joint forces from different countries come together to pursue common objectives. From classic international armed conflict like Desert Storm to operations other than war (OOTW), such as Northern Watch, jointness is the defining characteristic of the modern warfighting environment.

Joint and combined operations bring with them dramatic changes in the way judge advocates traditionally perform their operational law role. In decades past, JAGs tended to be service-centric. By contrast, today an Air Force judge advocate advises the Army CENTCOM Commander on military operations in the Persian Gulf, the Navy AFSOUTH Commander directs forces in Bosnia based in part on legal advice provided by his Army judge advocate, and a Navy judge advocate serves the Marine USACOM Commander. These examples are but the tip of a growing iceberg.

In light of this reality, understanding what our fellow services bring to the fight is essential. More to the point, knowledge of the law that governs their operations has become a requisite survival skill. In this article, we provide a primer for those who find themselves faced with the prospect of providing legal advice about naval operations, both during deployment and employment. /1/ While it is not an exhaustive study of the field (volumes have been written on the subject), it provides the novice enough information to get him or her moving in the right direction.

Section I is a general survey of the law of the sea. As will be seen, the world's waters are subdivided into various legal regimes, each with differing obligations and rights for those who traverse them. Given the multiple regimes, the judge advocate must be able to answer two very basic questions maritime operators inevitably pose: "May I drive my ship or fly my aircraft there" and, if so, "What are the limitations on my activities in the area?" Using the 1982 Law of the Sea Convention as a point of departure, Section I describes how to determine where the regimes lie and what they mean in practical terms for ship drivers, pilots and operational planners.

Armed with the basics, in Section II the reader is introduced to the law of naval operations per se, with emphasis placed on periods of armed conflict. The survey begins with a discussion of the law of neutrality, including the rights of belligerents and neutrals, visit and search operations, and the possible effect of UN operations on neutrality law. It concludes with a brief summary of four traditional concerns during armed conflict at sea - targeting, mine warfare, deception, and maritime zones.

Finally, it should be noted that this article is a broad brush introduction to what is for many readers an unfamiliar topic. We certainly recommend that those tasked with providing actual advice consult the law itself; we have cited that law in the accompanying footnotes. /2/ We also suggest that readers secure a copy of The Commander's Handbook on the Law of Naval Operations, a joint Navy, Marine, and Coast Guard publication? It discusses most of the topics our article addresses, but in greater detail than space allows here. Caveats aside, let us turn to the law of the sea.
II. THE LAW OF THE SEA

As noted, operators are reductionists - they want to know where their ships and aircraft can travel and what they can do while underway. The answers to these oversimplified questions are to be found in both treaties and customary international law. For the United States, the foundational international agreements are the three 1958 Geneva Conventions on the Law of the Sea. Unfortunately, the trio left unsettled critical issues, such as the width of the territorial sea; therefore, between 1973 and 1982 the United Nations sponsored a conference (UNCLOS III) designed to update the 1958 law. The resulting Law of the Sea (LOS) Convention came into effect in 1994 after ratification by the requisite 60 countries. Our own country refused to ratify it on the basis that its provisions on mining seabed resources were objectionable Those concerns were put to rest in a 1994 U.N.-brokered compromise that amended the Convention. In response, the Clinton Administration forwarded the treaty to the Senate for its advice and consent, a move strongly supported by the Department of Defense. To date, the Senate has not taken action on it.

Although the Senate has failed to provide its advice and consent, the LOS Convention is the primary de facto "source" of law for maritime operations. This has been so since President Reagan issued his 1983 Ocean Policy Statement, proclaiming that except for those provisions related to seabed mining the Convention reflects existing (customary) international law." As a result, the LOS Convention provides a practical and very detailed guide to what we see as the binding provisions regulating use of the seas. Indeed, it is fair to say that the Convention establishes the constitution for the world's oceans - some 70% of the globe.

A. The Starting Point - Determining Baselines

Because the rights and obligations of naval vessels (and aircraft) are usually determined by the legal nature of the waters through which they transit, to provide advice on naval operations one must first understand the legal regimes of the world's waters. Determining the boundaries between these regimes depends on the location of what are known as baselines. Ultimately, every maritime legal regime is measured from them; indeed, they are the starting point in any law of the sea question.

Normally, baselines are set at the low-water mark of a coast as annotated on large-scale charts issued by the coastal nation. Complete sovereignty is enjoyed over the waters that are landward of this line. Seaward of the baseline, sovereignty fades as the law increasingly takes into account the competing interests of other States in passage through waters lying offshore. Inasmuch as baselines serve as the critical point of departure under international law for delineating ocean regimes, many current law-of-the-sea disputes focus on the placement of this line. The reason is quite simple; the further the line is pushed seaward, the greater control the coastal State has over resources (primarily fish and oil under the seabed) in the waters that border it.

As important from an operational point of view is the fact that the closer a warship is to the baseline, the greater the restrictions on its activities.

Despite the seeming simplicity of the low-water-mark standard for determining baselines, there are a number of exceptions to the general rule. In most cases, these exceptions exist in order to ease the task of ascertaining baselines; doing so simplifies navigation and, at least in theory, reduces the number of disputes resulting from difficult to determine low-water lines.
The most common exception is the "straight baseline," a straight line drawn between two points. There are three circumstances in which it is appropriate for a State to claim a straight baseline in lieu of the low-water line. The first occurs where a coast is unstable, as with, e.g., deltas. In such cases, the coastal State simply claims a straight line that roughly tracks the low-water mark at the time the claim is made; should the low-water mark subsequently shift, the straight baseline remains constant. /16/

A more prevalent use of straight baselines occurs where a coast is either "deeply indented" or there are "fringing islands" lying off it. /17/ Figures 1 and 2 illustrate these situations. Unfortunately, neither term is precisely defined in the LOS Convention. The United States, however, has suggested that in order to draw straight baselines for a deeply indented coastline, a State must have three or more indentations in close proximity to one another and the depth of each indentation must be greater than one-half the length of its proposed baseline. /18/ Regarding fringing islands, the US proposal is that the islands must mask 50 percent of the coastline in the given location, lie within 24 nautical miles of the coast, and each baseline segment must not exceed 24 nautical miles in length. /19/

When claimed (the coastal State may elect not to), straight baselines must either be clearly annotated on the claimant's nautical charts or a list must be published, setting forth the geographic coordinates of the lines. /20/ In all cases, baselines must closely track the coast's general direction, and the water they enclose must be "closely linked" to the adjacent land mass. /21/ Given the possibility of abuse, the United States currently claims no straight baselines and strictly interprets the rules when deciding whether to acknowledge those asserted by other States. Today, over 35 nations, ranging from Albania to
Vietnam, claim baselines that the US considers excessive. Figure 3, Vietnam's claim, offers a particularly egregious example. Such assertions are objectionable because all water landward of a straight baseline is internal water; as such, it may only be entered, absent coastal state consent, in emergency circumstances (see discussion below).

![Figure 3: Vietnam - Claimed Excessive Baselines](image1.png)

Bays represent a second category of exceptions to the low-water rule for baselines. They fall into two categories, juridical and historic. To qualify as juridical, or legally defined, a bay must first satisfy the semicircle, or "wetness," test. In this test, a line is drawn across the mouth of the bay. That line is then used to draw a semicircle. If the surface area of the water in the bay equals or exceeds that contained within the semicircle, the indenture in the coastline meets the first prong of the test. However, the line closing the mouth of the bay, i.e., that line which will become the baseline, can be no more than 24 nautical miles (NM) long. If it is longer, the country seeking to claim the juridical bay is required to move the line inward until it is 24 NM or less in length.

![Figure 4: Juridical Bays](image2.png)

The law of the sea also recognizes the right of States to close the mouths of "historic" bays with straight baselines. Before qualifying as historic, the coastal nation must have exercised
continuous and open authority over the bay for an extended period, an authority acquiesced to by other States. /25/ When the standard is met, the bay is exempt from the juridical bay requirements addressed above. Today, over 15 nations claim historic bays, and the right to use straight baselines across them, in determining the legal status of the waters lying off their coasts. The United States neither claims nor recognizes any historic bays. However, to the north, Canada claims Hudson Bay as historic. /26/ More important from a naval operations point of view is Libya's claim that the Gulf of Sidra (and its 300 NM closure line) is historic (see figure 5). /27/

Such claims are significant because passage through waters landward of a valid historic bay closure line is, as noted, subject to coastal State consent; they are internal waters. Therefore, to demonstrate our lack of acquiescence to claims the United States does not recognize, the US Navy and Coast Guard regularly send warships into the contested waters as part of the Freedom of Navigation (FON) Program. /28/ This is true not only for historic bays but for excessive claims generally. In the case of the Gulf of Sidra, on multiple occasions FON operations have resulted in the (unsuccessful) use of force by Libya. /29/

Islands have their own baselines, calculated in precisely the same way as those off continental shores - using the low-water line. /30/ However, a third exception to the low-water line standard applies where a State consists entirely of islands, as is the case, for example, with Indonesia and the Philippines.

These countries, which are known as archipelagic States, are permitted to draw straight baselines of 100 NM or less connecting the outermost points of their constituent islands, provided the ratio of water to land within the baselines is between 1:1 and 9:1. /31/ Waters inside the baselines are called "archipelagic waters" and are subject to special rules, discussed infra, regarding passage through them. Seaward of the straight baselines, the ocean's traditional legal regimes apply. Should a State not meet the archipelagic criteria, the islands in the group are treated separately, that is, each receives its own baseline for use in determining the nature of the waters surrounding it.

The necessity of properly understanding how to determine such baselines, and of being aware of another State's improper use of them, was aptly demonstrated in 1992 when the submarine USS BATON ROUGE collided with a Commonwealth of Independent States (Russian) submarine off the Kola Peninsula. 12 Figure 7 shows how this occurred. Russia claimed a straight baseline
across the Kola Bay. For the US, the mouth of the bay in question measured 26.7 nautical miles and thus did not qualify for the use of straight baselines under any internationally recognized regime. The US, therefore, assumed that the Russians employed traditional, low-water mark baselines in the area. As can be seen, because of the differing baseline calculations, part of the claimed Russian territorial sea lay in what the US considered to be international waters. The problem is that submarines may not transit submerged, as they are permitted to do in international waters, through another State's territorial sea. In this case, the result was a collision between the two submerged submarines. Based on their respective interpretations of the law of the sea, both sides filed diplomatic protests.

B. Legal Regimes of the Oceans and Their Airspace

Once the baseline has been determined, it is possible to delineate where the various legal regimes of the oceans lie. Doing so is essential, for different obligations and rights attach to each. In particular, the nature of the regimes controls where warships and military aircraft may pass, and what they may do in the process.
In a general sense, the world's oceans may be divided into two categories - national and international waters. The former, consisting of internal waters, archipelagic waters and the territorial sea, are the coastal State's sovereign territory. Of these, a State's greatest range of rights lies in internal waters, i.e., those (with the exception of archipelagic waters) landward of the baseline (juridical bays, ports, rivers, lakes, etc.). Except in situations where a ship seeks refuge either from weather or because the vessel has become unseaworthy (the right of safe haven/harbor), entry into internal waters is only permissible with the consent of the coastal State. Further, that State may generally place whatever conditions it chooses on entry, for it is, after all, consensual. /33/

Moving seaward from the baseline is the territorial sea. Like internal waters, the territorial sea is the sovereign territory of the coastal State, /34/ though the rights of other States are greater here. The LOS Convention, and its acceptance as customary law by non-signatories, settled a longstanding dispute over the maximum breadth of the territorial sea. Prior to this time, claims ranged from three miles (the former US position) to in excess of 200 NM. By Article 3 of the Convention, the breadth has been set at not more than 12 NM seaward of the baseline. Note that this is a maximum; some States claim less. Turkey, for instance, claims 12 NM in the Black and Mediterranean Seas, but six in the Aegean. /35/ The United States claims 12NM. /36/ Unfortunately, some nations still claim in excess of the permitted breadth. /37/

Territorial seas also surround islands. In fact, this "rule" is at the heart of many disputes, such as that between the Greeks and Turks in the Aegean. Because the hundreds of Greek islands have their own baselines, they acquire their own territorial sea. Therefore, the Aegean has the potential of becoming almost a "Greek lake" if Greece extends its territorial sea out from the currently claimed six NM to the maximum 12 permitted by the law of the sea. This is a prospect which the Turks vehemently oppose. /38/ Similarly, competing claims regarding sovereignty over the Spratley Islands in the South China Sea are a constant source of potential hostilities in the PACOM AOR. /39/

Though aircraft may not enter the airspace above the territorial sea absent coastal State consent, ships of other States enjoy three basic transit rights. First is the right of innocent passage. Innocent passage is continuous and expeditious transit through another State's territorial sea. /40/ It may be exercised in the absence of consent by the coastal State regardless of the type of vessel, its cargo, or how it is propelled. That said, nuclear-powered ships and those carrying inherently
dangerous cargo must comply with international law (not coastal State law) regarding precautionary measures and proper documentation. /41/

Despite the requirement for ships in innocent passage to proceed expeditiously, they are not required to take the most direct and logical route through the territorial waters. /42/ In fact, they may anchor due to an inability to navigate at night, because of weather or other distress, or to assist others. /43/ The right of innocent passage can be suspended temporarily for security reasons; /44/ interestingly, neither "temporarily" nor "security reasons" are defined in the LOS Convention. Gun exercises or missile shoots are typical examples meriting suspension of passage rights.

While in innocent passage, ships are obligated to refrain from acts that are "prejudicial" to the peace, good order, or security of the coastal State. The LOS Convention provides an exclusive list of activities that are prejudicial, and thereby forbidden. Among those directly bearing on the activities of naval forces are: threatening the sovereignty, territorial integrity, or political independence of the coastal nation; launching or recovering military devices, including submersibles and helicopters; collecting intelligence; interfering with the coastal State's communications; engaging in propaganda that affects the security of the coastal State; and willfully causing pollution that violates the relevant provisions of the Law of the Sea Convention. /45/ Submarines must surface and fly their flag when passing through territorial waters. /46/ An oft asked question is whether ships may activate their radar while in passage, even weapon-systems-related radar. They may, for doing so aids in navigation or serves as an integral function of the warship's defensive posture. /47/ The list of restrictions closes with a catch-all prohibition on any other activity "not having a direct bearing on passage." /48/ If a warship engages in non-innocent passage, the coastal State may request that it take appropriate corrective actions. Failure to do so justifies a demand that the naval vessel depart the territorial seas. Should it not, the coastal State may use minimum force to compel its departure. /49/

The Convention does not require prior notice or authorization before a ship may proceed in innocent passage. Nevertheless, some coastal States have imposed such requirements on warships. Over 25 nations purport to require prior permission, 13 insist on prior notification, and five place impermissible special restrictions on nuclear-powered warships. /50/ Understandably, these States have often been selected for FON operations.

A second transit right into the territorial seas of another nation is the right of assistance entry. It arises when it becomes necessary to come to the aid of ships, aircraft or individuals in distress. Because there is an obligation (a maritime, good Samaritan rule of sorts) to assist those in danger of being lost at sea," the coastal State need not consent prior to entry if the location of the vessel or individual in need of aid is reasonably known. That said, permission of the coastal State is required if a commander intends to conduct a search, for that is the responsibility and prerogative of the coastal State. As to the use of aircraft and helicopters, which are otherwise forbidden from entering another State's national airspace without consent, US policy is to employ them when needed in life-threatening situations. /52/

Transit passage through international straits is the third right of entry into territorial waters. An international strait is one lying in the territorial waters of one or more countries which connects two parts of international waters. A classic example is the Strait of Gibraltar, which passes through the territorial waters of Spain and Morocco to connect the Atlantic Ocean with the Mediterranean
Sea. Other key international straits of interest for naval operations include the Strait of Hormuz (connecting the Gulf of Oman and the Persian Gulf), and the Strait of Malacca (connecting the South China Sea and the Indian Ocean).

"Transit passage" resembles innocent passage in that it must be continuous and expeditious and not constitute a threat to the bordering coastal States. However, because of the importance to maritime powers of travel through straits, the LOS Convention places fewer restrictions on transit passage. Most importantly, aircraft are permitted to fly through international straits. /53/ Indeed, this is how U.S. Air Force aircraft based in England flew to Libya when France refused overflight permission for Operation El Dorado Canyon, the 1986 air strike in response to Libyan terrorism. /54/ Further, transit passage is permitted in "normal mode," /55/ a fact with direct military implications. Though undefined in the Convention, "normal mode" is interpreted to include launching and recovering aircraft and helicopters. Therefore, carrier task forces may put up combat air patrols as a defensive measure. Additionally, submarines may pass through international straits while submerged. /56/ Absent this right, a potential adversary could simply monitor a strait to determine, e.g., how many US submarines were in the Mediterranean Sea, Persian Gulf, etc. at any one time. The advantage of stealth, which submarines offer, would quickly be rendered de minimus.

Unlike innocent passage, transit passage is non-suspendable; /57/ were it not, coastal States could effectively block travel into large areas of the world's oceans. Though non-suspendable, a problem does arise in determining where transit passage begins and ends. Specifically, if a ship approaches a strait from territorial waters where it is in innocent passage, when may it go into normal mode? A similar question arises for flight. For example, if an aircraft proceeds towards the Strait of Gibraltar, at what point may it enter Spanish or Moroccan airspace to fly through the strait? These questions are unsettled in the law. The US position is that aircraft and vessels can proceed in the normal mode while in the "approaches" to the strait. /58/ An approach is subjectively determined by State practice. Once within the strait, a vessel or aircraft may travel through it anywhere from shore to shore. For warships, this is true regardless of whether there is an International Maritime Organization (IMO) approved vessel traffic separation scheme in effect, as there is, for example, in the Strait of Hormuz. /59/ Though warships in transit passage need not comply with such schemes, they must still operate with "due regard" (safety) to other vessels.
The last category of national waters addresses those lying within archipelagic baselines - archipelagic waters. It is important not to confuse these with territorial waters, which lie just on the seaward side of the archipelagic baseline. Innocent passage rules apply in the archipelago’s territorial seas, as well as its archipelagic waters /60/ with one significant exception, the archipelagic sealane.

An archipelagic sealane is a route normally used for international passage through archipelagic waters. While in them and the adjacent territorial sea, vessels and aircraft may travel in normal mode. /61/ Thus, overflight of aircraft and submerged sailing by submarines is permissible. This represents a compromise arrived at during UNCLOS III between archipelagic States, which wanted control over nearby waters, and maritime powers, which sought unimpeded and liberal passage through archipelagos like the Philippines and Indonesia.

The location of archipelagic sealanes is not formally set anywhere; they are merely those routes "normally used" for international navigation, a highly subjective standard. Vessels and aircraft may proceed in normal mode up to 25NM from the sealane's centerline, provided they do not come closer to shore than 10 percent of the distance between the land masses bordering the sealane. /62/ While there is a procedure for States to designate sealanes, to date none have done so. /63/ However, once a State, working through IMO, designates sealanes, vessels and aircraft are only authorized to engage in transit passage through those lanes. Finally, although innocent passage through archipelagic waters may be suspended temporarily for security reasons, archipelagic sealane passage is non-suspendable. /64/
Beyond the territorial sea lie international waters - the contiguous zone, the exclusive economic zone, and the high seas. The contiguous zone may extend out to 24NM from the coastal State's baseline and is used for purposes of regulating customs, fiscal, immigration, and sanitation matters. Reaching up to 200 NM from the baseline is the exclusive economic zone (EEZ), where the coastal State exercises jurisdiction over activities involving resources, such as fishing and research. Lying off the outer edge of the exclusive economic zone are the high seas, an area where the sovereign rights of all States are theoretically equal.

For the purposes of naval operations, activities that may be conducted in international waters differ little, if at all, from regime to regime. Overflight without consent of the coastal State is permitted throughout international waters. So too are intelligence gathering and military exercises, including gun.
exercises. It must be noted, however, that naval forces are always required to operate with "due regard" to the presence of other vessels and aircraft. /66/ Additionally, the rights of warships must be balanced against the rights of coastal States in the affected regime. For instance, while a naval exercise is permissible in the EEZ, it must not significantly interfere with coastal State fishing activities in the area. Balancing the rights of the coastal State and the maritime State would likely require the exercise to shift elsewhere. Similarly, warships in international waters must comply with international law governing pollution.

Certain States have attempted to impose limits inconsistent with international law on activities within international waters and airspace. Nearly 20 nations have declared security zones beyond their territorial seas which purport to restrict various military activities. /67/ Vietnam's security zone, e.g., is depicted in Figure 3. As noted above, such zones are permissible only in the territorial sea (or archipelagic waters), and only temporarily. Some States, including the US, have established air defense identification zones (ADIZ) in international airspace. For instance, the US ADIZ on the east coast extends out 200NM. /68/ ADIZs are permissible under international law only to the extent they constitute a condition of entry into national airspace. In other words, a State may validly require an aircraft to comply with ADIZ identification requirements before it consents to entry of the aircraft into its territorial airspace. However, if it is merely passing through the ADIZ, the aircraft need not, as a matter of law, abide by the coastal State's conditions. As a matter of comity and safety, however, most usually do. /69/

Finally, mention should be made of sovereign immunity. Regardless of the regime in which it is operating, a warship or military aircraft may not, absent its consent, be arrested (seized), searched, inspected, or boarded by officials of another State." Instead, if the vessel or aircraft entered internal waters pursuant to host-nation consent, the host may simply withdraw that consent, thereby requiring the aircraft or vessel to depart. If the aircraft/vessel subsequently refuses to leave, minimal force may be used to compel it to do so.

III. THE LAW OF NAVAL OPERATIONS

Usually, the judge advocate can solve most of the operational commander's burning maritime conundrums by analyzing issues in terms of three basic questions. First, who is taking or contemplating the action? Next, what juridical regime of the ocean is the action occurring in? Finally, what are the respective parties' interests or rights in the affected area? The law of the sea is the proper starting point for answers to these basic questions; however, in many cases a comprehensive and correct response also requires resort to the law of naval operations. In the remainder of this article, we consider two key areas of that law - neutrality and the means and methods of warfare at sea.

A. Neutrality

In today's world, where at any given moment some nation is bound to be engaged in armed conflict with another, the operational judge advocate must be well versed in the law of neutrality. Fortunately, it is, in great part, consistent with the law of the sea; the maritime rights and duties States enjoy in peacetime continue to exist, with minor exceptions, during armed conflict.
Therefore, the judge advocate who analyzes questions of neutrality in light of law of the sea principles, will routinely provide legal counsel that is on the mark.

The law of neutrality governs the relationship between parties (belligerents) and nonparties (neutrals) to an armed conflict by defining their respective rights and obligations. Neutrality concepts emerged and evolved during the era of sailing, principally the 17th, 18th and 19th centuries, when the world was less interdependent. It was a time when nation-States tended to resolve their own problems without the help of allies, elaborate security agreements, or United Nations resolutions. While the world has changed dramatically over the past century, neutrality continues to serve as a useful framework during international armed conflict for the conduct of participants and nonparticipants alike.

Neutrality law fosters international stability by serving three useful purposes. First, and foremost, it contains the spread of the hostilities by keeping down the number of participants. Second, it defines the legal relationship between parties and nonparties to the conflict. Finally, neutrality law helps limit the impact of the war on nonparticipants, particularly with regard to commerce. In essence, it serves to balance the interests of the belligerents, who want to wage war with few restrictions and to isolate the adversary, with those of neutral nations, who seek to conduct normal activities, such as trading, with minimal interference.

Both neutral and belligerent rights are clearly delineated in neutrality law. In general, a neutral enjoys two basic rights: inviolable territory and the practice of commerce. In return, the neutral must abstain from participating in the conflict and maintain its impartiality. Likewise, a belligerent enjoys reciprocal rights and duties. It must respect a neutral's inviolability and its entitlement to trade, but has its own right to insist on the neutral's abstention and impartiality.

As a general rule, neutral territory is treated as sacred space; it is inviolable. Belligerents are prohibited from conducting hostilities, establishing a base of operations, or seeking sanctuary in neutral territory. Meanwhile, the neutral State is responsible for policing its own territory, using force if necessary, to ensure that it is not being used impermissibly by the belligerents. In the event a neutral is unable or unwilling to police its territory, a belligerent, under the doctrines of self-help or self-defense, is authorized to take whatever action is necessary, including entering the neutral's otherwise inviolate territory and using force, to put an end to its misuse.

A neutral State's obligation to police its own territory derives from the almost total control it exercises over its sovereign, national waters. Of course, as all States may during peacetime, the neutral is permitted, absent force majeure, to impose conditions on entering its internal waters or close its ports to foreign vessels. During armed conflict, however, a neutral exercises even greater sovereignty over its territorial waters, at least with respect to belligerent warships. For instance, notwithstanding the customary right of innocent passage, a neutral may levy conditions on belligerent warships transiting its territorial seas; it may even bar them altogether. A neutral is not permitted, however, to hamper or impede transit through an international strait or archipelagic sea lane. Further, whatever the neutral nation elects to do with regard to its national waters, a neutral must treat all belligerents in an impartial, nondiscriminatory manner.

If a neutral State chooses to open its waters to belligerents, the law places certain limitations on their activities therein. For instance, no more than three belligerent warships may remain in port at any given time, and absent adverse weather or an unseaworthy condition, these vessels must depart within 24 hours of their arrival. Additionally, a belligerent warship may only replenish
food and fuel stores to peacetime levels during its port call; it may not take on any war materials, such as weapons and ammunition. /90/ Likewise, if damaged, a warship may only be repaired to a seaworthy condition; its military capabilities cannot be restored. /91/ Of course, the neutral State retains responsibility for policing its ports and is obligated to intern, for the duration of the conflict, any vessel and crew that fails to comply with these conditions.

While a belligerent is prohibited from conducting hostile activities in neutral waters, /92/ it is generally free to wage war, with few restrictions other than the law of armed conflict, in its own and its adversary's waters, as well as on the high seas. /93/ Besides engaging the enemy in combat in these waters, a belligerent normally seeks to isolate its adversary from the outside world by controlling merchant shipping, thereby curtailing the enemy's ability to sustain its war effort. To balance this desire with the neutral goal of maintaining commerce, the contraband system has developed over time. Simply put, although neutrals are free to engage in commerce with one another, as well as with belligerents, they may not trade in contraband with the belligerents.

Contraband consists of those goods or materials, such as ammunition, that are directly related to warfighting, or that are war-sustaining, such as oil, electronic components, and industrial raw materials. Historically, goods fell into one of three categories: absolute or conditional contraband, or free goods. Absolute contraband is material that by its nature is designed for use in the armed conflict, whereas conditional goods consist of dual-use products. /94/ Free goods, like baby formula, religious objects, or children's clothing, are those items that only have utility to the civilian population. They are not considered contraband and thus may be freely traded, even with belligerents.

Today, the line between absolute and conditional contraband has blurred because of the difficulty, (in an era in which entire populations are involved in the war effort,) of determining whether conditional goods are being used for military or civilian purposes. Therefore, in practice, belligerents publish a list delineating what goods constitute contraband. A belligerent may frame the list either in terms of goods that are considered contraband or those which are not." It is the prevailing view of the international legal community that publication of such a list must proceed any capture of contraband goods. Whether this is true for munitions is unclear. /96/

Though neutral vessels transporting contraband bound for belligerent or occupied territory are subject to capture, it may be difficult to determine their destination. However, contraband is presumed to be destined for a belligerent in the following circumstances /97/

a. when a neutral vessel calls at an enemy port before heading to its final destination, a neutral port;

b. when goods are manifested to a neutral port that is serving as a transit port to the enemy, even if the goods are consigned to the neutral port; 98 and

c. if goods are going to an unnamed consignee in a neutral State near enemy territory.

To ensure that neutrals do not trade contraband with the enemy, belligerent warships in the exercise of their right of visit and search may board neutral merchant vessels outside neutral waters and inspect their cargo. /99/ Visit and search is a belligerent's right during armed conflict to stop all merchant vessels, enemy or neutral, and search them to ascertain if they are transporting contraband. Only warships and naval auxiliary vessels are authorized to exercise this right, and they must do so in non-neutral waters. /100/ If conducting visit and search at sea is impossible or unsafe (e.g., due to weather conditions), a belligerent warship may divert a merchant vessel to a belligerent port where the inspection can be conducted safely. For example, during the Gulf War, coalition forces routinely
diverted merchant vessels, particularly container vessels (which are practically impossible to inspect completely and safely at sea), into port for the purpose of searching them. /101/

Not all vessels are subject to visit and search. Under international law, a warship is a sovereign platform, thereby exempt from visit and search. Additionally, a belligerent may not interfere with neutral merchant vessels sailing in convoy with warships flying the same flag, provided the warship certifies in writing that the vessel is not carrying contraband and provides the belligerent with other relevant information that it would be entitled to obtain during a visit and search, such as port of departure and destination. /102/ While the technical requirement is for a written certification, a belligerent generally accepts verbal assurances.

If a neutral merchant vessel carries contraband, attempts to conceal its identity, resists visit and search, carries irregular or fraudulent papers, attempts to or breaks a blockade, or violates regulations in the immediate vicinity of naval operations, the vessel and its cargo are subject to capture (seizure), though not destruction. /103/ Once captured, the merchant vessel is escorted to a port under belligerent control, where a tribunal known as a prize court adjudicates the legality of the capture. /104/ If the prize court finds that the vessel was carrying contraband, it awards the seized vessel and its contents to the belligerent. The crew of the vessel is repatriated immediately; they are not prisoners of war.

To avoid undue interference with neutral shipping, belligerents may employ a system whereby its consular officials inspect vessels and containers prior to their loading. If all is in order, a navicert is issued to the vessel. /105/

Then, absent changed or unusual circumstances, a belligerent will generally not visit and search the vessel at sea. /106/

As noted, visit and search is a belligerent right, recognized under the law of armed conflict. One must carefully distinguish it from the rights of "approach and visit" and "stop and inspect." Approach and visit is a law enforcement term, which encompasses two actions. Approach simply means to pose questions to the master of a vessel, usually to inquire about the vessel's nationality, type of cargo being carried, and where it is coming from and transiting to. Under the right of visit, a sovereign vessel such as a Coast Guard cutter is authorized to board a foreign-flag vessel (that is not entitled to sovereign immunity under the LOS Convention) /107/ and inspect its documents when there is reasonable suspicion to believe the vessel is engaged in piracy, unauthorized broadcasting, or slave trade, or is without nationality. /108/ Notwithstanding the Posse Comitatus Act, U.S. Navy vessels are authorized to exercise the right of approach and visit."

The right of stop and inspect, on the other hand, is a term employed during maritime interception operations (MIO), which are measures used to enforce a United Nations' sanctioned embargo. For instance, following the Iraqi invasion of Kuwait, the United States and other countries, acting under the authority of UN Security Council Resolutions 661 and 665, conducted MIOs in the Persian Gulf, the Gulf of Oman, and the Red Sea, diverting almost all goods headed into or out of Iraq. /110/

A final issue involving neutrality is whether the concept exists at all during enforcement actions authorized pursuant to Chapter VII of the United Nations Charter. Under Article 39 of that chapter, the Security Council determines if a State's actions constitute a "threat to peace, breach of the peace, or act of aggression." /111/ If it does, the Council decides what steps are necessary to "restore international peace and security." /112/ Among the actions it may authorize is the use of force under Article 42. /113/ Such force may be employed either by UN troops (Blue Helmets) or by member States
acting individually or collectively, as in Desert Storm. The dilemma vis-a-vis neutrality is that once the Security Council has acted, member States are obligated to "accept and carry out (its) decisions" and "join in affording mutual assistance in carrying out the measures (it has) decided on." /114/ Thus, a fair argument can be made that a nation cannot simply declare itself neutral and sit by on the sidelines during Chapter VII operations.

The issue is of more than academic interest. Consider the implications if this approach is valid. In the absence of neutrality, trade restrictions beyond contraband would apply. Also, since by definition there would be no neutral waters, target-State warships could no longer escape attack by entering the territorial sea of a neutral. Further, neutrals have an obligation to intern belligerent military personnel who come into their hands during a conflict and to police its territory, ensuring that belligerents do not conduct operations or seek sanctuary therein. However, if obligated to support UN-authorized operations, an avowed neutral state would be required to capture and intern military personnel of the declared aggressor, while immediately returning those supporting the UN operation. Moreover, the world community would expect the "neutral" to preclude the aggressor from operating in or entering its territory, but to allow UN-authorized forces to operate there.

It is not the purpose of this article to resolve this complex issue. However, even assuming the approach is correct, neutrality law retains its importance in military operations. First, when the UN does not act, (and it has failed to act in the overwhelming majority of international armed conflicts since its creation,) neutrality law applies. Second, even when the Security Council responds under Chapter VII, e.g., to Iraq's invasion of Kuwait, it is unrealistic to expect all nations, notwithstanding their Charter obligations, to support the action. For example, in Desert Storm both Iran and Jordan declared their "neutrality." Though the world community merely recognized them as "nonparticipants," vice neutrals, it is nevertheless essential that the legal obligations they assume by so characterizing themselves are understood. Thus, neutrality remains a vital body of law even in the "new world order."

B. Methods and Means of Armed Conflict at Sea

1. Targeting

Although enemy warships are obviously subject to attack at any time outside neutral territorial waters, a belligerent generally may only capture, not destroy, enemy merchant vessels. /115/ If, however, a merchant vessel refuses to heave to after being ordered to do so, resists visit and search, carries offensive weapons, sails in convoy with enemy warships, or carries absolute contraband, it becomes a military target and is subject to attack in the same fashion as a warship. /116/ That said, a belligerent may destroy a merchant ship when it is impractical to seize the vessel and take it to one's own or an allied port. Before doing so, however, the belligerent warship must ensure the safety of the ship's crew, passengers, and papers in light of the prevailing circumstances, such as weather. /117/

Neutral vessels, by virtue of their conduct and actions, may sometimes acquire the character of an enemy merchant vessel or warship. For example, neutral merchant vessels that take part in the hostilities, serve as naval auxiliaries, are incorporated into the intelligence and communications system of the enemy, or sail in convoy with the enemy are treated like enemy warships. /118/ As such, they are valid military objects, subject to attack and destruction under the law of armed conflict. Similarly, neutral merchant vessels operating directly under enemy control or direction (e.g., chartered by the enemy) or resisting attempts to determine their identity (e.g., during a visit and search operation) acquire the character of enemy merchant vessels. /119/

Regardless of the flag they are flying, certain vessels, called protected platforms, are immune from capture or attack unless they act in a manner that is inconsistent with their protected status. For
example, cartel vessels and aircraft (those carrying prisoners of war), hospital ships, medical aircraft, rescue craft, lifeboats and life rafts, and small coastal fishing vessels may not be targeted. /120/ A belligerent, however, can certainly board and inspect protected platforms to ensure that they are being used appropriately. /121/ Should a protected platform fail to stop and allow a boarding, interfere with belligerent activities at sea, disobey lawful orders, or otherwise act in a non-innocent manner, it is subject to capture and, if circumstances necessitate, possibly to attack. /122/

Vessels that have surrendered are also immune from attack. Surrender must be allowed if it is unambiguous, effectively communicated, conveyed in a timely manner, and can be accepted. /123/ A vessel usually communicates its desire to surrender by stopping, raising a white flag, hauling down its ensign, and lowering and manning the lifeboats. /124/ Following an engagement, a commander is duty bound to rescue the survivors and pick up the deceased, regardless of their nationality, provided it is possible without hazarding the vessel. /125/

2. Mine Warfare

Mines are key weapons, not only in blockades, but in naval warfare generally. This is particularly true for less powerful countries. /126/ There are two types of mines, armed (or contact) and controlled. Armed mines are those that are tethered to the ocean bottom or floating free waiting for a vessel to strike them and detonate on impact. Controlled mines, by contrast, require an affirmative act to become armed. Sophisticated devices with remotely controlled triggering devices, they are incapable of causing damage unless they are activated.

By their very design, armed mines are indiscriminate weapons capable of wreaking havoc on both military objectives and innocent third parties. The use of such naval mines, therefore, is regulated by international agreement. /127/ Generally, belligerents must provide notice of their use and location to the international community. /128/ They are also required to become harmless (go inert) immediately upon breaking loose from their mooring or within one hour of the belligerent losing control over them if they are free-floating or unanchored contact mines. /129/ Finally, any State laying armed mines is required to record their location in order to allow for appropriate notification of mariners and to retrieve them when they are no longer needed. /130/

When deciding whether to employ naval mines, the commander needs to answer three basic questions: is it peacetime or wartime; what type of mine, armed or controlled, is being deployed; and where is the mine being placed? Prior to the outbreak of hostilities, i.e., peacetime, a nation may mine its internal waters with contact or controlled mines without providing notice. It may also temporarily employ armed mines in its territorial sea and archipelagic waters for national security purposes, provided international notice is given. Whereas archipelagic sea lanes and international straits can never be mined during peacetime so as to deny transit passage rights, controlled mines may be laid in international waters without notice, so long as they do not impede other lawful uses of these waters. Obviously, during peacetime a State may not place armed mines in international waters, except in self-defense. In such cases, the State must give notice, maintain an on-scene presence, and remove the mines as soon as the threat is eliminated.
During armed conflict, the rules for employing controlled mines are unchanged, with the exception, of course, that a belligerent may place them in its opponent's national waters without consent. However, because armed conflict is occurring, belligerent rights regarding the use of armed mines expand. A belligerent may mine its own national waters, as well as those of the enemy, provided international notification is given and the mines are not solely targeting commercial vessels. /131/ On the other hand, a belligerent is never authorized to place naval mines in the national waters of a neutral State without its consent. /132/ It may, however, employ mines to channel (force into set corridors) neutral shipping through international straits and archipelagic sea lanes, so long as it does not deny a neutral vessel its right of transit passage. /133/ Finally, during armed conflict a belligerent may employ armed mines in international waters so long as the extent of the mining is not indefinite and notice is provided. /134/ Once the direct need for the emplacement ends, the belligerent must take steps to remove any mines it laid, wherever located. /135/

---

**FIGURE 13: PEACETIME MINING**

<table>
<thead>
<tr>
<th>Point A</th>
<th>Mining by Country 1?</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point B</td>
<td>Mining by Country 2?</td>
<td>Yes</td>
</tr>
<tr>
<td>Point C</td>
<td>No, absent consent</td>
<td>Yes, but requires notice if armed</td>
</tr>
<tr>
<td>Point D</td>
<td>Yes, but controlled only and cannot interfere with lawful use by others</td>
<td>No, absent consent</td>
</tr>
<tr>
<td>Point E</td>
<td>No (international strait)</td>
<td>No (international strait)</td>
</tr>
</tbody>
</table>
FIGURE 14: WARTIME MINING

\[ B = \text{Belligerent} \quad N = \text{Neutral} \]

<table>
<thead>
<tr>
<th>Mining by Country B1?</th>
<th>Mining by Country B2?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Point A No</td>
<td>No</td>
</tr>
<tr>
<td>Point B Yes, but requires notice</td>
<td>Yes, but requires notice</td>
</tr>
<tr>
<td>Point C Yes, temporarily with notice</td>
<td>Yes, temporarily with notice</td>
</tr>
<tr>
<td>Point D Yes, but requires notice</td>
<td>Yes, but requires notice</td>
</tr>
<tr>
<td>Point E Yes, but only to channelize</td>
<td>Yes, but only to channelize</td>
</tr>
</tbody>
</table>

3. Deception

Deception, ruses, and stratagems have always played a major role in naval warfare. The use of decoys, false communications, and feigned movements are perfectly lawful. /136/ Also, under customary international law, naval commanders are authorized to fly the flag of a neutral or enemy State, wear neutral or enemy uniforms, and otherwise disguise their warships, provided that prior to engaging the enemy the vessel and her personnel display their true colors. /137/ On the other hand, perfidy, i.e., misusing protected symbols, signs, or status to gain a military advantage, is illegal. /138/ Issuing false maydays, raising a white flag when not intending to surrender, and using protected places, such as a hospital ship, to stage counterattacks against the enemy are examples of perfidious conduct and constitute war crimes. /139/

4. Zones

When hostilities occur, belligerents typically establish exclusionary or war zones. /140/ While there is nothing illegal about creating such areas, they are not "free-fire" zones, authorizing belligerents to shoot anything that moves in the area without complying with the law of armed conflict principles of discrimination, necessity, and proportionality. Indeed, the mere presence of a vessel in the zone confers no additional rights or authorities on a belligerent. /141/ Rather, the zones simply serve as warning areas, designed to advise others that a war is taking place and that, because they are entering an area in which hostilities are likely, they are at greater risk and should exercise caution should they elect to enter the zone. Specifically, belligerents may not prevent mariners from navigating through the area. In essence, an exclusionary zone is nothing more than a notice to mariners or airmen, which serves to limit the extent of the conflict and help neutral vessels remain out of harm's way. /142/
Exclusion zones should not be confused with a belligerent's right under customary international law to control the immediate area of naval operations. The operative word in this case is "immediate." Within the immediate area of naval operations and hostilities, a commander may establish special restrictions on neutral vessels and aircraft, including denying them access to the area. Generally, restrictions are placed on communications emanating from the area and on how vessels may maneuver, so that neutral shipping will not interfere with or endanger ongoing military operations. Any neutral vessel that fails to comply with a commander's orders assumes the character of an enemy merchant vessel and is thus subject to capture and possibly attack. /143/

It is also important not to confuse operations zones, such as those discussed above, with blockade practices. A blockade is a traditional method of isolating the enemy from the outside resources and support needed to maintain its war effort by preventing all vessels or aircraft from entering and departing specified ports and areas under enemy control. /144/ A blockade, however, cannot bar access to neutral territory or international straits. /145/ Under traditional rules, to establish a valid and effective blockade, /146/ a belligerent must establish the geographic boundaries of the blockade, set a start date for its enforcement, effectively notify the international community, maintain sufficient force in the area to render transit dangerous, and impartially enforce the blockade. /147/ In modern warfare, a belligerent need not be on scene to enforce its blockade. /148/ Rather, it is sufficient to employ mines or over-the-horizon weapon systems, which will significantly deter others from transiting through the area. /149/

IV. CONCLUSION

Hopefully, this article has highlighted the critical issues involved in maritime operations, whether during periods of peace or armed conflict, for those who do not regularly handle them. The key is to remember what questions to ask, not to have full recall of the nuances of the law of the sea and naval operations. Reduced to basics, what you need to know is: Who wants to do what, to whom, where, and under what circumstances. Armed with this information, you can systematically attack the legal issues you confront with confidence.

* Commander Astley (B.S., United States Coast Guard Academy; MS., Florida Institute of Technology; JD., American University) is a Professor of International Law and Assistant Director for Maritime Law Enforcement, Naval War College.

** Lieutenant Colonel Schmitt (B.A., MA., Southwest Texas State University; MA., Naval War College; JD., University of Texas; LL.M Yale University) is a Professor of International Law and Assistant Director for Aerial Warfare, Naval War College. He is a member of the Texas State Bar.

1 This article is based in part on lectures delivered at the United States Naval War College. We are indebted to our colleagues there, past and present, who have played a role in their development and evolution over the years. All illustrations were modified by the Naval War College's Graphics Art Department from those used in the lectures. We are grateful for their laudable efforts.

3 The Commander's Handbook on the Law of Naval Operations (NWP 1-14M, MCWP 5-2.1, COMDTPUB P5800.7) (1995) [hereinafter NWP 1-14M]. The Commander's Handbook does not contain any legal authorities. However, the Annotated Supplement to the Handbook is specifically designed for the judge advocate and is replete with citations. Part I of the Supplement, dealing with peacetime operations and the law of the sea, was revised in 1997.

4 The Navy has set forth its doctrine in Naval Doctrine Publication (NDP) 1, Naval Warfare (1994). It is the first in a planned series of six doctrine publications. The others address intelligence, operations, logistics, planning, and command and control.


11 The President specifically stated that the Convention contained "provisions with respect to the traditional uses of the oceans which generally confirm existing maritime law and practices and fairly balance the interests of all States." United States Ocean Policy, 19 Weekly Comp. Pres. Doc. 383 (Mar. 14, 1983). See also Law of the Sea Negotiations: Hearings before the Subcomm. on Arms Control, Oceans, Int'l Operations and Env't of the Senate Comm. on Foreign Relations, 97th Cong., 2d Sess. 107 (Statement of Theodore G. Kronmiller, Deputy Assistant Secretary of State). For the purposes of this article, Law of the Sea Convention articles will be treated, pursuant to US policy, as reflecting customary international law.

12 As of February 1997, 115 States, including most maritime powers, have ratified the Convention.


14 LOS Convention, supra note 7, art. 5.


16 LOS Convention, supra note 7, art. 7(1).

17 The US and Russia are currently working on a joint interpretation of the terms.

19 Id. at 17-30.

20 LOS Convention, supra note 7, art. 16.

21 Id. art. 7(3).

22 Id. art. 10. Islands within the bay are treated as water-surface area for the purpose of the test.

23 Id. art. 10(5). The actual position of the line moved inwards to comply with the 24 NM requirement is the prerogative of the coastal State. To determine where a particular State has placed the line, consult the Maritime Claims Reference Manual, supra note 13.

24 LOS Convention, supra note 7, art. 10(6).

25 The United States argues that acquiescence is an affirmative act; therefore, a failure to protest a claimed historic bay does not suffice. Arthur W. Rovine, 1973 Digest of US Practice in International Law 244-45 (1974). The International Court of Justice, in addressing the issue of acquiescence, held to the contrary in Fisheries Case (U.K. v. Norway), 1951 I.C.J. Rep. 116 (Dec. 18). The Fisheries Case is also instructive on the issues of deeply indented coastlines and fringing islands.

26 Amendment to Fisheries Act, July 13, 1906, cited in Roach and Smith, supra note 15, at 23.


28 In 1996, the US Navy conducted 14 freedom of navigation operations.


30 LOS Convention, supra note 7, art. 121. Uncovering (wet) rocks, however, do not. Uncovering rocks are low-tide elevations, i.e., rocks and shoals that only break the surface at low tide. The sole exception to this rule is for those wet rocks that lie within the territorial sea of the coastal State. In such cases, the uncovering rock "baseline" pushes out the coastal State's territorial sea. Id. art. 13.

31 Id. arts. 46-54. A number of States, which are not constituted wholly by islands, have drawn straight baselines around non-independent archipelagoes. The US position is that they do not qualify because the countries are not comprised exclusively of islands, as required by the LOS Convention. The US, therefore, can not use archipelagic baselines around Hawaii, even though it is an archipelago, as it is not an archipelagic State. Non-island States that impermissibly claim archipelagic baselines include Denmark (Faroes), Ecuador (Galapagos), Portugal (Azores), and the United Kingdom (Falklands and Anguila). See Roach and Smith, supra note 15, at 63-67. Note that an island State which cannot meet the criteria may elect to draw archipelagic baselines around a subset of its islands which can. In such cases, the remaining islands are treated as islands, i.e., each having its own individual baseline.

32 The incident was widely reported. See, e.g., David Evans, Insider to Probe Sub Collision, Chicago Tribune, Feb. 20, 1992, at 6.

33 For procedures regarding warship entry into internal waters, see OPNAVINST 3128.3 (series), Visits by US Navy Ships to Foreign Countries.

34 LOS Convention, supra note 7, art. 2.


37 As of 1 January 1997, Angola (20), Benin (200), Cameroon (50), Congo (200), Ecuador (200), El Salvador (200), Liberia (200), Nicaragua (200), Nigeria (30), Nigeria (30), Peru (200), Philippines (varied), Sierra Leone (200), Somalia (200), Syria (35), Togo (30), and Uruguay (200) claimed territorial seas in excess of 12 nautical miles.


40 LOS Convention, supra note 7, arts. 17-18.

41 Id. art. 23.

42 For instance, a ship may take a zigzag route (as is usually the case with a sailing ship which is tacking) or enter territorial waters and then reverse course (a route that might be justified, e.g., by receipt of new mission orders).

43 LOS Convention, supra note 7, art. 18(2).

44 Id. art. 25(3). The Convention specifically cites gun exercises. Note that the suspension must be published in advance. Id. This is done through Notices to Mariners (NOTMAR), the maritime equivalent of the Notice to Airmen (NOTAM). Note also that innocent passage may not be suspended in straits used for international navigation.

45 Id. art. 19.

46 Id. art. 20.

47 This is the traditional US view.

48 Id. art. 19 (2) (1).

49 LOS Convention, supra note 7, art. 25(1). The Convention does not outline specific remedies. However, the right to employ minimum necessary force once other remedies have been exhausted is a reasonable derivation of State sovereignty over the territorial sea. Note that Cambodia justified the 1975 seizure of the SS Mayaguez by alleging that its passage was not innocent. Though it was actually outside the territorial sea, even if it had been within Cambodian waters there should have been a request to depart prior to the use of force. See Eleanor C. McDowell, Digest of US Practice in International Law 423-26 (1975). See also Comment, The Mayaguez: The Right of Innocent Passage and the Legality of Reprisal, 13 San Diego L. Rev. 765 (1976).

50 As of 1 January 1997, the following countries require prior permission for warship transit of the territorial sea: Albania, Algeria, Antigua & Barbuda, Bangladesh, Barbados, Brazil, Bulgaria, Burma, Cambodia, Cape Verde, China, Congo, Denmark, Grenada, Iran, Maldives, Oman, Pakistan, Philippines, Poland, Romania, St. Vincent & the Grenadines, Somalia, Sri Lanka, Sudan, Syria, United Arab Emirate, Vietnam, and Yemen. Prior notification is required by: Croatia, Egypt, Finland, Guyana, India, Libya, Indonesia, Malta, Mauritius, Seychelles, South Korea, Yugoslavia, and North Korea. The five with restrictions on nuclear power/materials are: Djibouti, Egypt, Oman, Pakistan, and Yemen.
51 LOS Convention, supra note 7, art. 98 is the high seas codification of this customary international law duty.

52 The right of assistance entry is not explicitly provided for in the LOS Convention. However, it is considered customary international law. DOD guidance on assistance entry is contained in Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 2410.01A, Guidance for the Exercise of Right of Assistance Entry (1997).

53 LOS Convention, supra note 7, arts. 37-39.


55 LOS Convention, supra note 7, art. 39(1)(c).


57 LOS Convention, supra note 7, art. 44. The argument has been made that transit passage was already customary international law at the time of UNCLOS III. See Richard J. Grunawalt, United States Policy on International Straits, 18 Ocean Dev. & Int'l L. 445 (1987). For an excellent discussion of the issue in terms of national security concerns, see W. Michael Reisman, The Regime of Straits and National Security: An Appraisal of International Lawmaking, 74 Am. J. Int'l L. 48 (1980).

58 NWP 1-14M, supra note 3, para. 2.3.3.1.

59 Traffic separation schemes are established by the International Maritime Organization in congested areas. Reduced to basics, they separate inbound and outbound traffic. It is the US position that sovereign platforms, like warships, are exempt from the requirements as a matter of law. That said, US policy is to generally follow such routing when operational considerations permit. US Navy Regulations, art. 1139 (1990).

60 LOS Convention, supra note 7, art. 52(1).

61 Id. art. 53.

62 Id. art. 53(5).

63 Indonesia is currently before the IMO seeking to designate archipelagic sealanes through its waters.

64 Id. art. 54, applying article 44 mutatis mutandis.

65 Id. art. 33, pt. V and pt. VII, respectively.

66 Id. art. 87; NWP 1-14M, supra note 3, paras. 2.4.1., 2.4.2., and 2.4.5..

67 As of Jan. 1, 1977, those countries include Bangladesh, Burma, Cambodia, China, Egypt, Haiti, Iran, North Korea, Nicaragua, Pakistan, Saudi Arabia, Sri Lanka, Sudan, Syria, United Arab Emirates, Venezuela, Vietnam, and Yemen.

68 US ADIZs are set out at: 14 C.F.R. part 99.42 (contiguous States); part 99.43 (Alaska); part 99.45 (Guam); and part 99.47 (Hawaii).

69 See Air Force Pamphlet (AFP) 110-31, International Law--The Conduct of Armed Conflict and Air Operations (1976), at para. 2-1g. ADIZs should not be confused with Flight Information Regions (FIRS), which are established by the International Civil Aviation Organization to provide flight control of civil aircraft in set regions, usually a heavily traversed area. Technically, they are not applicable to State aircraft (such as military aircraft), but for safety reasons State aircraft often comply with FIR reporting requirements.
70 See LOS Convention, supra note 7, arts. 32, 58(2), 95, and 236. See also NWP 1-14M, supra note 3, paras. 2.1.2. and 2.2.2.


72 The law of neutrality recognizes that nations, at times, resort to armed conflict to resolve their differences. These hostilities, however, adversely affect innocent third parties, particularly those engaged in neutral commerce. The law of neutrality seeks to minimize this disruption.

73 Neutral territory includes all national waters and airspace, i.e., land, internal waters, territorial seas, and archipelagic waters, as well as the airspace above them.

74 While a neutral State is precluded from trading contraband with one of the belligerents, it is not required to prohibit or prevent its nationals from doing so. Hague V, supra note 71, art. 7. Of course, a nation could exercise its discretion and preclude its citizens from trading or exporting certain commodities to a belligerent. See, e.g., 18 U.S.C. 963 (1994) (making it a felony to use warlike vessel to commit hostilities against a State with whom the US is at peace, or to deliver said vessel to a belligerent); 18 U.S.C. 965 (1994) (forbidding vessels to depart US ports if carrying contraband to belligerent).

75 Impartiality appears to be a particular problem in current practice. In fact, one could argue that over the last century the standard has evolved into one of nonparticipation. For example, during the early stages of World War II, the United States supported Great Britain through its lend-lease program. During the Persian Gulf Tanker War between Iran and Iraq, Kuwait, an avowed neutral, allowed items destined for Iraq to cross its borders. While the United States and Kuwait refrained from participating in the hostilities, their actions in the two cases were hardly impartial. Certainly, the aggrieved belligerents, Germany and Iran respectively, could have treated the United States and Kuwait as belligerents; however, for political and policy reasons they elected not to do so.

76 Hague XIII, supra note 71, art. 2 (forbidding acts of war, including exercise of right of visit and search in neutral waters). Belligerents are also barred from launching and recovering aircraft, laying mines, capturing enemy merchant vessels, or exercising the right of prize in neutral waters. See Michael Bothe, The Law of Neutrality, in The Handbook of Humanitarian Law in Armed Conflicts 485, 501-02 (Dieter Fleck ed. 1995) [hereinafter Fleck].

77 Hague XIII, supra note 71, art. 5.

78 Hague XIII does not explicitly state that belligerents may not use neutral waters as a sanctuary; however, taken as a whole, the Convention supports such a reading. See San Remo Manual, supra note 2, at 97.

79 Hague XIII, supra note 71, art. 8.

80 A classic example of the doctrine of self-help in a maritime setting is the case of the Altmark. In 1940, the Altmark, a German naval auxiliary vessel with British prisoners on board, sailed into the neutral waters of Norway in an attempt to evade interception. When Norway failed to exercise its duty as a neutral, under articles 1, 2, and 5 of Hague XIII, to expel or seize the belligerent vessel that was using its waters as a base of operation or sanctuary, the British warship Cossack entered Norwegian waters, seized the Altmark, and released the prisoners. See Gerhard von Glahn, Law Among Nations 849-50 (6th rev. ed. 1992).

81 Article 51 of the UN Charter explicitly recognizes a nation's inherent right of self-defense. Under this inherent right, a nation may take necessary and proportional measures to protect itself against hostile acts and demonstrations of hostile intent. For a detailed discussion of the United States' policy on self-defense, including what constitutes necessary and proportional measures, see CJCSI 3121.01, Standing Rules of Engagement for U.S. Forces, 01 Oct. 1994, at A-4 to -6.
For example, during the Vietnam war, the North Vietnamese staged numerous operations out of, and sought sanctuary in, Cambodia. Due to Cambodia's failure to police its territory, the United States made several incursions into the country under the doctrine of self-help. Before a belligerent takes such an extreme step, the State should contact, if time permits, the neutral government to apprise it of the situation and request it correct matters. Under the doctrine of self-defense, by contrast, a belligerent force may immediately respond to an imminent or ongoing attack even though it is originating from a neutral territory.

See Hague XIII, supra note 71, art. 9.

A warship is a vessel owned or operated by the armed forces, bearing distinctive external markings, under the command of a commissioned officer and employing a crew that is subject to military discipline. See LOS Convention, supra note 7, art. 29; High Seas Convention, supra note 5, art. 8(2).

Hague XIII, supra note 71, art. 9 (authorizing neutral to impose conditions, limitations, and prohibitions on admission to neutral ports and territorial seas). A neutral's ability to regulate warship entry also arguably extends to naval auxiliaries, such as the Altmark. San Remo Manual, supra note 2, at 98-99. See also supra note 80. A State certainly is not required to preclude belligerent warships from transiting its waters. In fact, a State does not violate the law of neutrality simply because it allows such vessels to engage in "mere passage" through its territorial sea. See Hague XIII, supra note 71, art. 10. Most neutral States close their territorial seas to belligerent submarines, but not to hospital ships.

While a belligerent warship or military aircraft is entitled to transit an international strait or archipelagic sea lane, it must do so expeditiously, without threatening the coastal nation and refraining from engaging in hostile acts. A belligerent operating in a strait, however, is always authorized to defend itself against illegal attacks. All rights associated with transit passage apply, so submarines can navigate submerged and aircraft can fly anywhere within the strait and its approaches. See supra notes 52-58.

A neutral may close its ports to belligerent vessels that fail to comply with the neutral's regulations or violate its neutrality and still comply with the requirement of impartiality. Id.

If a warship is in port when hostilities break out, the vessel is obligated to depart the port within 24 hours. Id. art. 13. Also, if warships from both belligerent States are in port simultaneously, then they depart the port in alternating fashion with a 24-hour interval between departures. Id. art. 16.

Belligerent activities include, but are not limited to, visit, search, diversion, capture, and confiscation. Visit is the act of ordering a vessel to heave to and inspecting its papers. Search entails questioning the vessel's complement and examining the vessel's cargo and spaces. Diversion, meanwhile, is the act of ordering a vessel to a non-neutral port for the purpose of conducting visit and search. A vessel is captured when a belligerent takes control of a vessel by placing a prize crew on board. Finally, confiscation occurs when a prize court finds that a belligerent's act of capture was legal and awards ownership of the vessel (condemns it) to the belligerent.

In waging war in a neutral's exclusive economic zone, a belligerent must always give due regard to a neutral's valuable resources and any artificial islands, installations, and structures. The belligerent must also give due regard to protecting the environment.

Weapons and military vehicles are examples of absolute contraband, whereas food and fuel are examples of conditional contraband. For a discussion of the differences, see San Remo Manual, supra note 2, at 215-16; NWP 1-14M, supra note 3, para. 7.4.1.
95 For example, and though not a classic belligerent/neutral situation for reasons to be discussed infra, during the UN-authorized embargoes of Iraq and Haiti, the international community was advised that medical supplies could be shipped to the affected countries. Contrast today's practice with that of World War I and World War II, when belligerents were required to provide neutrals with a list of contraband items that could not enter or exit an adversary's territory. See Knight & Chiu, supra note 2, at 846-47.

96 San Remo Manual, supra note 2, at 216.

97 NWP 1-14M, supra note 3, para. 7.4.1.1. The presumption only pertains to absolute contraband, not conditional contraband. When dealing with conditional goods, the belligerent must factually prove to the prize court, without benefit of the presumption, that the seized material was ultimately headed to the enemy. See Robert W. Tucker, The Law of War and Neutrality at Sea 270 (50 Naval War College International Law Studies 1957); Green, supra note 71, at 157-58.

98 During Desert Storm many ports in Jordan served as transit ports for Iraq. Coalition forces relied on the presumption to seize absolute contraband manifested for Jordanian ports. Later, they would have to prove to the relevant prize courts that the material was, in fact, really destined for Iraq, not Jordan. See Tucker, supra, at 332-44. The United States set up two prize courts, one in the southern district of New York and one in the northern district of California, to adjudicate prize cases arising out of Desert Storm. Prize courts are typically established under domestic law, but they apply international law. See Green, supra, at 158.

99 See L. Oppenheim, International Law 740 (H. Lauterpacht 7th ed., 1952); 11 Whiteman, Digest of International Law, ch. XXXII (1968); Knight & Chin, supra note 2, at 849-50; NWP 1-14M, supra note 3, para. 7.6. There is disagreement in the international community over whether a belligerent may conduct visit and search in the part of an international strait that comprises its own territorial sea. The United States' position is that a belligerent can exercise this right in its part of a strait provided no other location is reasonably available and the belligerent is not impeding someone's right of transit passage. In fact, in 1984 Iran routinely conducted visit and search operations in that portion of the Strait of Hormuz that constituted Iran's territorial sea. There is no dispute, however, over exercising this belligerent right in a strait overlapping the territory of one or more neutrals or in a neutral's archipelagic sea lanes; it is strictly forbidden.

100 The first step in conducting visit and search is to order the suspected vessel to heave to or stop and to stand by for boarding. This is normally accomplished by firing a blank charge, flag hoist (SN or SQ), or raising the vessel on the radio. If the vessel does not heave to, the warship pursues it and uses force, if necessary, to compel the commercial vessel to stop. Once the vessel is stopped, an armed boarding party led by an officer boards the vessel. Initially, they check the vessel's papers, including the cargo manifest and bills of lading. Normally, checking the vessel's papers is sufficient. If, however, the boarding party suspects the vessel is carrying illegal cargo, they will search the vessel and its cargo. See NWP 1-14M, supra note 3, para. 7.6.

101 During the Gulf War, Coalition forces challenged over 7,500 vessels, boarded and inspected more than 950 of these vessels and diverted another 50 or so, which were carrying over 1 million tons of illegal cargo. See San Remo Manual, supra note 2, at 196.

102 NWP 1-14M, supra note 3, para. 7.6. Of course, if one of its country's merchant vessels is carrying contraband, the commanding officer of the warship must allow the belligerent to conduct visit and search. Id. Further, the exemption only applies to vessels in convoy with warships from the same flag State. This is why several Kuwaiti tankers were reflagged in the United States during the Gulf Tanker War. The only way to preclude Iran, which was conducting atrocities such as tossing grenades into a vessel's wheelhouse after it was searched, from conducting visit and search on Kuwaiti vessels was to flag them in the US and then to sail them under the umbrella of a US convoy. See Francis V. Russo, Jr., Neutrality at Sea in Transition: State Practice in the Gulf as Emerging International Customary Law, 19 Ocean Dev. & Int'l. Law 381, 392-95 (1988); David L. Peace, Major Maritime Events in the Persian Gulf Between 1984 and 1991: A Juridical Analysis, 31 Va. J. Int'l. L. 545, 553-54 (1991).

103 Under exceptional circumstances, a belligerent may destroy a captured neutral merchant vessel, provided the safety of the crew, passengers, and ships' papers is assured. Final Protocol of the Naval Conference, Feb. 26, 1909, art. 49, 208 Parry's T.S. 338, reprinted in 3 Treaties, Conventions, International Act, Protocols and Agreements
Between the United States and Other Powers 268 (G. Charles ed. 1913) [hereinafter Declaration of London]. The belligerent should also take steps to safeguard the personal effects of the passengers and crew. NWP1-14M, supra note 3, para. 7.10.1. Note that though the London Declaration remains unratified, it was applied by both sides during the Turco-Italian War and the War of the Balkans. Indeed, at the beginning of World War I, efforts were made to follow its principles. Today, many of its principles continue to be considered customary law. Michael N. Schmitt, Blockade Law: Research Design and Sources 20-21 (1991).

104 Prize decisions are particularly useful as a source of maritime law. Early American Supreme Court decisions have been collected in the three volume set, Prize Cases Decided in the United States Supreme Court: 1789-1918 (J. Scott ed. 1923). English decisions of the First World War are in Lloyd's Reports of Prize Cases (10 vols.) (Lloyds, 1915-1924).

105 See J. G. Starke, Introduction to International Law 561-69 (9th ed. 1984). The Navicert system was developed by the British during World War II as a means to facilitate economic warfare against the enemy, cutting off its supply of contraband, while reducing the economic hardship on neutrals. Id.; San Remo, supra note 2, at 200. Although not belligerents, the United States and others enforcing UN-sanctioned embargoes against Iraq and Haiti, used the navicert system. After inspecting large containers ashore before they were loaded on neutral platforms, Coast Guard personnel would seal the container in a fashion that allowed boarding parties at sea to quickly ascertain if someone had tampered with it. A vessel, carrying a navicert, which had its cargo holds or containers sealed, was allowed to proceed on its voyage without further delay.

106 The navicert, however, is no a guarantee against the belligerent boarding and inspecting the vessel, and it certainly does not affect the rights of other belligerents.

107 LOS Convention, supra note 7, arts. 95-96.

108 See id. art. 110. See also NWP 1-14M, supra note 3, para. 3.4.

109 The Navy is not addressed in the Act. 18 USC 1385.

110 See S.C. Res. 661, reprinted in 29 I.L.M. 1325-27 (1990) (barring all goods except medical supplies and limited foodstuffs); S.C. Res. 665, reprinted in 29 I.L.M. 1329-30 (1990). See also Knight & Chiu, supra note 2, at 844-46. To illustrate the scale of the maritime interception operation, over a two-year period multinational forces intercepted over 17,800 vessels, boarding approximately 7,400 and diverting 410 of them.

111 UN Charter art. 39.

112 Id.

113 Id. art. 42.

114 Id. arts. 25 & 49 respectively.

115 See San Remo, supra note 2, at 146-51. For an excellent discussion of this issue, see Wolff Heintschel von Heinegg, The Law of Armed Conflict at Sea, in Fleck, supra note 76, at 405, 428-30. Probably the most exhaustive study on the subject of targeting merchant vessels is contained in the Law of Naval Warfare: Targeting Enemy Merchant Shipping (65 Naval War College International Law Studies) (Grunawalt ed., 1993).

116 The San Remo Manual subscribes to the position that an enemy merchant vessel must be part of the enemy's war-fighting effort before it acquires the character of a military target. San Remo, supra note 2, at 146-51. The US Navy, on the other hand, espouses that an enemy merchant vessel that is integrated into the war-sustaining as well as the war-fighting effort of the enemy is subject to attack, if complying with the London Protocol would endanger the mission of the attacking military vessel, submarine, or aircraft. NWP1-14M, supra note 3, paras. 8.2.2.2, 8.3.1, and 8.4.
See Heintschel von Heinegg, supra note 115, at 455.
132 Hague Convention XIII, supra note 71, at art. 2; San Remo Manual, supra note 2, at 173.

133 NWP 1-14M, supra note 3, para. 9.2.3.

134 See NWP1-14M, supra note 3, para. 9.2.3; Heitschel von Heinegg, supra note 115, at 453-54. See also Howard S. Levie, Mine Warfare at Sea 147 & n.40 (1992) (noting that Hague VIII does not explicitly limit the placement of mines on the high seas, but that their use must not deny high seas freedoms of navigation).

135 Hague VIII, supra note 127, art. 2. After the Vietnam War, the United States attempted to remove approximately 8,000 mines it placed in North Vietnamese waters. Heintschel von Heinegg, supra note 115, at 456, n. 270.

136 The infamous Trojan horse is a classic example of a legal ruse. An example of a false communication occurred during the Battle of Midway. US Forces had broken the Japanese code and knew an attack was forthcoming, but did not know where because the Japanese were using a codeword for the objective. The Navy transmitted false signals regarding the water supply at Midway, and, when the information was retransmitted by the Japanese using the codeword, the US was able to identify Midway Island as the intended object. Another legal deception that is routinely employed during armed conflict is the feint. During Desert Storm, the Coalition forces feigned an amphibious assault on the shore of Kuwait, thus occupying Iraqi troops, while the 7th Corps swept the left flank, where the real offensive assault took place.

137 NWP 1-14M, supra note 3, paras. 12.3, 12.5.

138 Protected symbols include the red cross, red crescent, white flag, the UN flag, the Hague Convention symbol for the protection of cultural property, and an oblique red band on a white background that signifies a hospital zone or safe haven for noncombatants. Additional Protocol I, supra note 123, art. 37-38. Distinctive emblems are reproduced in Fleck, supra note 76, at 553-54.

139 For restrictions on perfidy, see Convention Respecting the Laws and Customs of War on Land, Oct. 18, 1907, art. 23 (b)(f), 36 Stat. 2277, 205 Consol T.S. 277 (Hague IV); Additional Protocol I, supra note 123, arts. 37-38, 44, 85.

140 During the Falkland War, both Argentina and Great Britain declared war zones around the Falkland Islands. Iran and Iraq, likewise, declared exclusionary zones during the 1980-1988 Gulf Tanker War, although they both impermissibly used them as "free-fire" zones, targeting anything that moved in the other's area. See Russo, supra note 102, at 389-92.

141 Conversely, the mere fact that a valid military target is located outside an exclusion or war zone does not make the target immune from attack. During the Falkland War, Argentina claimed that the sinking of the warship Belgrano outside the war zone established by the British was illegal. This is an incorrect assertion; as a warship of the enemy the Belgrano constituted a valid military target regardless of its location.

142 Id.

143 NWP 1-14M, supra note 3, para. 7.8.


145 Declaration of London, supra note 103, art. 18.

146 Declaration Respecting Maritime Laws (Declaration of Paris), Mar. 30, 1856, para. 4, 115 Parry's T.S. 1, reprinted in J. Moore, A Digest of International Law 561 (1906).

147 See Declaration of London, supra note 103, arts. 2, 3, 5, 9, 11, & 16. A belligerent routinely provides neutrals with a 24-hour grace period, allowing them to depart port, before putting a blockade into effect. Also, a belligerent
expends considerable effort in notifying the world of its blockade. The form of the notice is irrelevant, but to take action against someone who breaches the zone, the belligerent must prove that the alleged violator had notice of its existence. Additionally, a belligerent need not maintain a continuous on-scene presence or block every possible approach to establish an effective blockade, but it must be more than a paper blockade. Finally, the belligerent must enforce the blockade against all vessels, including those owned or operated by allies.

148 The last traditional blockade, employing forces on scene to enforce the zone, was established by the United States in Korea in 1951. After Korea, the United States began to enforce zones using long range missiles and mines, such as the mining of Haiphong Harbor in Vietnam.

149 In selecting a weapon system, the commander must always remember the principle of distinction and target discrimination. If torpedoes are used, they must sink or go inert after completion of their run. See Hague VIII, supra note 127, at art. 1(3).
Taming Shiva: Applying International Law to Nuclear Operations

COLONEL CHARLES J. DUNLAP, JR., USAF

I am become death, the destroyer of worlds.

Scientist J. Robert Oppenheimer quoting from the Hindu text, the Bhagavad-Gita, at the first atom bomb test in from the Hindu text, the 1945. /1/

I. INTRODUCTION

Like the Hindu deity Shiva, a nuclear weapon has inherent duality: it can be a "destroyer," as was demonstrated at the end of World War II, or a "creator," as has been proven thereafter. /2/ Specifically, since the advent of these weapons in 1945, an era has been produced that is free of the kind of savage global conflicts that twice visited the world this century - conflicts whose monstrous cost totaled more than 87 million lives. /3/

Despite the relative peace of the nuclear-weapons' age, General George Lee Butler, the former Commander in Chief (CINCSTRAT) of United States Strategic Command (USSTRATCOM), declared in a December 1996 interview with the Washington Post that nuclear weapons were "morally indefensible. /4/ Although General Butler later incongruously maintained that he was not calling for immediate, unilateral nuclear disarmament, /5/ his assertion, nevertheless, should be of great concern not only to judge advocates practicing operations law, but indeed to all members of the armed forces.

General Butler's allegation of moral indefensibility, if unanswered, has the dangerous potential to undermine America's nuclear deterrent. While persons subject to the Uniform Code of Military Justice are obliged to obey lawful orders even if they conflict with their individual consciences, /6/ Butler's assertion questions the very legality of such orders.

Even more troubling, his manifesto assaults the ethos of our armed forces - an ethos upon which America's future warfighting success depends. The Chairman of the Joint Chiefs of Staff predicts in Joint Vision 2010 that "success [in future conflicts] will depend ... upon the ... moral strengths of the individual soldier, sailor, airman, and marine . . . . We will build upon the enduring foundation of... core values and high ethical standards." /7/

For a variety of reasons, nuclear weapons already present profound moral issues with the potential to impact military operations /8/ Obviously, when a military leader of General Butler's stature makes such a claim that he did, the situation becomes more even more exacerbated and conceivably divisive. In its worst extrapolation, moral uncertainty is introduced into the
minds of thousands of conscientious and honorable men and women upon whom America's nuclear deterrent relies uncertainty that could manifest itself at the worst possible time for the Nation. /9/

What might such uncertainty mean for deterrence? The experts tell us that "[t]o deter a nuclear attack, retaliation must be perceived as likely. . . ."/10/ If an enemy perceives that our forces /11/ are too psychologically encumbered by the kind of moral dilemma General Butler's pronouncement encourages to fully respond to an attack, then the adversary may discern an advantage in making one.

Consequently, this article has three purposes: first, it intends to counter General Butler's claim of moral indefensibility by explaining the legal and ethical norms within which U.S. nuclear forces operate. Second, it aims to briefly introduce the practitioner to some of the major legal issues associated with nuclear weapons, as well as to the procedures by which legal advice is incorporated into the planning process. Third, it will discuss practical lessons learned from GLOBAL GUARDIAN 97, America's premier strategic nuclear exercise. This article will conclude by contending that a robust mechanism is in place to ensure that the moral and ethical standards of the rule of law are fully inculcated into America's nuclear deterrent. /12/

II. LEGALITY OF NUCLEAR WEAPONS

As many practitioners know, the United States has always insisted that nuclear weapons are not inherently unlawful instrumentalities of armed conflict." From time to time, however, elements of the international community have questioned this premise. For example, the United Nations General Assembly has passed a number of non-binding resolutions that have condemned nuclear weapons. /14/

Importantly, the International Court of Justice (ICJ), the judicial arm of the United Nations, issued an advisory opinion in 1996 that addressed the legality of the threat or use of nuclear weapons. /15/ While the ICJ decision does not create a binding precedent in the same sense as a U.S. appellate court, /16/ it is influential in the court of world opinion and, indeed, may be accepted by a considerable number of countries as an expression of customary international law. /17/

The ICJ determined that no existing rule of international law prohibits the use of nuclear weapons in conflict. /18/ Although it concluded that their employment would "generally be contrary to rules of international law applicable to armed conflict," the court nevertheless found it could not say that such use was necessarily illegal "in self-defense in which the very survival of a State would be at stake." /19/ Of interest to the practitioner is the court's use of the phrase "a State" instead of "the State." This suggests that the use of nuclear weapons is not limited to the survival of the nuclear-weapons state itself, but that they also could be employed in appropriate circumstances in the collective self-defense of an non-nuclear ally. /20/

More problematic is determining exactly what circumstances and at what point along the continuum of conflict does the "survival" of a state become at stake. /21/ Moreover, what precisely does "survival" of a state mean? Though beyond the scope of this article, one might fairly conclude that, given the UN Charter's emphasis on self-determination and support for the rule of law, "survival" could reasonably be interpreted broadly enough to include freedom from the intense coercion arising from any use of weapons of mass destruction or from an overwhelming conventional threat. Therefore, the ICJ's decision is not necessarily at odds with U.S. doctrine. /22/
The most important implication of the ICJ case for U.S. legal advisors and planners is its reflection of the international community's widely differing views as to the propriety of nuclear weapons. Some allies or coalition partners in a given campaign might, for example, decline to support a nuclear mission under some or any circumstances despite the fact that they are full, cooperative partners in conventional operations. /23/

III. THE LAW OF ARMED CONFLICT (LOAC)

However ambiguous the ICJ was in other areas, there was no equivocation on its conclusion that any use of nuclear weapons must conform to applicable requirements of international law, and these would include the LOAC concepts of discrimination, military necessity, and proportionality. /24/ This presents little difficulty for American planners as the United States has "long taken the position that various principles of the international law of armed conflict would apply to the use of nuclear weapons as well as other means and methods of warfare." /25/

Still, any discussion of nuclear weapons is complicated by the widespread but mistaken belief that their destructive potential makes it impossible to apply LOAC principles. Actually, modern technologies and methodologies afford planners a number of tools helpful to LOAC compliance. /26/ For example, Joint Publication 3-12.1, Doctrine for Joint Theater Nuclear Operations /27/ notes that by reducing weapon yield, improving accuracy through delivery system selection, employing multiple small weapons (as opposed to a single, large device), adjusting the height of burst, and offsetting the desired ground zero, collateral damage can be minimized consistent with military objectives. /28/ A working knowledge of these planning options, along with a general understanding of nuclear weapons themselves, /29/ is extremely helpful to judge advocates tasked to provide LOAC advice for these highly-complex operations.

Additionally, USSTRATCOM's Strategic War Planning System (SWPS) can, among other things, model the probability of arrival, probability of damage, and overall damage expectancy of a given weapon delivered on a selected target by a designated platform. Of particular importance to practitioners, the system can also project expected numbers of casualties, fatalities, and population-at-risk based on information drawn from the Joint Resource Assessment Data Base. /30/ However, SWPS operates within certain parameters and, consequently, the legal advisor must understand its limitations and evaluate the data accordingly. Modeling and decision support systems do not - and must not - supplant the commander's intuition in the execution of the warfighting art. It is vital that the practitioner avoid an overly mechanistic application of computer modeling data; it must not become a substitute for a holistic LOAC analysis. /31/

Despite such efforts it is nevertheless true that attacks on certain targets would likely result in sizable civilian casualties. It should be recalled, however, that LOAC places responsibilities for minimizing civilian casualties not just on the attacker, but on the defender as well. That responsibility extends to exercising "care to separate individual civilians and the civilian population as such from the vicinity of military objectives." /32/ Where the defender fails to exercise such care, the primary culpability for collateral civilian casualties lies with him, so long as the attacker continues to work to minimize civilian casualties as much as is practicable under the circumstances.

Legal advisors should likewise be aware that while the U.S. does not target populations per se, /33/ it reserves the right to do so under the limited circumstance of belligerent reprisal. /34/ The U.S. (along with other declared nuclear powers) insists that Protocol I to the Geneva Conventions /35/ does not apply to nuclear weapons. /36/ Hence, prohibitions contained in Protocol I forbidding reprisals against civilians are not, in the U.S. view, applicable to nuclear operations. /37/
Parenthetically, James W. Child observes in Nuclear War: The Moral Dimension that "people have a duty to restrain their government from committing nuclear aggression and if they fail in that duty, their absolute immunity as noncombatants is undermined." /38/

Finally, legal advisors must understand the special political and psychological dimensions of nuclear weapons. Although using nuclear - or any other - weapons merely to terrorize noncombatant civilians is contrary to international law, affecting the mental state of an adversary, degrading his morale, and eroding his will to continue the conflict, can all constitute legitimate military objectives. /39/ The difficulty, as Geoffrey Best notes, is reliably quantifying such amorphous and often quite culturally-specific psychological concepts to the point where one could reasonably conclude before the attack that

a "definite military advantage" would be achieved. /40/

To avoid such dilemmas, Joint Pub 3-12.1 considers, for example, affecting an adversary's "[p]erception of US will and resolve" as an employment (as opposed to targeting) consideration. /41/ In other words, under U.S. doctrine a particular target must first be justified in orthodox military terms independent of the psychological or political 'message' the use of nuclear weapons might produce.

IV. SPECIAL ISSUES

The exceptional nature of nuclear weapons raises special issues of international law that are beyond the usual LOAC considerations. These include:

A. Arms Control and Related Agreements.

A myriad of international agreements exist which in some way touch upon nuclear weapons. /42/ In particular, the Strategic Arms Reduction Treaty (START I) /43/ sets specified limits on the kinds of nuclear strategic systems the U.S. may possess. /44/ Other agreements place restrictions as well. The Outer Space Treaty, /45/ for example, forbids the orbiting or installation (but not transit) of nuclear weapons in space. Similarly, a growing number of terrestrial nuclear-weapon-free zones (NWFZ) agreements have been concluded. /46/

The U.S. is a party to NWFZ agreements which exist for Antarctica, Latin America, Africa, the South Pacific, and the sea-bed. /47/ Usually the U.S. and other nuclear weapons states commit "not to test nuclear weapons inside the zone, not to use or threaten to use the weapons against any treaty or protocol party inside its territory or territorial sea, and not to station, develop, or manufacture nuclear weapons inside the zone." /48/ The U.S., however, considers that none of these agreements compromise freedom of navigation, overflight, and similar rights which otherwise exist. /49/ Nevertheless, judge advocates should be aware that some nations have a different interpretation in this regard. /50/

As noted above with regard to NWFZ agreements, the Nuclear Nonproliferation Treaty (NPT)," which was extended for an indefinite period in 1995, presents the rather unique issue of "negative security assurances. /51/ Separate from the text of the treaty itself, the U.S. and other nuclear weapons states foreswore - subject to certain conditions - the use of nuclear weapons against non-nuclear treaty parties. Specifically, the U.S. version of the declaration provided in connection with the NPT extension states:
The United States reaffirms that it will not use nuclear weapons against any non-nuclear-weapon States Parties to the Treaty on the Non Proliferation of Nuclear Weapons except in the case of invasion or any other attack on the United States, its territories, its armed forces, its allies, or on a State towards which it has a security commitment, carried out or sustained by such non-nuclear-weapon State in association or alliance with a nuclear weapons State. /52/

While this statement represents U.S. declaratory policy, it does not equate to a binding international agreement although at least one expert argues to the contrary. /53/ Nor does it preclude the application of the belligerent reprisal doctrine /54/ in the event, for example, of the use by a treaty party of a non nuclear but unlawful weapon of mass destruction. /55/

B. Overflight

As with any military operation, judge advocates must be concerned with overflight issues. Violations of national airspace are an infringement of the overflown nation's sovereignty and may be opposed by force. Moreover, nations asserting neutrality in a given conflict may feel obliged to take military action against intruders in order to preserve their neutral status. /56/ Still, such encroachments generally do not constitute acts of aggression within the meaning of Article 2(4) of the United Nations Charter. Thus, overflight violations - even as part of a military combat operation - do not per se sustain a Nuremberg-like charge of aggression. /57/

Ordinarily, of course, overflight permission will be sought. /58/ For many of the reasons suggested above, this effort may be complicated by the international community's divergent views of the legality of nuclear weapons. When nuclear operations are in support of a geographic combatant command, it is the responsibility of that organization to ensure that the necessary overflight permissions are obtained. The supported command also must secure any overseas staging authorizations that a particular plan might require.

A further problem is presented by the overflight of ballistic missiles because there is no universally accepted definition of the upward extent of national sovereignty. /59/ There appears to be consensus, however, that systems in orbit are beyond the territorial jurisdiction of particular states. /60/ Accordingly, overflight of ballistic missiles, at least to the extent they are traversing space at an altitude above the lowest point at which artificial satellites can be placed in orbit without free-falling to earth, is more of a political than legal issue. Legal advisors must, therefore, be well-versed in the relevant political-military environment.

C. Civilian Control

U.S. nuclear forces operate under strict civilian control. Directing the employment of U.S. nuclear weapons "requires the explicit decision of the President." /61/ In this respect, American practice aligns with that of most nuclear weapons states as historian Martin van Creveld observes:

So far as we know, in every country that built the [nuclear] bomb the existing chain of command was bypassed or modified in favor of direct control by the head of state. Either the nuclear arsenal was entrusted to a separate organization considered politically reliable . . . or else technical arrangements, known as Positive Action Links ... were introduced so that the military could not fire them on their own initiative even if they wanted to. /62/
Absent Presidential direction, U.S. military forces cannot use nuclear weapons, even in self-defense. The Atomic Energy Act adds a further measure of security by mandating civilian control over every aspect of nuclear weapons production. /63/

V. PRACTICUM

Following a classified 1995 study by the USSTRATCOM legal staff, a number of steps were taken to improve the incorporation of legal advice into the nuclear planning process. These changes culminated in what CINCSTRAT called an "unparalleled" level of integration of law into GLOBAL GUARDIAN 97, the strategic nuclear exercise which took place in November 1996. A number of important lessons learned emerged from that exercise.

A. Operators must be aware of the specific obligations to incorporate legal reviews into nuclear operations planning on the same basis as conventional operations planning.

DOD policy has never made any distinction between conventional and nuclear operations when it required compliance with the law of war in the conduct of military operations. /64/ The practical application of this policy, however, was greatly facilitated by the new edition of a Chairman, Joint Chiefs of Staff instruction which specifically requires combatant command legal advisors to review "pre-planned and adaptively planned strategic targets." /65/ This review covers compliance with DOD policy, as well as domestic and international law.

The February 1996 publication Joint Pub 3-12.1 /66/ was also helpful. That document is replete with references to the applicability and importance of LOAC and, accordingly, it served to orient planners and operators to the role of legal advisors.

B. The special nature of nuclear operations requires customized training for both operators and legal staffs.

Because of the many unique applications of international law in the nuclear operations' context, USSTRATCOM's LOAC training was completely revamped prior to GLOBAL GUARDIAN 97. A classified advanced curriculum aimed at operators and others directly involved in nuclear operations augmented the traditional LOAC briefing. Overall, 96% of command personnel were trained prior to the exercise. Specialized training was also provided to senior officers at USSTRATCOM's Task Force commanders' conference in October 1996.

Like the operators, judge advocates and other legal personnel needed additional training to support nuclear operations. Besides being trained as to the special issues already mentioned, designated personnel also needed to become familiar with the policy guidance applicable to nuclear strikes found in such documents as National Security Directives, the Policy Guidance for Nuclear Weapons Employment, and the Joint Strategic Capabilities Plan (Annex C), as well as theater-specific plans.

To meet the requirement for specialized training for its legal personnel, USSTRATCOM conducted in-house training sessions, sometimes with the assistance of representatives of the Plans and Policy Directorate. In addition, that Directorate produced a customized glossary of terms and acronyms applicable to nuclear operations. USSTRATCOM judge advocates, in turn, provided
telephonic briefings (along with selected nuclear-operations oriented legal materials) to their counterparts on the legal staff of the supported geographic combatant command.

C. In order to provide timely advice, legal advisors must be immediately available to planners and others responsible for nuclear operations.

During the actual exercise, judge advocate and paralegal representation was found on USSTRATCOM's Senior Battle Staff, the Mobile Consolidated Command Center and, on a 24-hour basis, the Support Battle Staff. Judge advocates were also inaugurated into meetings of the Nuclear Planning Element (NPE)." The NPE composition includes the weapons systems experts who build from the bottom up the required technical information for an attack. Constant interaction with these warfighters was especially critical as it afforded the opportunity to provide planners with real-time advice for the adaptive planning process.

Of particular note was USSTRATCOM's employment, for the first time, of a reserve judge advocate to help man the Support Battle Staff. This required a taxing months-long process to obtain the necessary security clearances but proved essential to providing the necessary coverage. It once again underlines how important it is for all operational lawyers, active and reserve, to initiate the process to obtain elevated security clearances as early as possible.

D. Effective legal support of theater nuclear operations requires the involvement of the legal staffs of the supported geographic CINC.

While USSTRATCOM legal advisors are primarily responsible for the review of the Single Integrated Operation Plan (SIOP), meeting the legal needs of theater support operations require a coordinated effort of USSTRATCOM legal advisors and their counterparts on the staff of the supported geographic commands.

During GLOBAL GUARDIAN 97, judge advocates were included in the exercise cell of the supported geographic CINC. This development vastly enhanced the flow of information concerning legal issues peculiar to nuclear weapons. In particular, it helped to secure appropriate LOAC assessments and ensured that the special issues that arise in the nuclear operations arena were highlighted in a timely manner to the geographic command staff. The theater CINC's legal staff was also a critical source of theater-specific information required by USSTRATCOM's legal staff.

VI. CONCLUSION

This article demonstrates that nuclear weapons, like other sophisticated instrumentalities of modern war, are amenable to the law of armed conflict in both a theoretical and practical sense. This by no means downplays the horrific capability of these weapons; rather, it serves to remind us of the awesome responsibilities legal advisors must bear. It is crucially important that all military personnel involved with America's nuclear deterrent understand that a structure exists that ensures that plans involving nuclear weapons conform with the rule of law.

Of equal importance is explaining that there is, in fact, a direct relationship between conformance with the rule of law and moral rectitude. Professor Best spells this out: "It must never be forgotten that the law of war, wherever it began at all, began mainly as a matter of
religion and ethics ... It began in ethics and it has kept one foot in ethics ever since." In short, where society's law is observed, one may rightly contend that society's moral standards are likewise respected.

Clearly, whether or not nuclear weapons are "morally indefensible" as General Butler claims wholly depends upon the purpose for which they might be employed and the manner of such employment. Having discussed the latter we must consider the former - is there anything worth defending with a nuclear weapon? What moral rights do we have? Professor Child offers this analysis of the nuclear conundrum:

We have a right to protect ourselves and preserve our society and its traditions. No matter the enormity of harm a potential aggressor might heap upon us and the rest of the planet, that right is not expunged. It is morally correct to put any such aggressor on notice. We know our rights to defend ourselves and shall exercise them. Knowing what we believe about our moral rights, any potential aggressor will know which course prudence dictates. So in the end, this deeper moral understanding of our position might help prevent the most colossal of all catastrophes. /72/

In a very real sense, the issue General Butler raises goes to the more fundamental question of the morality of war itself. For some, war is never morally defensible; others live by the motto "live free or die" /73/ John Stuart Mill captured the essence of this dichotomy in the following passage:

War is an ugly thing, but not the ugliest of things: the decayed and degraded state of moral and patriotic feeling which thinks nothing worth a war, is worse .... A man who has nothing which he cares about more than he does about his personal safety is a miserable creature who has no chance of being free, unless made and kept so by ... better men than himself. /74/

Fortunately for the nation, there are yet such "better" men - and women - manning the Nation's nuclear deterrent. It is their dedication that serves as a clear warning to potential adversaries not to miscalculate the resolve of the U.S. military. Should deterrence fail, our forces are - and must continue to be - ready to immediately execute orders of the national command authorities to employ nuclear weapons. Those that carry this gravest of responsibilities are entitled to be secure in the knowledge that plans they must execute honor the highest ideals of the country they have sworn to defend. They deserve nothing less from their leaders.

* Colonel Dunlap (B.A. St. Joseph's University; J.D. Villanova University) is the Staff Judge Advocate, U.S. Strategic Command, Offutt Air Force Base, Nebraska. He is a member of the Pennsylvania State Bar.

1 As quoted in THE MACMILLAN DICTIONARY OF POLITICAL QUOTATIONS 459 (Lewis D. Eigen and Jonathan P. Siegel, Eds. 1993).

2 For a discussion of the duality of Shiva as a "destroyer" and "creator" see THE WORLD'S GREAT RELIGIONS 16 (Sam Welles et al., eds., 1957).

3 Military historian Martin Van Creveld observes that, ironically, "in every region where [nuclear weapons] have been introduced, large-scale, interstate war has as good as disappeared." Martin Van


6 MANUAL FOR COURTS-MARTIAL UNITED STATES, ch. IV, para. 14c(2)(a)(iii) (1995) states that "dictates of a person's conscience, religion, or personal philosophy cannot justify or excuse the disobedience of an otherwise lawful order."


8 For example, in 1983, U.S. Catholic Bishops issued a letter entitled *The Challenge of Peace. God's Promise and Our Response* which discussed nuclear war and nuclear deterrence reprinted in *WAR, MORALITY, AND THE MILITARY PROFESSION* 463 (Malham M. Waikin, ed. 1983). Although the bishops accept the morality of the possession of nuclear weapons for deterrence as an interim step towards complete disarmament, and seem to leave open the possibility that an extremely limited, other-than-first-use employment against purely military targets may be moral, they nevertheless say that "there must be no misunderstanding of our profound skepticism about the moral acceptability of any use of nuclear weapons." Id., at 482. For a critique of the Bishops' letter see John W. Coffey, *The American Bishops on War and Peace* in *PARAMETERS OF MILITARY ETHICS* (Lloyd J. Matthews, ed., 1989), at 28.

9 To illustrate a circumstance where a moral conundrum might emerge, one analyst of the Bishops' letter notes that approximately thirty percent of the armed forces are comprised of Catholics, and further observes:

   Individual soldiers who are Roman Catholic are confronted with a serious choice. If they are going to follow the Bishops' teaching, they will be compelled to disobey an order to fire a countervalue nuclear weapon. An individual may have no crisis of conscience during time of peace. If, however, he is serving in a position in which he could be ordered to launch a countervalue, how would he respond if the order were issued? *Until the time arrives, the answer to the question cannot be known.* By the same token no Roman Catholic can morally issue an order to launch countervalue nuclear weapons. The same choices, tensions, and questions apply to those issuing the orders.


11 In addition to adverse effects on military forces, public support for deterrence can also be eroded if there is a perception that it is based on an immoral and unlawful means. Compare W. Michael Reisman and Chris T. Antoniou, *THE LAWS OF WAR* xxiv (1994):

   In modern popular democracies, even a limited armed conflict requires a substantial base of public support. That support can erode or even reverse itself rapidly, no matter how worthy the political objective, if people believe that the war is being conducted in an unfair, inhumane, or iniquitous way.

   Id.
An established goal and objective of USSTRATCOM is to "emphasize the role of law as a guiding force in our national security strategy." USSTRATCOM Goals and Objectives, para. B.4 (1996) (on file with the author).


15 Legality of the Threat or Use of Nuclear Weapons, General List No. 95 (Advisory Opinion of the International Court of Justice, July 8, 1996) [hereinafter ICJ op.]. For an excellent analysis of the case see Michael N. Schmitt, The International Court of Justice and the Use of Nuclear Weapons (1997) (draft, forthcoming in the NAVAL WAR COLLEGE REVIEW, Fall 1997).

16 See Restatement (Third) of the Foreign Relations Law of the United States § 903 cmt. H, illus. 12 (advisory opinions are binding only when the parties agree that they will be decisive).

17 For a discussion of "customary international law" see Reisman and Antoniou, supra note 12, at xix-xxi.

18 ICJ op., supra note 15, at para. 105(2)B (emphasis added).

19 Id. at para. 105(2)E.


22 Chairman of the Joint Chiefs of Staff, Joint Publication 3-12, Doctrine for Joint Nuclear Operations, December 1995, at [hereinafter cited as Joint Pub 3-12] states that "the fundamental purpose of US nuclear forces is to deter the use of weapons of mass destruction (WMD), particularly nuclear weapons, and to serve as a hedge against the emergence of an overwhelming conventional threat." Id. at v.


24 ICJ op. supra note 15, at para. 105(2)D. See also Written Statement of the Government of the United States of America before the International Court of Justice, June 14, 1994 (Request by the World Health Organization for an Advisory Opinion on the Question of the Legality Under International Law of the Use of Nuclear Weapons by a State in War or Other Armed Conflict), at 26-31 (discussing the application of various LOAC principles to nuclear operations) [hereinafter U.S. ICJ stmt.]


26 George Bunn, the former general Counsel for the Arms Control and Disarmament Agency, argues that until the early 1970s, the U.S. lacked the technology to "permit significant discrimination between population and other targets in or near cities." See George Bunn, US Law of Nuclear Weapons, NAVAL WAR COLLEGE REVIEW, Fall 1984, at 58-59.
27 Chairman of the Joint Chiefs of Staff, Joint Publication 3-12.1, Doctrine for Joint Theater Nuclear Operations, 9 February 1996, [hereinafter Joint Pub 3-12.1].

28 Id., at 111-2 and 111-3.

20 For a very brief explanation of nuclear weapons technology see Luttwak and Koehl, supra note 10.

30 These terms have specific definitions. For example, "casualties" are defined as the "estimated number of people who die or receive injuries that require medical treatment due to short term effects (6 months) of nuclear detonations." "Population at Risk" is defined as the "total civilian population in danger of dying, independent of shelter, from short term (6 months) effects of nuclear detonations." See Memorandum, Acronyms/Definitions Used in SIOP Analysis(U), USSTRATCOM Plans and Policy Directorate, Force Assessment Branch (April 1997) (on file with author).

31 Compare Glenn E. James, CHAOS THEORY: THE ESSENTIALS FOR MILITARY APPLICATIONS 57-95 (Newport Paper No. 10, Naval War College, 1996) (discussing the limitations of computer modeling).


33 For a historical overview of U.S. doctrine concerning population targeting, see Jeffrey Richelson, Population Targeting and U.S. Strategic Doctrine, in STRATEGIC NUCLEAR TARGETING (Desmond Ball and Jeffrey Richelson, eds., 1986) 234-249.

34 See U.S. ICJ Stmt, supra note 24, at 26, 31. "For the purpose of the law of armed conflict, reprisals are retaliation in the form of conduct that would otherwise be unlawful, resorted to by one belligerent in response to violations of the law of war by another belligerent." Id., at 31. Moreover, "[u]nder the customary law of armed conflict, reprisals may only be taken for the purpose of enforcing future compliance with [the] law, and must comply with certain rules limiting scope and effect" Id., citing U.S. Army, Field Manual 27-10, Law of Land Warfare (1956), at 177.


36 U.S. ICJ stmt. supra note 24, at 28-29. The U.S. reiterated and detailed this position in a later submission to the ICJ. See Written Comments of the Government of the United States of America on the Submissions of Other States before the International Court of Justice, June 20, 1995 (Request by the World Health Organization for an Advisory Opinion on the Question of the Legality Under International Law of the Use of Nuclear Weapons by a State in War or Other Armed Conflict) at 23-30.


39 See U.S. Navy, Annotated Supplement to the Commander's Handbook of the Law of Naval Operations, Naval Warfare Publication (NWP) 9 (Rev.A) (1989) para. 8.5.1.2 (discussing the prohibition on the bombardment for the sole purpose of terrorizing civilians) and Parks, supra note 32, at 142 (discussing the general proposition of psychological purposes as military objectives).


41 Joint Pub 3-12.1, supra note 27, at III-7.
42 For a listing of some of these agreements see Joint Pub 3-12 supra note 22 at Appendix A.


44 See generally Stewart M. Powell, Nuclear Arms Reductions Roll On, AIR FORCE MAGAZINE, December 1996, at 57.


47 Rosen, Id.

48 Id., at 47.

49 Lehman, supra note 25, at 542-546.

50 Rosen, supra note 46, at 57 (discussing claim of the former USSR that allowing transit was incompatible with a NWFZ).


52 Dep't of State, Statement of Secretary of State Warren Christopher, April 5, 1995.


54 See supra note 34.

55 Contra Bunn supra note 53.

56 Compare Green, supra note 25, at 260-261.


58 It has been widely reported that cruise missiles flew through Iranian airspace during the Gulf War without the explicit permission of the Iranian government. See Michael R. Gordon and General Bernard E. Trainor, THE GENERALS' WAR 116 (1995).

59 AFP 110-31, supra note 13, at para. 2-1h.

60 Id.

62 Van Creveld supra note 3, at 305.

63 See e.g. 42 U.S.C §2121 et seq.


65 Chairman Joint Chiefs of Staff Instruction (CJCSI) 5810.01, Implementation of the DOD Law of War Program, (August 1996), at para. 5c(4) (emphasis added).

66 Supra note 27.

67 For a general overview of nuclear war planning policies, see David Alan Rosenberg, Nuclear War Planning in THE LAWS OF WAR: CONSTRAINTS ON WARFARE IN THE WESTERN WORLD 160-190 (Michael Howard, George J. Andreopoulos, and Mark R. Shulman, eds., 1994).

68 See supra note 30.

69 For a discussion of the mission and organization of the Senior Battle Staff, the Support Battle Staff, and the Nuclear Planning Element see USSTRATCOM Directive 506-4, Crisis Staffing Procedures of the United States Strategic Command Fixed Command Center, 1 March 1996.

70 The Director for Operational Plans and Interoperability (J-7) also has this responsibility. CJCSI 5810.01 supra note 66, at para. 5a(2)(d). The SIOP is the "U.S. contingency plan for strategic nuclear war. The SIOP provides the president and the national command authorities with a variety of attack options, each with its own targets, timing, tactics, and force requirements." Luttwak and Koehl, supra note 10, at 533-534.

71 Best, supra note 40, at 289.

72 Child, supra note 38, at 173.

73 "Live free or die" is motto of the State of New Hampshire.

I. INTRODUCTION

Consider the following scenario: several years from now you are serving as a staff judge advocate during a wartime operation against a sophisticated opponent, Nation X. Your commander informs you that he is planning to attack the enemy using electronic means. Because Nation X is resupplying its forces using its rail transport system, he plans to "infect" /1/ the computer system that controls the rail system, with the aim of disrupting train schedules and hampering the enemy's logistic abilities. He also plans to electronically scramble patient records in enemy hospitals, to reduce hospital efficiency and perhaps even cause a few casualties among the wounded. Furthermore, the commander informs you that several years earlier, the U.S. placed "logic bombs" in some of the computers Nation X purchased, and he now plans to set these bombs off to disable this equipment. He does not know what Nation X is using the computers for or what enemy operations will be affected, but he is sure destroying them will cause some damage. Finally, the commander plans a remote, electronic takeover of the computer systems controlling a dam near the nation's capital. Once that is accomplished, he will order the floodgates open, sending torrents of water toward the capital city. After explaining the plans to you, he tells you his hi-tech attack plan will greatly shorten the war and result in fewer American casualties. He ends his description by asking "I just wanted to run that by you. Do you legal types have any problems with any of that?"

Most likely, upon hearing the commander's plan, a host of questions will rush through your mind. You know you need to analyze each proposed action to ensure compliance with the laws of war, but these technologies and tactics are different from any you have heard of before. You wonder whether the traditional analysis applies, or whether there are special rules for these hi tech measures of death and destruction. This article will examine information warfare (IW): its technologies, tactics and potential effects, and discuss how IW should be analyzed under the international Law of Armed Conflict (LOAC). /2/

Currently, the U.S. military is placing great emphasis on the development of information warfare weapons, which take advantage of U.S. strengths in microprocessing and weapons design. These weapons are likely to cause profound changes in U.S. military capability and strategy in the coming decades. Unfortunately, this is an area that judge advocates have thought little about. Most questions about information warfare are still technical in nature, such as determining what we now have the technology to do, and forecasting what will be achievable in the future. However, if judge advocates do not begin thinking about these weapons now, we are likely to be caught off guard when asked by a commander whether a proposed use of an IW weapon is legal. Judge advocates will need a solid understanding of what the capabilities of these new weapons are, expertise in LOAC /3/ and the ability to judge the legality of an information warfare attack in a fact-specific scenario. As a practical matter, this means being able to apply the principles of LOAC to a type of warfare that was not even conceived of at the time LOAC was developed.

II. THE JUDGE ADVOCATE'S ROLE

Judge advocates are involved both in the evaluation of new weapons and the decision to use them. Attorneys are already involved in the weapons evaluation process. The Air Force puts every new weapon system through a legal review. This process is designed to ensure that weapons comply with
LOAC before they are approved for use in the field, and judge advocates are charged with conducting the review. /4/ Additionally, before any major attack during an actual conflict, a senior judge advocate is usually consulted to ensure that the attack does not run afoul of LOAC. /5/ Numerous senior officers have noted the extensive legal review given to target selection during the Gulf War. /6/ The point at which judge advocates will be asked their opinions on an information warfare attack is swiftly approaching. It behooves all Air Force attorneys not only to know the principles of LOAC but to understand the kinds of weapons that are being developed, in the hopes that they will be able to apply LOAC to evaluate the legality of their use in a proposed attack. /7/ The judge advocate in the field may be called upon to quickly determine whether an information warfare attack upon a given target runs afoul of the basic principles of LOAC, which include military necessity, proportionality and chivalry (presumably, the basic legality of the weapon would have been determined already, at the time it was developed, so the fourth LOAC principle, "humanity" is the concern of the Operations Law Division attorney, not the field attorney.) /8/ Though these weapons would have already passed an initial legality review conducted at the time they were developed, an attorney in the field needs to keep in mind that it is possible to use legal weapons in an illegal manner, a result to be avoided.

Many types of weapons have been developed since LOAC was formed, and the Air Force has subjected them all to review. This reflects a fundamental assumption that not all weapons are legal, and not all uses of weapons are legal. There is no reason to assume IW weapons are an exception. When LOAC applies to an operation, it applies to information warfare activities undertaken as part of that operation. /9/ As will be discussed below, IW weapons are likely to be commonly used in the future. Because there is a full spectrum of possibilities between 'war' and 'peace' it is sometimes difficult to determine at what point toward the 'war' end of the spectrum the obligations of LOAC attain full force. The general rule is that LOAC applies when a nation engages in an "armed attack" against another. As a result, the legal issue becomes: what constitutes an "attack" in the information realm?

III. DEFINING INFORMATION WARFARE

Before a judge advocate can begin a legal analysis of the use of IW, he must have a good understanding of its definition. /10/ The term represents a rapidly evolving, but as yet imprecisely defined field. /11/ Defining it is difficult because the term can be applied to everything from basic electronic warfare, which has been in the military lexicon for several decades, to large-scale psychological campaigns and even futuristic, theoretical descriptions of attack modes that will not be possible for several decades, if ever. It is difficult to narrow it to a simple definition, and it often gets lumped with other concepts into an amalgamation known as "Operations Other Than War" (OOTW). Cyberwar, Netwar, and others terms are used, often meaning different things to different analysts, using different contexts. Perhaps the best definition is one of the simplest attempted: "Information-based warfare is that which utilizes information, especially computer-processed information, to impose one's will on the enemy." /12/

The Air Force currently defines IW as "any action to deny, exploit, corrupt or destroy the enemy's information and its functions while protecting Air Force assets against those actions and exploiting its own military information operations." /13/ This definition seems deliberately vague, and it highlights the Air Force's interest in any and all possibilities that might develop." A more constrictive definition might forestall promising research paths, and the statement is careful to indicate that the Air Force views IW as both an offensive and defensive tool. The exact outline of what technology will soon make possible is not yet known, thus justifying the Air Force's open ended definition.

While not wanting to foreclose any possible avenues, the Air Force currently envisions three principal objectives for IW: (1) control the information realm while protecting our own military
information from enemy action (Counter-information); (2) exploit control of information to employ IW against the adversary (Command and Control Attack); and (3) enhance our overall force effectiveness by fully developing military information operations (Information Operations). /15/

In the past 20 years, we have moved from the concept of electronic warfare (a glorified way of describing smart bombs) to the idea of command and control warfare, to full-fledged information warfare. Many still think of IW as being synonymous with command and control warfare, or C2W, but the term is far broader. /16/ C2W is a limited concept because it envisions using new technology to assist in the use of traditional weapons and traditional means of attack. It represents using a "digital battlefield," but a battlefield in which the actual fighting is still done with currently existing weaponry. It is comparable to trading an analog watch for a digital watch. The display may be different, but the information and the technology (based on the vibration of quartz) are still the same. C2W is limited because it fails to encompass the fundamentally new modes of attack that IW will make possible. /17/ There is growing evidence that IW will blossom into a full-fledged "Revolution in Military Affairs" (RMA) /18/ and thus change forever the way wars are fought. /19/ Such a revolution will necessitate new doctrine and new organizations. /20/ Some have even proposed that a specialized military branch will be required, /21/ though this seems wildly premature. /22/ Even if a separate Information Warfare fighting arm is unlikely, the implication of such weapons will probably cause a vast reorganization of the military. /23/ On the whole, the effect of such weapons will likely parallel the impact automation made on the nation's largest corporations: a flattening of the hierarchy.

A. Why it Matters

The topic of information warfare is important to the military now, because it represents the military's attempt to understand and exploit the great technological changes sweeping the world. It is also seen as a possible means by which the United States can maintain its position as the world's most militarily powerful nation, even as it downsizes its military forces. The revolutionary promise of IW is that in the not-too-distant future, the U.S. will not need large standing forces. While the pointed end of America's spear will be smaller, the hope is that it will be "far sharper and able to pierce the opponent's jugular vein on the first throw." /24/ It also represents an opportunity to both decrease our response time and to increase an enemy's response time by confusing it, or paralyzing its observation, orientation, decision, action (OODA) loop by altering or denying information. /25/ IW is of interest to all military branches, but to the Air Force even more than its sister services because IW is more congruent with the existing AF mission than those of other services. An information warfare attack would literally be as fast as the speed of light, cross national boundaries effortlessly, be undetectable in many cases, and rely on the most advanced technology. While not a perfect match to the existing AF mission, it's much closer than to the roles other services traditionally play. Additionally, many IW targets will be traditional air power targets. For example, the command and control centers that allow a nation to communicate to its own forces and to the outside world are typically located deep inside a nation's boundaries, thus making ground assault or naval engagement ineffective, if not impossible. The Air Force is most often tasked with destroying an opponent's communications abilities, and hopefully the opponent's ability to wage offensive information warfare itself. /26/ In the future, information warfare may be viewed as an Air Force core competency.

Imagine a battlefield commander being able to cripple an enemy before an engagement begins by activating "logic bombs" placed into the circuitry of enemy machines when they were built, by their American (or possible allied) manufacturer. Such an attack could be carried out
against crucial military systems that depend on computer chips, as well as more prosaic devices, such as office machinery, thus reducing an enemy's logistical and administrative efficiency. /27/ Any device that is equipped with a microprocessor can be equipped with such a booby-trap, and they are virtually impossible to detect. Logic bombs are just one weapon in an new arsenal that will be made available to commanders in the coming decades. Other weapons being developed include the ability to impose a "technology blockade" on an enemy, which would prevent intelligence reports (or perhaps any outside news at all) from entering a certain region of the world. There is also a variety of computer viruses being developed, designed to cripple enemy computers or let the U.S. take surreptitious control of their functions.

The U.S. has been working its way up to this point for a long time. Throughout the past two decades, large expenditures of money have gone toward improvements in precision guided munitions (PGMs) as well as high information dependent platforms such as Aegis, AWACS, JSTARs, and soon, Unmanned Aerial Vehicle (UAV) contingents. However, all of these platforms use advanced information collection and processing in the service of delivering conventional weapons. The next generation of weaponry will extend these abilities, but will also include "pure" information warfare weaponry; that is, weaponry designed to directly attack the enemy by exploiting its dependence on electronic systems.

B. Institutionalization

Though information warfare is still in its infancy, it is quickly being institutionalized by the Department of Defense. New career fields are being established, and doctrine is being developed. /29/ There is now a Directorate for Information Warfare, and a School of Information Warfare and Strategy at National Defense University (NDU), Fort McNair. In June of 1995, NDU graduated its first class of 16 "infowar" officers, specially trained in everything from defending against computer attacks to using virtual reality in planning battle maneuvers. /30/ Each service has created its own separate institutions as well. The Air Force has established the Information Warfare Center (AFIWC) at the Air Intelligence Agency (Kelly AFB) to develop information warfare capabilities and to provide information warfare support to field commanders. Additionally, Air Combat Command has established an information warfare squadron at Shaw AFB, North Carolina. Its specific mission is to conduct information warfare activities. This listing only scratches the surface of the agencies, both old and new, which are now heavily involved in developing and conducting information warfare as an American warfighting specialty. The Electronic Industries Association has estimated that over the next decade, the federal government will spend more than a billion dollars on information warfare procurement, a sevenfold increase over previous levels. /31/ The services plan to make IW an operational option for commanders as soon as possible. For example, the Army's Signal Warfare Center in Warrenton, Virginia has already invited companies to develop computer viruses for battlefield operations. /32/

IV. INFORMATION WARFARE AND THE LAW OF ARMED CONFLICT

Given the growing importance of IW to Air Force doctrine, Air Force JAGS should become well-versed in IW, both its meaning and its lawful place in modern warfare. The logical starting point for a legal analysis of IW is using the existing framework of LOAC.

LOAC is a body of law that derives from several international treaties (specifically, the Hague and Geneva Conventions), as well as customary international law (law created by the custom and practice of civilized warring states, which is binding on all nations). It applies to all armed
conflicts between states (thus, civil wars or battles with terrorist groups are not covered.) Hague Law is concerned mainly with the means and methods of warfare, while Geneva Law is concerned with protecting persons involved in conflicts, such as POWs, the wounded, and civilians. This article deals mostly with LOAC in the context of Hague Law (sometimes called the "true" Law of War) because it addresses how new weapons should be used. /33/

From a commander's perspective, a chief purpose of LOAC is to inform him and his troops how much force they can use against the enemy before they have "crossed the line" and become war criminals. /34/

LOAC can be divided into several basic principles. /35/ Briefly, these concepts are military necessity, humanity, proportionality and chivalry. /36/ The first principle, military necessity, permits a military to use no more force than necessary to achieve the partial or complete submission of the enemy, with the least expenditure of life, time and physical resources. /37/ The Hague Convention of 1907, Article 22, protects human life by stating "The right of belligerents to adopt means of injuring the enemy is not unlimited." /38/ Article 23(g) does the same for property by stating "[it is especially forbidden] to destroy or seize the enemy's property, unless such destruction or seizure be imperatively demanded by the necessities of war." /39/

Obviously, commanders cannot always tell just how much force they will need to conclude an attack successfully, and there is no requirement that they know. They can make estimates, and even add a little as a safety margin. What they cannot do is deliberately apply more force than they believe will possibly be necessary, in hopes of killing rather than capturing enemy combatants or civilians. /40/ LOAC also insists that commanders discriminate between military objectives and civilian objects, while insisting that defenders separate civilians and civilian objects from military targets.

The second principle, humanity, prohibits "unnecessary suffering" through the use of any kind or degree of force not necessary for the purposes of war. For example, using bullets deliberately designed to cause especially painful wounds before they killed would violate this principle. It broadly outlaws the use of weapons that are designed to cause unnecessary suffering as well as specific weapons which have been outlawed by international treaties (such as certain poison, chemical, and bacteriological weapons). The humanity principle is what creates the judge advocate department's responsibility to review new weapons.

Another LOAC principle is proportionality, sometimes considered a subset of humanity. /41/ It requires military planners to take into consideration the extent of civilian destruction their actions will cause, and, to the extent consistent with military necessity, seek to avoid such casualties and destruction. /42/ In other words, civilian losses must be proportionate to the military advantages sought. /43/ The military advantage gained by attacking civilian structures is generally minuscule compared to the resulting loss of human life and culture, and thus runs afoul of proportionality. This is why attacking hospitals, schools, religious structures and other cultural institutions is banned, unless the enemy is taking advantage of the situation by hiding military assets there.

The last principle, chivalry, mandates the waging of war in accord with well-recognized formalities and courtesies. Whereas ruses are lawful in war, faking a surrender (called perfidy) violates this principle and is thus illegal, as is wearing the enemy's uniform to infiltrate his ranks. /44/ Chivalry can be thought of as outlawing "treachery" of any kind, though simply fooling an enemy, for example, by staging a mock operation, is perfectly legal. /45/
Violations of LOAC subjects individuals to criminal sanctions under national laws (as exist in the U.S.) and to international judgment (such as the Nuremberg War trials, and the current trials resulting from the war in Bosnia). Violations also invite reprisal, in the sense that opposing nations and troops are authorized to attack back in ways that are not ordinarily legal, to avenge a LOAC violation by the other side.

A. When Does LOAC Apply to Information Warfare?

While Information Warfare is a topic of great concern to the military, there is currently a mismatch between technical development and legal development. We know much more about what is now technologically possible than we know about what is acceptable, humane, or legal.

For instance, are there any circumstances which would invalidate a U.S. plan to introduce vulnerabilities into another nation's information systems, or to corrupt its data, or to destroy its information systems completely? How can we make sure the military results of our attacks are proportionate to the casualties and destruction they cause? How will the prohibition against perfidy (false surrender) apply to psychological operations, or electronic deception?

Because it was developed long before Information Warfare, LOAC and other international laws regarding the conduct of military campaigns are silent as to which information attacks are legal. However, one should not assume that because LOAC predates information warfare, it is not applicable. Many classes of weapons have been developed in the last century which could not have been conceived of when LOAC was being developed, yet LOAC has been consistently been applied to evaluate these weapons. It makes sense to apply them for the same fundamental reasons as led to development of LOAC in first place.

Asking whether an IW attack amounts to an "armed conflict" that triggers the application of LOAC depends on whether such an attack would meet the international definition of aggression, which has been defined by the United Nations as "the use of armed force by a State against the sovereignty, territorial integrity or political independence of another State, or in any other manner inconsistent with the Charter of the United Nations . . . ." The United Nations went on to provide specific examples of aggression, none of which included information warfare scenarios (hardly surprising, since the definitions were created in 1974). However, the list of examples provided was not exhaustive, so the absence of information warfare attack does not exclude them from the definition of aggression.

The ultimate question, then, is, "When would an IW attack constitute a use of `armed force'"? At this point, the concepts are too new and the technical possibilities are evolving too quickly to definitively categorize all information warfare attacks and to determine whether they constitute an armed attack. However, it seems particularly likely that an attack by electronic means would be considered equivalent to an armed attack in two cases: (1) Attacks using directed energy weapons (such as the proposed "HERFF" high energy gun); and (2) when the consequences of the attack are equivalent to the damage done by traditional weapons, (e.g. refineries destroyed or power grids disabled).

In this way, the principles of international law, including LOAC, will likely be made applicable to new information technologies by analogizing them to their closest pre-information age antecedents. This process of "law by analogy" is probably the easiest and most natural way to proceed, since people are accustomed to integrating new technology into established ways of doing
things. It is much more likely than the convening of new international conventions to explicitly evaluate information warfare attacks and proclaim their legitimacy or illegitimacy.

B. The Practical Application of the Law

In the past, computers were used mostly for informational activities, such as analysis. They were number crunchers. They stored, tabulated and analyzed reams of data, and allowed humans to see patterns and identify trends. They are now also widely used in transactional activities (such as facilitating stock purchases). While their use was confined to these informational and transactional activities, there were few ethical questions involved in attacking them, because they were not tied to human life in a direct way. Today, however, computers are not confined to these two traditional uses. They are not merely observers of the physical world; rather, they are increasingly used to control it. Activities involving the operation and control of essential physical and functional infrastructures, such as power grids, air traffic control systems, telecommunication and the like, are increasingly shifting from human or mechanical/electrical control to electronic/software control. 1/53/ This has two effects: it makes them tempting military targets, and it ties them closely to human lives. Because these computers will be vulnerable to attack from other computers, questions are raised about when it is appropriate to use IW to attack them.

The use of IW weapons will probably be justified in most of the situations where it would be acceptable to employ traditional weapons. For example, instead of dropping iron bombs on a command center, we could endeavor to cut off its power, introduce enough electromagnetic interference to make communications unreliable, import computer viruses into its control systems, or a combination of all of the above. Dropping an iron bomb on a command center does not present much of a LOAC problem, but other situations will undoubtedly arise which will be trickier. For example, when an information warfare strike is proposed against an enemy's civilian information system, an analysis must be made that applies the principles of necessity, proportionality, humanity and chivalry to the electronic attack. This is not to say that the attack cannot proceed even if there will be significant collateral "spillover" onto the civilian side. That is acceptable, but one must strive for proportionality and that cannot be done without considering the effect of the attack on the civilian population. Such analysis could lead to the conclusion that there is a better way to conduct the attack which has the virtue of damaging the enemy's military capability but leaves civilian functions intact, thus minimizing collateral damage. When an IW operation does constitute an "armed attack," LOAC demands that it be analyzed in the context of each of the four LOAC principles.

The principle of military necessity poses little problem to IW planners as long as the systems they are attacking are purely military targets. Because of our capacity to disable an enemy's information centers and thus blind him, such targets are increasingly seen as primary targets, even more so than the enemy's military units. 1/4 The U.S. is enhancing its power to "leapfrog" over traditional combat units, strike at their command and control centers, and then target the enemy combat units at a leisurely pace as they scramble for intelligence. If this is the case, it could well result in decreased casualties, because enemy units would be more likely to surrender after being cut off from their chain of command, and U.S. forces would have time to put on a display of force designed to convince them that surrender is their best option, rather than simply targeting and killing them.

One problem with military necessity to IW in the short term is that LOAC commands armies to use no more force than is necessary, but IW weapons are so new and unproved in battle that commanders cannot know with any confidence how much is enough. For example, if a commander wanted to disrupt enemy air operations by inserting a virus into the enemy's military air
traffic control network, he and his technical advisors would probably have to guess what computer defenses the enemy is using. Simply inserting a virus might not be enough, especially if the enemy is using redundant software coding techniques, or perhaps even has a redundant network standing by. In this scenario, the only method by which the commander can judge the attack's success is by its visible effects on enemy air operations (for instance, a dramatically reduced number of sorties fielded by the enemy). Assume that because of the uncertainties involved, this commander orders the implantation of several viruses, the imposition of false images on enemy radar screens, and the altering of electronically filed flight plans. The result is that the enemy loses control of its air operations, several planes crash after running out of fuel while waiting to land, and two enemy fighters collide in mid-air while vectoring.

In the scenario above, the commander may have ordered the use of more "force" than was necessary to achieve the goal of curtailing enemy flight operations and thus aiding the quest for air superiority. However, the commander could not be sure how much of an attack was necessary, and so he prudently erred on the side of too much, rather than not enough force. LOAC does not require commanders to dilute attacks to the point where mission objectives may not be achieved or their own forces are jeopardized, and thus the commander's actions seem appropriate. However, as time goes by and armies become experienced at using IW weapons, commanders will have less "breathing room," and a more informed analysis of how much force is required will become necessary, just as it is with older weapons.

The principle of humanity poses a larger problem to an IW planner. While at first glance it would seem that since these weapons will be primarily used to disable networks, not people, they must be inherently more "humane" than bullets or bombs, and thus the "humanity" of an IW attack is not something that would require much thought. However, the very ubiquity, of computer networks poses a problem for militaries intent on attacking them. Computer networks are increasingly interconnected and are used for multiple tasks. This greatly reduces the ability to predict and limit the results of an attack. For instance, in the above scenario, the commander may learn that the enemy's military air control system is probably connected to the civilian air control network of a nearby airport, and that the virus he plans to use to disable military air operations might also disable civilian air operations. At that point, the commander is obligated to ask what the possible effects on civilian non combatants might be. If it should turn out that the two air traffic control systems are tightly networked, his attack on the enemy airfield could result in a civilian airliner dropping out of the sky. Thus, the commander should first make efforts to probe the enemy's computer system to attempt to find out whether it is linked to the civilian system, and if so, to what extent. If an accurate determination can be made, there may be a way to disable the military air control system without having the same effect on the civilian system. If there is no possibility of doing so, and the commander feels that the rewards justify the loss of life, he may proceed with the attack as planned. Through such a process of analysis, operational commanders will fulfill their LOAC obligations.

However, sometimes it will be impossible to tell what systems are linked, and to what extent. An attack on a seemingly dedicated military computer network could have large-scale consequences for civilian air traffic control, power generation, telecommunications, and other systems on which civilian populations rely. It would be unreasonable to prevent commanders from launching IW attacks because they cannot be completely certain what the ancillary consequences of the attack will be. This does not release commanders from their obligation to obtain intelligence about enemy systems (through probes and perhaps the use of benign "advance" viruses) in order to enable at least a crude estimate of what the consequences of disabling the network would be. The day is bound to come when an information warfare attack by the United States against military IW targets results in civilian casualties. To the extent that the U.S. is unable to foresee or avoid these results, this would be acceptable under LOAC. Foreign nations that rely on connectivity between military and civilian systems are responsible for the
damages caused to civilians in such circumstances, because they failed to separate their systems. /55/ However, the United States should not be blind to the fact that it could suffer significant damages at home using the same logic, as will be discussed below.

The principle of proportionality presents commanders with the same quandary as does humanity. If a commander cannot judge the precise impact of an attack on the enemy, or determine what the ancillary effects might be (for example, where a computer virus might spread to) then how can a commander be sure that a counter-attack is proportionate to the enemy attack that provoked it? How can a commander defend himself if his strike against the military air traffic network of a remote airfield results in thousands of casualties, both military and civilian, as the enemy's entire national air traffic control system crashes, along with dozens of planes? In such a situation, a commander can expect some sort of investigation and will essentially have to plead ignorance of the consequences. "I didn't mean for that to happen" is the only real defense he will have, and thus before such an IW attack takes place, a commander should clearly define and record what the objectives are, so he can prove that large-scale catastrophic consequences were not intended. /56/

As another example, if destroying an enemy's civilian phone system by implanting a virus that disrupted its computerized switching network would make military communications difficult, it's probably a legitimate target, since civilian suffering from the loss of telephone service is likely to be minor (though there will likely be fatalities from ambulance calls that fail to get through and increased criminal activity resulting from the inability of citizens to raise the police). However, on the balance, this attack seems acceptable. However, if the same plan were proposed to take out a nation's power grid, the "balance" of results may be much closer to invalidating the attack, since it could likely lead to widespread human suffering (especially in extreme climates).

Finally, there is the principle of chivalry. The concept is closely linked to a time when one was required to conduct warfare "in good taste" and may seem anachronistic in a century that has witnessed wars more horrible and deadly than in any previous century. However, the United States has strived in past conflicts to adhere to the concept of chivalry, and will likely do so in the future. We would think less of ourselves if we did not. This is the principle that is most tied to "old" ways of conducting battle, and thus perhaps the most difficult to extend into the frontier of information warfare.

Once again, however, analogies can be made between the new possibilities and the traditional rules. For instance, it is illegal under LOAC to wear the uniform of the enemy in order to infiltrate its ranks. Modern armies often use transponder signals to identify their forces (in an effort to avoid "friendly fire"). Deliberately using identification frequencies employed by an enemy to confuse could be tantamount to wearing the enemy uniform, thus violating LOAC. However, the principle of chivalry does permit "lawful ruses" such as mock troop movements, the use of camouflage and false radio signals. Such ruses are likely to become of increasing importance to modern combat as armies attempt to avoid increasingly sophisticated sensors using elaborate techniques such as false radar signatures, or perhaps hijacking entire tracking systems to prevent them from informing the enemy that troops are approaching. In such a context, IW planners are likely to have a field day, and there are few legal questions as long as we do not attempt false surrender, impersonation of the enemy, or the false employment of international symbols, such as the Red Cross, to gain the advantage in battle.

V. WHY THE UNITED STATES SHOULD WELCOME THE APPLICATION OF LOAC TO INFORMATION WARFARE
At first glance, the typical American response to questions about the legality of information warfare is probably that we should delay any consideration of possible curbs to their use. The prevailing attitude is likely to be that such curbs are not in our national interest. After all, the United States leads the world in the development of computer technology, and seems set to dominate the battlefield using information warfare techniques. Thus, why should we participate in putting traditional law of armed conflict limits on such powerful new weapons in America's arsenal?

The first and most obvious reason America should welcome the imposition of traditional LOAC limits on these new weapons is for the same reason that we have accepted such limits on past weapons: it fits with our sense of fair play. The United States has never adopted the "kriegsraison" doctrine, a concept of all-out war which was used by Nazi Germany to reassure itself that its desired ends justified its barbaric means. Americans do not see their country as one which "stops at nothing" to win, and when citizens see evidence of such an attitude in the military (such as appeared at My Lai in Vietnam) support for American military efforts drop precipitously. Thus, if Air Force programmers infiltrated a computer in an opponent's country that controlled a dam, and caused massive flooding and civilian casualties, Americans would probably react in much the same way as they would if they learned the Air Force was bombing the dams the old-fashioned way. It is logical to assume that we would be judged by the results of our actions, not by the particular weapons used, and in this regard, information weapons will be judged by the same criteria used for any other weapon.

Another factor that should drive the United States to embrace the application of LOAC to the weapons of information warfare is the realization that America herself is at risk from information warfare attacks. /57/ perhaps more so than any other country, and that this vulnerability is likely to grow. /58/ If this is the case, it is in our national security interest to have certain boundaries set on the use of such weapons, and the boundaries set by LOAC would seem to be a good starting point. At the very least, strong international recognition of LOAC's applicability to IW would protect Americans from indiscriminate attacks from afar that are deliberately inhumane or wantonly disproportionate to any potential military goals. America's vulnerability to such attacks arises from three sources.

A. Development by Foreign Nations

First, we are not alone in developing information warfare weapons. Other nations are not only watching our actions, but developing their own doctrines and contingencies as well. Americans may take some comfort from our current lead in advanced computer chip production, but other nations are close behind. In software, too, our advantage is not large. In fact, in quantitative terms, the biggest center for developing new computer software is not the Silicon Valley, but Madras, India (though we do have a qualitative lead). /59/ In fact, the United States may be at a slight disadvantage in relation to countries who can start their development programs "from scratch" and have less capital at risk. /60/ These nations do not need to waste decades trying to copy what we are developing in the 1990s (as they had to do after the development of the atom bomb). Rather, they will be able to take advantage of our technology as we develop it. Other countries can take advantage of much of the information revolution that the United States has invested heavily in, without bearing any of the costs. /61/

For example, foreign governments can make use of Global Positioning Satellite data, space-based imagery, and Internet data, even if they played no role in these innovations. /62/ Over the next 10 years, a sophisticated opponent will be able to buy or lease a wide panoply of
capabilities from around the world. Not just GPS data, but surveillance, communications, direct broadcast, systems integration, internetworking, cryptography, and air-based imaging. Furthermore, the costs of such purchases will progressively decrease. /63/ The U.S. will not be able to hoard the benefits of the information revolution for itself, and such easy access tends to level the playing field between ourselves and potential opponents. /64/ The entry costs associated with IW are low. A few computer experts with computer terminals hooked into the worldwide network can do considerable damage. /65/ Most countries would be able to field much more impressive efforts, with correspondingly increased results. Tracking their efforts will be difficult, because unlike traditional military "buildups," in which the fundamental units for calculating opposing strength are visible and quantifiable, IW "buildups" will be mostly hidden. /66/ They will only be visible if we are able to track the acquisition and employment of top computer talent, and have some window (perhaps through espionage) on what projects they are attempting.

B. Our Advantage is Also Our Vulnerability

The second source of American vulnerability is that our technological advantages make us the most dependent on computer and networks, and thus the most vulnerable to attacks on computers by a sophisticated enemy. /67/ Reliance on information technologies, such as sensors, data processing and communications systems carries the inherent vulnerability of such technologies to offensive information warfare. /68/ Thus, the tip of our offensive "spear" may be blunted (or worse yet, pointed back at ourselves). Experts feel that our growing reliance on computer networks and telecommunications (the very tools with which we plan to dominate information warfare) is making the nation increasingly vulnerable to "cyber attacks" on military war rooms, power plants, telephone networks, air traffic control centers, and banks. /69/ Our society is increasingly dependent on the National Information Infrastructure (NII). Last year, the federal Joint Security Commission called U.S. vulnerability to infowar "the major security challenge of this decade and possibly the next century."

/70/ In 1995, the RAND Corporation conducted a series of exercises at the request of the Secretary of Defense for Command, Control, Communications, and Intelligence. Known as "The Day After in Cyberspace," the exercises revealed that with a very modest investment, a foreign attacker could disrupt civilian communications, transportation and power systems, as well as immobilizing military resources. The study demonstrated that because the U.S. economy, society and military rely increasingly on a high performance networked information infrastructure, this infrastructure presents a set of attractive strategic targets for opponents who possess information warfare capabilities. The exercise also revealed that no adequate tactical warning system exists for distinguishing between IW attacks and accidents. /71/

Our vulnerability is already being demonstrated daily. Pentagon computer networks are regularly infiltrated and manipulated. It has been estimated that military computers are probed by outsiders close to 500 times a day, but only about two or three of those probes are ever reported to security officials. /72/ The Defense Information Systems Agency has estimated that Defense Department computers were attacked at least 250,000 times in 1995 alone. /73/ These attacks are successful 65% of the time, and the number of attacks has been doubling each year. /74/ It is believed that for the most part, these are "hackers" who are more of a nuisance than a true danger, but they demonstrate the permeability of the Pentagon's systems, even after vast sums have been spent to make them secure. /75/ Defense and intelligence officials believe that enemy nations either already have the capability to mount information warfare strikes or soon will. /76/ Not only is America's NII vulnerable to hostile nations, but to non-state actors such as terrorist groups." In 1994, a Pentagon Defense Science Board /78/ warned that a terrorist group or unfriendly nation could use hacker techniques to launch an information strike which could cripple U.S. operational readiness and military effectiveness by delaying troop deployments and
misrouting cargo planes, trains and ships. /79/ In fact, an enemy cyberspace attack that disrupted a vital logistics system or the telecommunications network on which it depends could disrupt an entire military campaign, producing a military disaster. /80/ Besides logistics and telecommunications functions, there are medical systems (personnel tracking, blood supply records, etc.), cargo and transportation control networks, automated maintenance systems, pay and finance data, fuel supply information and munitions stock records, to name a few. These are all areas where the U.S. has chosen to take advantage of the microprocessor's power to run operations, which now creates vulnerabilities. We have mostly been considering strategic attacks, but tactical attacks are likely as well. For instance, an enemy could directly attack our ability to field sorties by corrupting air navigation systems or weather updates.

Besides the obvious advantages that lie in attacking our military networks, American civilian systems are also likely targets, both because the U.S. military has come to rely on them, and because destroying or disabling such systems would affect our ability to produce weapons, as well as degrading our communications and logistics systems. Even attacks on mundane systems could be extremely harmful to a military effort. For example, an engineered power outage, communications failure or road/rail disruption would be a mere inconvenience to citizens on an average day, but imagine this attack occurring at the peak of Desert Storm deployment. A Department of Defense board concluded that such a scenario could easily have constituted a strategic threat which would have altered arrival of the troops and equipment that played a critical part in the outcome of the war. /81/ Such a successful attack would likely also have resulted in a widespread loss of confidence in the government's ability to prosecute the war. The lesson is clear: The U.S. is not yet at a level of technological dependence such that information warfare will be the chief military threat it faces, but it is at the point where an enemy could use it to delay our reaction, dissuade us from responding, or hinder our execution of a response. /82/

IW would allow opponents to completely ignore the presence of U.S. military assets when contemplating an attack on the U.S. civilian sector. /83/ This could have devastating effects on our fighting ability. For instance, 95% of U.S. military communications is over commercial networks. /84/ Significantly, military use of such networks makes them legitimate targets under the rules of LOAC. An opponent would be correct in alleging that the United States made its phone system, along with its power grids and other shared infrastructure, military targets by not developing parallel systems for purely military use (or where there is a purely military system, like the Defense Switched Network (DSN), by not using it exclusively). While American troops are fair game under LOAC, American civilians should at least enjoy some protection, in the sense that an enemy is supposed to avoid harming them when possible. However, in many cases, the same computer networks that handle affairs for military members are also used to handle civilians. /85/ This is true in health care, personnel, and other fields. /86/ In some cases, an attack on information could lead to physical harm to an individual.

For example, a sick child could be harmed, perhaps fatally, if her computerized medical records were destroyed by an enemy and she required subsequent medical treatment, leaving doctors to guess the details of her medical history. /87/ Attacks on other systems, such as payroll records, would have less drastic short-term consequences, but could result in lower morale and even hardships for soldiers without a financial cushion. If America uses the same systems to service military personnel, civilian employees and dependents, it loses the right to be outraged when these systems are attacked in wartime.

An additional impetus to strike at American civilians is the source of new military technology. Unlike the period of the 1950s through the 1970s, technological advancements are not
being driven by the military services or the space program. Instead, the military often finds itself playing "catch-up" to advances made in civilian laboratories and employed by large corporations. Indeed, our newest IW weapons are likely to come from civilian research firms, and in some cases, the weapons themselves will be spin-offs from previously developed civilian applications. Unfortunately, one likely response to national comprehension of both the vulnerability and the importance of our civilian infrastructure is to give the military a role in providing for the defense of such civilian systems. While this may seem logical, it would have the effect of involving the military more deeply in these vital networks, thus making them more legitimate targets under LOAC. Perhaps a better approach is to let the military defend military systems, and private system operators defend their own systems. While this may offend some military planners who believe that they alone can be trusted to provide such security, the disruption of commercial systems is bad for business, and the profit margin is perhaps the best incentive of all to prod the development of tamper resistant networks.

C. The United States is Not a Sanctuary

The third reason America is vulnerable to attack is due to the very nature of the new weapons. Execution of an IW attack is completely unaffected by political boundaries or geographic distances. To someone who does not understand computers, the concept of an aggressor from across the ocean electronically reaching into machines located in the U.S. and altering or destroying data may seem fanciful. We are accustomed to feeling more secure than that. Americans have been vulnerable to direct attack by long range bombers and ICBMs for several decades, but barring "World War III" America still enjoys a great degree of physical isolation from the rest of the world, and good relationships with Canada and Mexico reinforce this sense of security. However, that is inconsequential to a nation planning to attack using information warfare. There is no "front line," and strategic targets in the United States are just as vulnerable to attack as in-theater command and control assets. The U.S. is not a sanctuary, because geographic distance is not a factor in planning an IW attack. The traditional "over-there" focus of U.S. national military strategy is therefore of declining importance to the likely future international strategic environment. Given the increased reliance of the U.S. economy and society on a high-performance networked information structure, a new set of lucrative strategic targets now presents itself to potential opponents. We must expect that battlefield losses by our enemies in a far away theater will tempt them to retaliate directly against the U.S. homeland. The expense of doing so would be about the same as an IW attack in the local theater. In this environment, the U.S. should look beyond its temporary advantage in information warfare, and realize that it has much to gain by the application of traditional limits to these new weapons. Far from a mere grudging acknowledgment, the U.S. should embrace the application of LOAC to information warfare.

In the short to intermediate term, other nations may view the development of information weapons as the best method to weaken America's military superiority. It represents a great leap forward, just as stealth technology did, but unlike stealth it will become inexpensive and widely available. Unlike nuclear weapons, which require exotic, difficult to acquire materials and whose production involves detectable operations, or biological weapons, which require the same, developing information weapons does not require a large physical plant, exotic materials, or telltale byproducts. Even third-tier countries have access to first-class programmers and state-of-the-art computer hardware and expertise that will allow them to develop these weapons. Almost any nation is capable of developing significant IW capabilities today. Foreign "cyberwar units" could sidestep or cripple our conventional weaponry that relies on microprocessors, undermining the military advantages the United States now holds. If America cannot effectively use her advanced tactical weapons and strategic systems because they are "down" due to an information attacks, her advantage erodes or disappears completely. History is replete with examples of how advances in military technology were eventually countered or
matched, and the pace of innovation is faster today than ever before. Some observers are counting on IW to enable the United States to reduce the size of its armed forces, but if the history of earlier sea-changes in the nature of warfighting is any guide, long-term prospects for significant reductions in the overall size of the U.S. armed forces are problematic. All revolutions in warfare have created advantages that became subject to fairly rapid "wasting," since successful innovations were quickly copied. We should not be blind to the possibility that our latest and greatest IW weapons may have a short useful life.

Because of the speed with which information technology will spread, and the vulnerability of the United States due to its technology dependent military and culture, we as a nation have every reason to support and encourage the application of international norms to the use of such weapons. Unlike the arrival of atomic weapons, information weapons not only constitute a revolution in military affairs, they are also likely to be used. With the exception of the Hiroshima and Nagasaki bombings, atomic weapons were never used. They served as a deterrent only, because nations realized how horrible the consequences of their use would be. By contrast, information weapons hold the promise of "bloodless" wars and precision targeting. IW weapons will also generally cause less physical destruction than other types of weapons. They are eminently usable. The information warfare RMA holds the prospect of conventional military victory without the mutual suicide of nuclear weapons, indeed with even less collateral damage than conventional weaponry. Thus there is a high probability that they will be used often in battle.

Another troubling aspect of an IW attack against the U.S. is that our traditional ability to deter attacks with the promise of a terrible counterattack disappears if we cannot identify the attacker. Deterrence only works when the identity of an attacker is known, or can be discovered. However, except in rare instances, isolation of military, national, public, and private information systems is all but impossible today. The Internet makes it possible to "route" an attack through a dizzying array of worldwide mainframes, so that the victim cannot tell where it originated. Hostile actions can be carried out remotely, at a great distance from the target, via a series of interlinked computers.

VI. DANGERS ALONG THE WAY

Information warfare holds the promise of allowing the United States to use its technology edge to win wars in the most direct ways possible. The "onscreen" weapons we will construct in the coming decades will be used against communications systems, artillery, bridges and engines, to name but a few targets. Entirely new methods of attacking nations are being developed. To an extent the new technology holds the promise of enabling destructive acts that are not really "violent." Such weapons will be less dependent on big explosions. Fewer explosions means less property destroyed and fewer unplanned human casualties. IW weapons will also mean fewer American personnel will be exposed to danger, as we will be able to launch attacks far from our targets. Additionally, as mentioned earlier, the advent of information warfare changes the relative value of many battlefield targets. It is now possible to imagine a war in which victory can be attained without the need to physically destroy an opposing force; it is possible to see an approach to conflict that allows for decisive campaigning without a succession of bloody battles. Information warfare may enable decisive victory at low cost in blood and treasure.
Although it does have the potential for reducing the casualties and destruction of war, one should not assume that information warfare will be painless. Indeed, it may presage more direct attacks on civilian targets than ever before. Taking down a country's air-traffic control or phone systems might be done cleanly with computers, but it still represents an attack on civilians, and it will still cause misery. The words of William Tecumseh Sherman will still apply: "War is cruelty, and you cannot refine it." /102/

In its zeal for developing these new weapons, America should not trap itself into making them the weapons of first resort in all situations. Currently, there is no international custom dictating that electronic means of attack must be preferred to physical destruction simply because they will normally cause less collateral damage, and the United States should resist any movement toward the establishment of such a custom. If the public comes to see war as painless or bloodless as a result of the availability of these weapons, the military will surely face criticism when it inevitably must resort to traditional weaponry. In other words, the U.S. needs to preserve its option to use "dumb bombs" and to take care that potential enemies and the public know that war remains a grim business. In this way, we can ensure that IW becomes an addition to our arsenal, not a hindrance to our ability to smash an enemy's power and will to fight, when that becomes necessary.

VII. FINAL THOUGHTS ON THE JUDGE ADVOCATE'S ROLE

Much technical work needs to be done before the true outlines of the information warfare age become clearly visible. However, it is clear enough that a raft of new weapons will be entering the American arsenal in the next two decades, which have no direct antecedents. They are not upgrades, such as the latest fighter plane is, but rather are truly new. Judge advocates need to be familiar with these weapons as they are being developed, so that they may provide competent advice when the time comes to use them. It is virtually impossible to provide good legal advice on LOAC matters without knowledge of system capabilities. /103/ As time goes by and military experience with these weapons grows, additional rules regarding their use will be developed. For example, rules of engagement will probably be written that directly address the use of IW. These too will require legal interpretation by judge advocates. Returning to the scenario at the beginning of this article, it is clear that the commander in question is headed for trouble. Perhaps the most obviously misguided part of the operational plan is the attack on enemy hospitals, which would be very inhumane. The flooding of the enemy's capital is sure to cause mostly civilian deaths, probably for little military gain, thus violating the idea of proportionality. The plans to attack enemy trains and to detonate "logic bombs" are probably acceptable. However, if time permits, the commander should try to better ascertain just what the effects of these attacks would be, whether vital life-supporting systems would be affected, and who would suffer most. If there is no time for this, the commander can proceed, as international law does not require him to foresee every outcome of the attack. There are no hard and fast rules as of yet, but at the very least, the principles of LOAC should guide an IW attack. The most critical skills a judge advocate will need are the ability to recognize the new issues involved, and the ability to apply the classic rules of LOAC to the weaponry of the 21st Century.

* Captain Hanseman (B.A., Ohio State University; JD., George Washington University) is an Assistant Staff Judge Advocate at Sheppard Air Force Base, Texas. He is a member of the Maryland Bar.

1 "infect" being a term used to describe the effect of a virus on a computer system.

2 This article generally uses the abbreviation "LOAC" to describe the law of armed conflict, which is the Air Force's preferred term for the law of war. The acronym should be familiar to U.S. Air Force judge advocates.

3 LOAC is the Air Force's preferred term for the Law of War.
4 See DOD Instruction 5500.15, Review of Legality of Weapons under International Law (16 Oct. 1974) and AFI 51-402, Weapons Review (13 Mar. 1994). The office responsible for the review is the International and Operations Law Division, Office of the Judge Advocate General (HQ USAF/JAI). Its task is to conduct timely legal review of all weapons, whether a new weapon at an early stage of the acquisition process, or a modification of an existing weapon, to ensure legality (i.e., compliance with international law).

5 AFR 110-32 / AFI 51-402: The Office of the Judge Advocate General has primary responsibility in the training, dissemination, and advising functions associated with the law of armed conflict.

6 Lt. General Chuck Horner, noted that the Gulf War was "the first air campaign in which every target was reviewed by a military lawyer." Lt Col Harry L. Heintzelman, IV, and Lt Col Edmund S. Bloom, A Planning Primer: How to Provide Effective Legal Input into the War Planning and Combat Execution Process, 37 A.F. L. REV. 1, 5 (1994).

7 Col. Phillip A. Johnson, Chief of the Air Force's International and Operations Law Division, has noted that so long as most information warfare programs are maintained in special access programs, only attorneys who have been cleared for access to such programs can be involved in providing detailed legal advice. As these programs mature and move out of the special access world, however, more and more judge advocates will be involved in giving such advice to clients in commands and operations throughout the Air Force.

8 Heintzelman & Bloom, supra note 6, at 20 n.61.


10 Martin Libicki, a professor at National Defense University, has attempted a detailed classification of IW concepts by dividing it into seven forms: Command and Control Warfare (C2W), Intelligence Based Warfare (IBW), Electronic Warfare (EW), Psychological Warfare (PSYW), Hacker Warfare, Economic Information Warfare (EIW), and Cyberwarfare. Martin Libicki, "What is Information Warfare? (ACIS Paper 3)," NATIONAL DEF. U. PRESS (August 1995).


14 Another insight into the official AF view of information warfare comes from its DOD's definition. DOD defines IW as actions taken to use information and information systems to access or effect foreign information and information systems and defend one's own information and information systems. DODD 3600.1, Information Warfare (21 Dec. 1997).

15 Fact Sheet, supra note 13.

16 "Information Warfare is sometimes erroneously referred to as C2W. However, the aim of C2W is to use physical and radio-electronic combat attacks against enemy information systems to separate enemy forces from enemy leadership." Colonel Richard Szafranski, A Theory of Information Warfare; Preparing for 2020, 9 AIR POWER J. 56, 65 (Spring 1995).
"The armed forces have a good idea that information technologies just might be the driver in future warfare, but we haven't yet articulated the strategic vision or identified the higher-order changes we need to make to really make this all come together .... Technology is not just a force multiplier. It is the interaction of strategic vision with new technology that will produce the revolution in military affairs and a new warfare form." Prof. George J. Stein, Information Warfare, 9 AIR POWER J. 30, 36 (Spring 1995).

An RMA is generally thought of as an innovation in technology, doctrine, or military organization that has the ability to fundamentally shift the way war is waged. The development of the airplane is an example of an RMA. Once these occur, other nations have little choice but to follow suit, or risk being at permanent military disadvantage.

"It would be a strategic mistake of historical proportions to focus narrowly on the technologies; force the technologies of information warfare to fit familiar ... models ... and miss the vision and opportunity for a genuine military revolution." Stein, supra note 17, at 32.

"Cyberwar is not merely a new set of operational techniques. It is emerging ... as a new mode of warfare that will call for new approaches to plans and strategies, and new forms of doctrine and organization." John Arquilla and David Ronfeldt, Cyberwar is Coming, 12 COMP. STRATEGY 141, 154 (Apr. -June 1993).

The United States may want to design new kinds of military units and capabilities for engaging in network warfare. Id.

It has also been argued that this will never happen, because dedicated IW units would be less effective than simply training existing units in how to conduct IW operations themselves, and because an 'IW corps' would inevitably see its main mission to be the engagement and defeat of the enemy's IW corps, rather than providing support to existing units in the accomplishment of their own missions. Libicki, supra note 10.

"The military may have to restructure its ranks with fewer layers of staff officers needed to process orders between a general and his shooters on the ground." Douglas Waller, Onward Cyber Soldiers, TIME, Aug. 21, 1995, at 41.

Admiral William A. Owens (Vice Chairman, Joint Chiefs of Staff), The Emerging U.S. System-of-Systems, 63 STRATEGIC F. (Feb. 1996).

Stein, supra note 17.

It has also been noted that if the U.S. were to start a war at a disadvantage, the burden of preventing a complete overrun at the outset of a war would surely fall heavily upon the U.S. Air Force and its ability to knock out the attacker's communications and logistics. Arquilla & Ronfeldt, supra note 20.


Id.

AFI 14-207 has made information warfare an explicit part of the targeting process. It instructs targeting planners to coordinate with information warfare and electronic combat planners for non lethal methods (command and control warfare, electronic warfare and suppression of enemy air defenses, etc.). AFI 14-207, Air Force Targeting (25 Nov. 1993).

Waller, supra note 23.

Garfinkel, supra note 27.

Several provisions of Hague treaties directly address the conduct of aerial warfare. For instance, Article 27 of the Annex to Hague IV limits the bombardment of cultural, religious, historical and medical facilities, unless these structures are being used for military purposes.

The London Charter of 1945 enunciates the crimes for which individuals can be held accountable in Article 6. It established three categories of crimes. These are crimes against peace (including the planning, preparation, initiation, or waging of a war of aggression); war crimes (including murder, ill-treatment, deportation for slave labor, or murder of prisoners of war, killing of hostages, plunder of public or private property, and wanton destruction of cities, towns, or villages not justified by military necessity); and crimes against humanity (including murder, enslavement, deportation, and other inhumane acts committed against any civilian population, before or during the war).


The Air Force defines military necessity as the principle which justifies measures of regulated force not forbidden by international law which are indispensable for securing the prompt submission of the enemy, with the least possible expenditure of economic resources. AFP 110-31, International Law-The Conduct of Armed Conflict and Air Operations (1976) at para. 1-3.


Id.

Paragraph 6.3 of AM 14-207 creates a responsibility on the part of weapon targeters to assist the commander in knowing how much force is necessary. It states that part of weaponeering assessment is to determine the amount of lethal and non-lethal force required to achieve the commander's objectives associated with prioritized targets." AFI 14-207 at supra note 29.

The Air Force defines proportionality as a subset of military necessity. The principle of proportionality is a well-recognized principle legal limitation on weapons or methods of warfare which requires that injury or damage to legal protected interests must not be disproportionate to the legitimate military advantages secured by the weapons. AFP 110-31, supra note 37, at para. 1-3.

Proportionality is codified in Additional Protocol I to the Geneva Conventions, articles 51(5)(b) and 57(2)(a)(iii), as banning attacks "which may be expected to cause incidental loss of life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated." The United States has not ratified the Additional Protocols because of disagreements with other assertions within them, but considers this definition of proportionality to be a restatement of customary international law, and thus binding on all countries.

AFP 110-31, supra note 37, at para. 5-3c(2).
AFP 110-31 defines perfidy as acts inviting the confidence of the adversary that he is entitled to protection or is obliged to accord protection under international law, combined with intent to betray that confidence. Id.

This type of operation seems natural to the United States, and was used to spectacular effect in the D-day landings and the "dummy" sea invasion during the Gulf War, among other examples.

The United States has always taken compliance with LOAC or its historical antecedents seriously. For example, under a predecessor to the modern LOAC called the Lieber Code of 1863, in force during the American Civil War, a soldier caught violating the code by destroying property, robbing, raping, or killing after receiving orders not to do so could be shot on sight by a superior. Art. 44, Instructions for the Government of Armies of the United States by Order of the Secretary of War, General Order No. 100, April 24, 1863.

"... most experts would agree that where data manipulation directly results in significant destructive effects that are indistinguishable in any meaningful way from those caused by traditional (kinetic) weapons, such assaults constitute "armed attacks" for purposes of Article 51 [of the U.N. Charter]." Charles J. Dunlap, Jr., Cyberattack! Are We at War?, NCSA NEWS (Nov. 1996) at 19.


It has been suggested that an IW attack directed against vital services such as power grids and telephone systems more clearly meets the definition of "armed attack" under Article 51 of the U.N. Charter than an attack against purely economic systems, such as stock markets. Dunlap, supra note 47, at 18.

It has been suggested that an IW attack directed against vital services such as power grids and telephone systems more clearly meets the definition of "armed attack" under Article 51 of the U.N. Charter than an attack against purely economic systems, such as stock markets. Dunlap, supra note 47, at 18.

Johnson, supra note 9.

Arquilla & Ronfeldt, supra note 20.

That Wild, Wild Cyberspace Frontier, RAND RESEARCH REVIEW (INFORMATION WAR AND CYBERSPACE SECURITY), Vol. XIX, No. 2 (Fall 1995).

One study suggests that the rapidity and manner of Iraq's destruction in the Gulf War raises questions as to whether the standard and traditional targets of attack remain legitimate and necessary. William Atkin, Et. Al., ON IMPACT Number 73 (1991).

An example of this principle is Iraq's use of the Amirya bomb shelter during the Gulf War. The U.S. attacked it, killing between 200 and 400 civilians, causing some to allege a LOAC violation. However, Iraq had converted the civilian shelter into a command and control bunker, and mixed military functions with civilians seeking shelter. Thus, the bunker became a legitimate military target, whether or not the U.S. knew there were civilians inside. Major Ariane L. DeSaussure, The Role of the Law of Armed Conflict During the Persian Gulf War: An Overview, 37 A.F.L. REV. 41, 64-5 (1994).

Commanders are protected by the so-called "Rendulic Rule." It holds that a commander in the field is not to be judged by knowledge gained in hindsight. Instead, commanders are judged by the information available to them at the time they made their decisions. For the history of this rule, see id., at 64.

Szafranski, supra note 16, at 64.
58 This sensible view was prevalent during the Gulf War, when the U.S. considered disrupting Iraqi computers that controlled government financial transactions, but the Bush administration ultimately rejected the idea, recognizing that America was uniquely vulnerable to such an attack herself. Waller, supra note 23.

59 Stein, supra note 17.

60 Martin Libicki, CDR James Hazlett, et al., The Revolution in Military Affairs, STRATEGIC F. Number 11 (Nov. 1994). This was also included in the summary report of the Crystal Genesis 94-1 Conference, sponsored by INSS and the War Gaming and Simulation Center (March 1994).

61 The Internet's rapid overseas growth portends greater access to Western data by countries otherwise poorly served by scientific and technical facilities, and may well become a conduit for sensitive data flows, beyond the reach of sovereign authorities. Strategic Assessment 1995 - U.S. Security Challenges in Transition, INST. FOR NAT'L STRATEGIC STUD. (1994).

62 Many people are under the impression that the U.S. military can degrade GPS signals, making them less accurate. However, commercial companies have found ways around our scrambling, and a newer system, called "Differential GPS" makes such attempts by the U.S. military fruitless. The only way to prevent an adversary from taking advantage of using GPS data would be to shut the system down, which would also prevent U.S. forces from using it. Martin Libicki, 2015: Power and Progress, INST. FOR NAT'L STRATEGIC STUD. (July 1996).

63 Libicki, supra note 12.

64 Libicki et al., supra note 60.

65 Rand, supra note 53.

66 Libicki, supra note 12.

67 "An infowar arms race could be one the U.S. would lose because it is already vulnerable to such attacks. Indeed, the cyber enhancements that the military is banking on for its conventional forces my be chinks in America's armor." Waller, supra note 23, at 41.


69 Lohr, supra note 31.

70 Waller, supra note 23, at 4.


72 Waller, supra 23, at 4.

73 Probably the most infamous attack was the seizing of Rome Laboratories in New York State during March and April 1994. The Air Force's premier command and control research facility was taken over by hackers who routed their calls through Britain, South America, and both U.S. coasts. They downloaded reams of critical information, including air tasking orders (the culprit later turned out to be a 16 year old Brit and an unknown accomplice.) INFORMATION SECURITY, supra note 71.

74 Id.
In Bosnia, 50% of the personal computers used by U.S. military units have suffered from computer virus infections of various kinds. This startling statistic would surely rise in the face of a deliberate, coordinated attack on U.S. information systems, which does not appear to be the case in Bosnia. Kenneth Allard, Information Operations in Bosnia, A Preliminary Assessment," 91 STRATEGIC FORUM (Nov. 1996).

CIA director John Deutch told the Senate in June 1996 that cyber attacks are now "likely to be within the capabilities of a number of terrorist groups" including the Hezbollah in the Middle East. Id.

The report was issued through the Office of the Secretary of Defense, and warned that Information Warfare could pervade throughout the spectrum of conflict to create unprecedented effects. Further, with the dependence of modern commerce and the military on computer controlled telecommunication networks, data bases, and enabling software and computers, the U.S. must protect these assets relating to their vulnerabilities. Garfinkel, supra note 27.

Wallner, supra note 23.

Rand, supra note 53.


"The U.S. civilian sector is no longer a sanctuary that can be protected by interposing military forces between threats or adversaries and their targets. Traditional military forces can be bypassed at the speed of light by Information Age attacks on the general population or key economic systems." Richard E. Hayes and Gary Wheatley, Information Warfare and Deterrence, 87 STRATEGIC F. (Oct. 1996).

A task force studying the issue has noted that the DOD information infrastructure is enmeshed with other Governmental structures, industry structures, and resources controlled by private citizens. REPORT ON INFORMATION WARFARE, supra note 81.

This is becoming even more so with the continued downsizing of the military, as witnessed by the recent merger of the military and civilian personnel systems.

Automated hospital systems are evolving toward mission-critical safety systems. Libicki, supra note 82.


Indeed, it is not at all clear that it would be technically possible to set up a governmental "information czar" whose task it was to provide for information defense, because cyberspace is really a collection of private-spaces, and having multiple private defenders provides the best chance at redundant (and thus resistant) systems. Libicki, supra note 82.

Molander, Riddile and Wilson, supra note 11.

Id.
92 The only prerequisites to developing IW technologies are information systems expertise and access to important networks. Most nations can obtain these from civilian sources. Id.

93 According to Barry Horton, Principal Deputy Assistant Secretary of Defense (who oversees the Pentagon's information warfare operations), quoted in THE NEW YORK TIMES, supra note 31 at D4.

94 Report on Information Warfare, supra note 85.

95 Owens, supra note 23.

96 Arquilla & Ronfeldt, supra note 20.

97 Hayes & Wheatly, supra note 83.

98 Martin C. Libicki, Information and Nuclear RMAs Compared, 82 STRATEGIC FORUM Number (July 1996).

99 Hayes & Wheatly, supra note 83.

100 Rand, supra note 53.

101 Arquilla & Ronfeldt, supra note 20.

102 Waller, supra note 23 at 41.

103 Heintzelman & Bloom, supra note 6.
European Collective Security in the Next Millenium

CAPTAIN DAVIS L. BROWN, II, USAF /*/

I. INTRODUCTION

In my last article, "The Role of Regional Organizations In Stopping Civil Wars," /1/ I promised a subsequent work on the future of NATO and Partnership for Peace (PfP). This article is in fulfillment of that promise. It is largely based upon live interviews with high-level military officials at NATO's Supreme Headquarters Allied Powers Europe (SHAPE):

• General Sir Jeremy MacKenzie (British Army), Deputy Supreme Allied Commander Europe,
• Colonel General (3-star) Leontiy Shevtsov (Russian Army), Deputy for Russian Forces /2/
• Major General Gunnar Lange (Danish Army), Director of the Partnership Coordination Cell,
• Captain Hein Schreuder (Dutch Navy), SACLANT Staff Element Chief to the PCC Director,
• Colonel Lennart Bengtsson (Swedish Army), Senior Liaison Officer for Sweden to the PCC,
• Lt. Colonel Dominic McAlea (Canadian Army), an attorney in the SHAPE Legal Office.

The scope of these interviews was the state of collective security in Europe and relations between NATO, PfP and Russia in the next ten years.

Also included is U.S. Secretary of Defense William Perry's response to a question of mine during an address at Ramstein Air Base, Germany. Asked how he envisioned the state of NATO, PfP and Russian relations in the next ten years, Dr. Perry likened the current state of NATO security to a circle encompassing NATO countries, inside which one is secure. /3/ He envisioned an enlargement of that circle to include the rest of Europe, reaching even to Russia. The level of security inside the circle would be unchanged; the circle would just get bigger.

Indeed, no one at SHAPE sees more than a remote possibility of open hostilities between countries now within Dr. Perry's "circle." The U.S.'s former adversary, Russia, now has troops under U.S. command in a NATO-led joint operation in Bosnia, a state of affairs until recently unimaginable.

GEN MACKENZIE: We used to pinch ourselves, for 50 meters away, in the Live Oak Building, is a Russian 3-star general and his staff. Who would have thought of that ten years ago?

The military lines of communication between the Partners (non-NATO participants in PFB) have also widened significantly. A mere 15-minute walk from SACEUR's office lies the Partnership Coordination Cell (PCC), housing military representatives from all the Partners.
In my last article, I introduced the Partnership for Peace and its principles as part of a broader movement by regional organizations to reach out and integrate their former adversaries, widening regional collective security structures ("If you can't beat 'em, join 'em"). The groundwork for NATO's integration of its former adversaries has been laid; therefore this article will now focus on what challenges await the component organizations. In July, 1997, in Madrid, the Alliance will hold its Summit for Euro-Atlantic Cooperation and Security, in which NATO's future role will be decided. Wrote NATO Secretary-General Javier Solana in January:

- We will invite one or more countries to start accession negotiations with the Alliance. Our goal is to be able to welcome the new members in 1999.

- We will launch an enhanced Partnership for Peace initiative to widen the scope of cooperation with all our Partners, particularly in political consultations and operational planning and activities.

- We will further develop an enhanced relationship with Ukraine.

- We aim to reach agreement with Russia on arrangements that cement a strong, stable and enduring security Partnership.

- We will put the finishing touches on a reformed command structure to improve our capability to carry out NATO's new mission of crisis management, to enable all Allies to participate fully in the structure and to contribute to the building of the European Security and Defence Identity.

These points will be addressed, beginning with a discussion of what lies in store for NATO itself, and what NATO will be like ten years from now, to include prospects for expansion. The role of PfP and its relationship with NATO will then be analyzed. Finally, Russia's role in European security its relations with NATO and PfP will be discussed.

II. OVERVIEW OF THE FUTURE OF NATO

The North Atlantic Treaty Organization (NATO) came into existence in 1949 to present a common front against the threat of Soviet aggression and expansion into Western Europe. /5/ At present NATO has 16 members, /6/ though not all of them participate in military activities. /7/ The fundamental principle governing military relations between members is embodied in Article 5 of the North Atlantic Treaty (also called the Washington Treaty) reads:

The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all; and consequently they agree that, if such an armed attack occurs, each of them, in exercise of the right of individual or collective self-defence . . ., will assist the Party or Parties so attacked by taking forthwith, individually and in concert with the other Parties, such action as it deems necessary, including the use of armed force, to restore and maintain the security of the North Atlantic area. /8/

Much has changed since NATO's inception, but this principle has not.
GEN MACKENZIE: We are still an alliance of Article 5 ethos-attack on one invokes a response by all. The business of security is still key to what we are about.

When Communism and the Soviet Union fell, NATO had to find a new role for itself.

GEN MACKENZIE: It appeared not so long ago that the view was that the Alliance's day is done. And I think now, it very much appears to be not so. It has largely come about because of Bosnia, /9/ because of our role in the Partnership for Peace, because of the changes we've made within our own structures to meet the changed threat.... The Alliance is now a very important structure with a real responsibility for maintaining peace and security over the next ten years.... We have realized that there are other challenges, other missions, and other risks which we need to face up to. And by far the best organization to do that is NATO.

Capt BROWN: What kinds of other challenges and risks?

GEN MACKENZIE: The most immediate challenge is how to reorganize ourselves, the structure of the Alliance. The general view is that we need to get smaller.

Another challenge will be adapting the Alliance, once geared toward all-out war against the Soviet Union, to conduct small, ad hoc, "crisis management" operations./10/ These are the types of operations which form NATO's new mission.

GEN MACKENZIE: The risks are, in the future, not from the traditional monolithic opponent we had in the past. What we face is an area of much greater instability. The iceberg has unfrozen and all the problems captured by that iceberg are now floating around. And of course our area of interest has expanded. We were an eastward facing organization; now we've got to be southward facing as well--maybe all-around facing.

MAJ GEN LANGE: I would not exclude NATO being requested by the UN or OSCE /11/ to do something on behalf of those organizations with regard to a peace-keeping mission.

For NATO to have legal competence to conduct such operations, the threshold for collective action had to be reconsidered. The NATO-led implementation forces (IFOR) and stabilization forces (SFOR) in the former Yugoslavia are a good example of this. NATO's involvement there was never triggered by an armed attack against the sovereignty or territorial integrity of any NATO member; Article 5, the originally foreseen mechanism for collective action, could not be invoked.
LTC MCALEA: Everyone speaks in terms of Article 5 .... But our security interest is not a function of armed attack against the territory of a NATO nation; it is also triggered by hostilities on our borders, or just on the other side. So we must ask, does this collective defense treaty require hostilities to spill over into our territory to invoke measures of collective defense? If you take a broad interpretative approach, you can say no. All of our operations are carried out with a view to enhancing the security of the Alliance.

GEN MACKENZIE: The threats to our security come from conflict, either in or on the periphery of the Alliance's area of interest.

This is where Article 4 of the North Atlantic Treaty comes into play. Article 4 reads, "The Parties will consult together whenever, in the opinion of any of them, the territorial integrity, political independence or security of any of the Parties is threatened." /12/

LTC MCALEA: Article 4 imposes a duty to consult. It's a big jump to go from consultation to the deployment of forces.

However, if a NATO member perceives a nearby conflict as a security threat, the door is open for the North Atlantic Council (NAC) to authorize collective measures. The complication is that the NAC must make two decisions instead of one: first, it must agree that the security of the entire Alliance is in sufficient danger to warrant collective action; second, it must decide whether to actually authorize the action. This is more difficult than for an armed attack, where Article 5 imposes an affirmative duty to act /13/ and not just consult, but the launching of IFOR/SFOR proves it can be done.

Indeed, it makes sense for NATO to become the preferred medium for crisis management, as NATO is actively preparing for future contingency operations. The Partnership for Peace has proven to be a valuable tool in this arena, especially in training.

MAJ GEN LANGE: It's difficult to put in place an operation if you don't have an exercise-trained and existing command and control structure. As far as I know, NATO is the only organization which has such capability.

CAPT SCHREUDER: One of the major tools we are developing for out-of-area operations (and also in-the-area operations) is the Combined Joint Task Force (CJTF) concept. First we focus on headquarters ... trained and prepared headquarters, where we have a "nucleus" which is completely prepared at all times to undertake an operation. And the nucleus will be augmented by other people. . . , but these augmentations are also already trained .... So it is, in a way, ad hoc, but it is very well prepared in advance.

It is very clear, therefore, that NATO continues to be relevant in regional security matters.

GEN MACKENZIE: There was along period of climbing up and down the C2 /14/ ladders--where we looked to go to war with Russia, we checked our inventory, we
climbed down the ladder again—and it was a relatively stereotyped operation. I think for the first time now the Alliance has really changed gear, and what you find now is a real sense of purpose, top to bottom. ... NATO really has a sense of belonging, a sense of actually being required.

NATO's highest priority will still be protecting its members from threats to their security; after all, that is why the Alliance was created. The nature and frequency of operations, however, will be vastly different than during the Cold War.

III. INTRA-EUROPEAN OPERATIONS

European countries are finding a new role for themselves in conducting military operations where the threat to their security is minimal or non-existent—peace operations or crisis management. It is in this area where the potential has developed for joint European operations supported by but not under the political direction of NATO. This potential has already been realized by the Western European Union (WEU).

The WEU was born out of the 1954 Paris Protocol, in which former Axis powers acceded to the 1948 Brussels Treaty. Article V of the Modified Brussels Treaty (MBT) is devoted to collective defense: "If any of the High Contracting Parties should be the object of armed attack in Europe, the other High Contracting Parties will ... afford the Party so attacked all the military and other aid and assistance in their power." Article VIII of the MBT concerns security matters other than collective defense: "At the request of any of the High Contracting Parties the [WEU] Council shall be immediately convened in order to permit Them to consult with regard to any situation which may constitute a threat to peace, in whatever area this threat shall arise ...."

All WEU members are also members of NATO, and WEU defense functions are carried out under the auspices of NATO. Article IV of the MBT reads, "In the execution of the Treaty the High Contracting Parties ... shall work in close co-operation with the North Atlantic Treaty Organization .... The Council and its agency will rely on the appropriate Military Authorities of NATO for information and advice on military matters." Within the European Union (EU), of which all WEU countries are also members, the WEU has primary responsibility for security matters. Article J.4 of the Treaty On European Union (the Maastricht Treaty) reads, "The [European] Union requests the Western European Union (WEU), which is an integral part of the development of the Union, to elaborate and implement decisions and actions of the Union which have defense implications."

The foundation of WEU's security concept is contained in the 1992 Petersberg Declaration. In it, the Foreign and Defense Ministers of the WEU members declared, "... we are prepared to support, on a case-by-case basis and in accordance with our own procedures, the effective implementation of conflict-prevention and crisis-management measures, including peacekeeping activities of the CSCE or the United Nations Security Council." WUE missions are limited to specific types of operations: humanitarian relief, search and rescue, peacekeeping, and crisis management, including peacemaking. Such operations have already taken place in and around the former Yugoslavia, setting the precedent for other WEU peace operations, should the need arise. NATO would probably provide some support, not necessarily in personnel, but perhaps in equipment and C2 structures.

CAPT SCHREUDER: We foresee forces and headquarters could be made available for the Western European Union to undertake an operation, and their command and
control structure, in principle, from NATO. The WEU Council would take charge of
the operation, with of course a continuing dialogue with the North Atlantic Council,
because they are using the structures and perhaps also the equipment of NATO. It is
also foreseen that, even in a WEU operation, the United States would be involved in
some elements, like strategic lift or strategic intelligence, which is only possessed by
the United States.

Essentially, a WEU mission would draw upon European personnel specifically made
available for Petersberg operations, using NATO headquarters and NATO assets, but under
the political control of the VVEU Council instead of the NAC.

**MAJ GEN LANGE:** All that question is being investigated right now: how this
special relationship between NATO and WEU should be, when it comes to WEU
nations being requested by OSCE or United Nations to execute an operation.

All of this is likely to enhance the role of the Deputy SACEUR.

**GEN MACKENZIE:** I am, in the ACE chain of command, the senior European. I'm also
the SACEUR's deputy. The WEU sees the Deputy SACEUR as having added responsibility
perhaps to report to the WEU directly, should there be a European operation; or to be co-
chairman, with the Deputy SA CLANT, of the Combined Joint Planning Staff to plan for
European missions--Petersberg missions.

Regional activities are of course not limited to the WEU. Other regional groupings have long
since been in existence, e.g. the Scandinavian countries, and have been enlarged or enhanced. New
joint activities have also formed, possibly because the Partnership for Peace has created an
environment conducive to greater cooperation and consultation between countries not predisposed to
enter into such relationships.

**MAJ GEN LANGE:** We see a real improvement with regard to increased confidence
between nations, due to the fact that there are more regional activities- in the
Baltic region, in the central region, in central Asia . . . . We've seen that the Baltic
states (Estonia, Latvia and Lithuania) have agreed to establish a peacekeeping
battalion, and the Poles establishing peacekeeping battalions with Lithuania and
Ukraine. /25/ We've seen that Romania and Hungary might consider establishing a
peacekeeping brigade. We've seen that Uzbekistan, Kirghizstan, and Kazakhstan
are out to establish a peacekeeping battalion.

**CAPT BROWN:** The UN Charter originally envisioned standing UN forces or
some kind of standing national forces to serve in UN peace operations. This didn't
happen for decades. Is this happening now?

**MAJ GEN LANGE:** As a matter of fact it is, because nations have concentrated on
identifying units who are trained and able for these peace operations, and which
might be made available upon request.
COL BENGTSSON: We never imagined that we could do, together, what we are already conducting . . . the possibility to discuss things with these guys [other Liaison Officers] just by entering the next room is tremendous. The countries around the Baltic have grown stronger and stronger ties the last years .... For Sweden it has always been interesting to look upon the northern region. We are more "tierized " /26/ Denmark, Norway, Finland, Sweden for stability in this region, the balance of this area. And Sweden has to be in this cooperation to make sure the balance is still there. Now this area has been enlarged, with the other Baltic countries as well . . . . But I won't say that [cooperation within the Baltic region] would be in a much higher priority than cooperation with NATO.

IV. PARTNERSHIP FOR PEACE

On 10 January 1994, NATO Heads of State issued the Partnership for Peace Invitation, launching a program to "expand and intensify political and military cooperation throughout Europe, increase stability, diminish threats to peace, and build strengthened relationships." /27/ Twenty seven countries to date have signed the PfP Framework Document, including many from the former Warsaw Pact and former Soviet Union. /28/ The objectives of the Partnership for Peace are:

- facilitation of transparency in national defence planning and budgeting processes;

- ensuring democratic control of defence forces;

- maintenance of the capability and readiness to contribute ... to operations under the authority of the UN and/or the responsibility of the CSCE;

- the development of cooperative military relations with NATO, for the purpose of joint planning, training, and exercises in order to strengthen their ability to undertake missions in the fields of peacekeeping, search and rescue, humanitarian operations, and others as may subsequently be agreed;

- the development, over the long term, of forces that are better able to operate with those of the members of the North Atlantic Alliance. /29/

These objectives do not include implementing collective defense of the Partners from external threats to their security. The PfP Framework Document does leave the door open for defensive operations-paragraph 8 reads, "NATO will consult with any active participant in the Partnership if that Partner perceives a direct threat to its territorial integrity, political independence, or security" /30/ - but collective defense was not the reason for joining PfP for all of the Partners:
COL BENGTSSON: From the Swedish viewpoint, that part of the Framework Document has never been that much discussed; that has not been at all the focus for our participation in this.

CAPT SCHREUDER: We are not ready to include Partnership nations in Article S (NATO) training, and there is no need for it. They are not members [of the Alliance]; that is something we have to bear always in mind.

MGENLANGE: And most partners are not interested.

Some Partners, on the other hand, are very interested in a defense guarantee. The Individual Partnership Programs (IPPs) of Poland, Czech Republic, Slovakia, Hungary, the Baltics, Slovenia, FYROM, Romania and Albania all contain references to future NATO membership. NATO, however, was not prepared to absorb many new members with a totally different concept of NATO's role:

GEN MACKENZIE: Partnership for Peace is a burgeoning program which probably was designed to slow down, or at least put into a reasonable time frame, the aspirations of those nations which wish to join the Alliance. It was to bring some reality into what the implications to joining NATO were all about, which would take time.

CAPT BROWN [to COL Bengtsson]: Do you perceive Article 8 of the PfP Framework Document working the other way around, with PfP countries also consulting with NATO, should there be any threats to ... NATO countries?

COL BENGTSSON: I thought so. That has actually been the way I have interpreted it. I thought that was something as a powerful delaying process that was given these Partners, instead of full membership from the very beginning. And in this package, they had a possibility at least to consult with NATO in case of feeling threatened.

GEN MACKENZIE: We've said all along we'll be prepared to discuss that. That's quite different from Article S where discussion is not on the agenda, because there is an automatic response. So discussions will take place.... Now that's a lot better than having absolutely nothing at all.

LTC MCALEA: The opportunity to consult doesn't represent a commitment in law or policy. ... PfP is an organization for building confidence and security, establishing transparency and dialogue. We try to bring PJP members up to the NATO standard of conducting activities; collective security is a byproduct of that.
The Partnership for Peace's lasting contribution to European collective security has been in preparing for joint crisis management operations, including humanitarian aid and various levels of peace operations.

COL BENGTSSON: To enhance the security of Europe is something that not only NATO countries or NATO-to-be countries would be interested in. It's interesting for us [Sweden] as well. And to cooperate within the area of peacekeeping, humanitarian operations and search-and-rescue is something that we would like to be involved in.... We could actually provide some experience as well.

Indeed, this concept dovetails with NATO Assistant Secretary General Anthony Cragg's definition of the Combined Joint Task Force (CJTF) concept: "CJTF ... is a deployable multinational, multi-service formation generated and tailored for specific contingency operations. It could cover a wide range of potential tasks including humanitarian relief, peacekeeping or peace enforcement." /31/ The types of operations envisaged for Partnership for Peace are the same types of operations envisaged for a CJTF. /32/ The "nucleus" of CJTF headquarters-trained staff, originally intended to be within established NATO headquarters, /33/ could easily include personnel from partner nations and for such an operation within a partner's own territory the Partner would no doubt insist upon it.

MGEN LANGE: It is very important to have this pool of resources, which has to be of a sufficient size and a sufficient diversity ... in regard to ... forming the organizational structure for this specific operation.

For partners to participate in joint operations with NATO, or even just amongst themselves, they must be able to work together on an operational level as well. Their military forces were unaccustomed to this. So began the Planning And Review Process (PARP), a biennial process whose purpose was "to provide a basis of identifying and evaluating forces and capabilities that might be made available . . . for multinational training, exercises, and operations in conjunction with Alliance forces." /34/ The first facet of developing the CJTF concept for PfP would be to achieve interoperability between the forces of partner nations and NATO nations. The magnitude of this undertaking took many partner nations by surprise:

COL BENGTSSON: After we joined the PARP process, and after we had been involved in various exercises, we realized that there are a lot of areas in which we have to improve our interoperability-how you replenish ships at sea, language barriers, how you organize your stockwork etc.... We have to adjust and bear in mind that all these countries would like to be interoperable with NATO, not with Sweden.

Interoperability has been the primary focus of PfP activities. Partners are devoting much of their IPPs to how they intend to achieve 20 specific Interoperability Objectives:
1. Command, control and communications in SAW /35/
2. Communications equipment for SAR operations
3. Training of medical teams for SAR operations
4. Commonality of fuel requirements-receipt and delivery of liquid fuels for ground forces
5. Ground refuelling/defuelling of aircraft
6. Replenishment in harbor
7. Replenishment at sea
8. Interoperability of air navigation aids
9. Commonality of airfield procedures
10. Interoperability of communications equipment
11. Language requirements for staff officers
12. Provision of liaison teams
13. Use of NATO communications procedures and terminology
14. Availability of units for PfP operations
15. Ability to mark and record hazardous areas (e.g. minefields/unexploded ordnance)
16. Blood and blood donor requirements
17. NATO land maps symbology
18. Adoption of universal transverse mercator projection grid and Military Grid Reference System (MGRS)
19. Aircraft identification friend or foe (IFF)
20. Logistic support /36/

In several years, once interoperability between NATO and the Partners is achieved, PfP can focus more on the operations themselves and business will become more mundane:

MGEN LANGE: I foresee that the relationship will become more and more routine, because all the procedures and activities are developed in such a standard that all who are participating in the program are getting experience. I opine that we will see fewer and more complex activities that will more and more mirror the normal NATO activities.

Partners will soon be asked to contribute to more intense and complex peace operations:

MGEN LANGE: . . . in the beginning we were limited to only exercises in the low end of the peacekeeping scale. But due to the IFOR operation, the NATO politicians have directed us to include peace-enforcement elements, at the tactical and operational level, for education and training in the program.

In assessing the future of the Partnership for Peace, it is also useful to assess what the partners themselves wish to gain from their participation. Each partner is to proceed at its own pace, with its own agenda. Each partner's IPP lists objectives in specific Areas of Cooperation, such as Air Defense, Defense Planning and Budgeting, Standardization, etc. Space does not permit a detailed comparison of the IPPs; worthy of mention, however, are several overall trends. For example, several countries, including the Czech Republic, Slovakia, and Hungary, are working to meet the requirements of NATO Standardization Agreements (STANAGs),
which define technical specifications for equipment used in NATO operations. Partners are working to apply NATO's experience in defense budgeting to increase the transparency of their own processes. The Czech Republic and others seek to study western legal frameworks governing military forces, with a view toward adopting similar frameworks. Sweden's goals include helping former Warsaw Pact countries achieve theirs. Partners also declare their intentions to participate in planning and execution of multinational crisis management exercises, including peacekeeping.

What do partners hope to gain politically? For partners not interested in NATO membership, the long-term objective is enhancing the security of Europe. The Swiss Presentation Document sums up fairly well the prevailing philosophy:

Switzerland subscribes to, and supports, the values on which the Partnership for Peace is based ... namely:

the re-affirmation of existing commitments

- to preserve democratic societies, their freedom from coercion and intimidation, and the maintenance of the principles of international law;

- to ... refrain from the threat or use of force against the territorial integrity or political independence of any State, to respect existing borders and to settle disputes by peaceful means."

In other words, by promoting values conducive to greater stability in other European countries, partners augment their own security.

Many other partners' motives go beyond collective security and into the realm of collective defense. Wrote Polish Prime Minister Wlodzimierz Cimoszewicz, “... we expect that our role in PfP should be helpful in attaining our ultimate goal, namely, full membership in NATO.” /38/ Slovenian State Secretary Ignac Golob: "Slovenia ... considers that European security, built on the basis of an enlarged NATO and a more substantive WEU, cannot but be premised on a strong transatlantic link." /39/

Estonia, Latvia and Lithuania are even more explicit in their desire of a security guarantee from the West. Lithuanian Ambassador Ceslovas Stankevicius: "The integration of Lithuania and the other two Baltic states into the community of Western nations means a return to their natural places in the international community .... Lithuania has rejected the model of the so-called bridge between East and West or the role of any type of buffer state." /40/ Latvian National Armed Forces Commander Colonel Juris Dalbins: "To the Balts, the logical way forward is through membership of the European Union (EU), full membership of the Western European Union (WEU) and of NATO." /41/ Some partners do appear highly interested in "consultation" in case of a threat to their security, and NATO plays on that very hard.

It has been suggested that in the future larger organizations, such as OSCE or PfP, may subsume NATO:

COL BENGTSSON: Perhaps in the future, joining NATO is not the main task for discussion in any country, because PfP is taking over all the stuff that NATO used to do
The fundamental principle upon which NATO membership is based is Article 5, and the criteria for any NATO applicant will be its ability and willingness to participate in NATO's collective defense. As noted in my last article, however, collective defense is not the same as collective security. Collective defense is the cooperation by a group to meet a common threat from outside. Collective security is the measures within a group to prevent aggression by one member against another. What Colonel Bengtsson is suggesting is that close cooperation in crisis management between NATO and the partners is a form of collective security decreasing the likelihood of an armed attack, necessitating collective defense. This appears to be higher priority for the historically neutral countries than preparing for an armed attack.

For these countries, therefore, a factor to deciding whether to apply for NATO membership will be NATO's own assessment of its post-Cold War mission. The whole concept of neutrality was built upon the desire not to intimidate the Soviet Union or get involved in a superpower conflict. Since such a conflict is now highly unlikely, NATO is assuming the kind of role in collective security that some neutral countries have practiced for decades, e.g. peacekeeping. From this perspective it is not illogical for them to view NATO as only one component of a larger collective security organization. For them to find the prospect of NATO membership more palatable, however, either NATO must redefine the basic tenet of its existence or its applicants must adjust to higher priorities than crisis management. NATO appears unlikely to do the former.

V. NATO ENLARGEMENT

At the 1994 Brussels Summit, NATO Heads of State first announced the possibility of eastward expansion. The first new invitations to NATO membership were issued at the Madrid Summit, and President Clinton has called for new members to be admitted by 1999. By acceding to the North Atlantic Treaty, new members would acquire the right to have an attack on them considered an attack on the rest of the Alliance, and have the backing of the armed forces of the whole Alliance in their defense. A 1995 Study on NATO Enlargement set forth a number of factors to be considered in deciding whom to invite to join the Alliance, including:

- Nature of prospective members' contributions to NATO's collective defense. A new member's participation must have some benefit to NATO.

- Ability and willingness to assume the obligations of membership. New members must be prepared to contribute to the defense of current NATO members. They may also be expected to deploy forces outside their territory and have NATO forces deployed inside theirs. They must meet NATO interoperability standards and incorporate NATO operating procedures. New members must be able to contribute their fair share to NATO's commonly funded programs. In addition, they must support the role of nuclear forces in the current NATO concept of deterrence.

- Resolution of ethnic disputes within a new member's territory and also disputes with other European countries.
- Active participation in PfP. While not a guarantee of future membership, it does establish a foundation of military cooperation with NATO forces, helping prospective new members become better acquainted with the day-to-day functions of the Alliance. The more closely they work with the Alliance, the easier to evaluate their potential contributions to NATO activities.

- Accessibility to NATO forces. A new member's territory must be readily accessible to Allied forces seeking to enter it for reinforcement, exercises, crisis management, and permanent stationing. Similarly, the rest of NATO territory must be readily accessible to the new member. This factor will come into play when assessing the membership potential of countries not geographically contiguous with other NATO territory.

- Contribution to the Alliance's command structure and infrastructure. New members must contribute to joint military headquarters. Their personnel must be language proficient and knowledgeable of NATO concepts and procedures. The existing command structure must also be able to adjust to reorganization. This will be an important factor in choosing whether to invite new members sequentially or concurrently.

- Willingness to accept additional new members later on. Article 10 of the North Atlantic Treaty requires a unanimous vote of existing members in order to invite new ones. There is always a concern that a new member might "close the door" to further expansion by always vetoing new invitations. The relations between prospective members and other possible prospective members must be considered.

In December 1995, three months after the Study came out, NATO Foreign Ministers decided on "intensified, individual dialogue with interested Partners; enhancement of PfP to help those interested Partners to prepare for the responsibilities of membership." 

*GEN MACKENZIE: The Partnership for Peace programme has helped bring some reality into what the implications for joining NATO were all about.*

As mentioned before, many Partners' IPPs contain references to joining NATO. Of those, the most active participants appear to be Poland, the Czech Republic, Hungary, Romania and Ukraine. Many have suggested that the first invitations would in fact go to Poland, the Czech Republic and Hungary.

Poland and the Czech Republic easily fit the criteria for NATO membership—they are relatively stable; they have no major internal or external disputes; they are both very active in PfP programs; both adjoin Germany and are easily accessible. Hungary also fits many of the criteria—though Hungary shares no borders with any other NATO member (and will not even if Poland and the Czech Republic join), and has no outlet to the sea. This problem would be solved by the entry of Slovakia. Romania has recently acquired some Western backing for NATO membership, after recently elected reformist parties passed new market reforms. Romania and Hungary also signed a friendship treaty, helping to alleviate some of the tension over the status of the Hungarian minority in Transylvania.

Sweden has also been particularly active in the program, though officially Sweden remains neutral.
COL BENGTSSON: But I can read and listen, and I can see that a lot has taken place in Sweden in the last years, . . . where the main opposition leader, Mr. Carl Bildt, /56/ has said, as late as two weeks ago [January 1997] that we have to think this over again.... So there is a debate in Sweden, at least a debate has slowly started.

An additional factor, not necessarily driving NATO expansion but at least related to it, is the potential for enlargement of the European Union and Western European Union. Several Partners have expressed an interest in joining the EU. As mentioned before, the WEU is the defense component of the EU. Many partners are also Associate partners of the WEU /57/ and several have participated with WEU in real-world operations. /58/

According to the Study On NATO Enlargement, "An eventual broad congruence of European membership in NATO, EU and WEU would have positive effects on European security." /59/ One definitely positive effect would be sheer simplicity. Austria and Ireland are members of the EU but not NATO or WEU, which is responsible for EU defense matters. Ireland is not even in PfP. Iceland, Norway and Turkey are members of NATO but only "Associate Members" of WEU, and not members of the EU. This somewhat confusing state of affairs raises the question of who is responsible for defending whom.

VI. NATO RELATIONS WITH RUSSIA

The relationship between NATO and Russia is different from all others, for it was the threat of Soviet aggression in Western Europe which originally prompted the Alliance's formation. Today NATO does not consider Russia to pose an imminent threat; indeed NATO and Russia have begun to cooperate on common matters of security. Few at SHAPE are thinking in the long term about NATO-Russian relations; instead they are concentrating on strengthening dialogue and cooperation in the next several years. Right now NATO and Russia interact in two dimensions: on the operational level in joint contingency operations, and on the political level over NATO expansion.

First, however, it is important to note that no one at SHAPE believes in a realistic possibility of Russian membership of NATO in the near future:

GEN MACKENZIE: I don't think Russia would necessarily want it, and I don't think we want it. That's beyond the bounds of reason at the moment.

COL GEN SHEVTSOV: This depends on the economic and political stability of Russia, and military stability as well. Another condition is the development of a document to address joint relations-with PfP, the military, contacts, exercises, operations, all types of cooperation .... NATO must understand that Russia is a large nation with a large military-industrial complex. Standardization is not possible. Russia is not one of these small central European countries with 15-20,000 personnel and 50 tanks, buying its equipment from other nations. Those countries NATO is capable of guiding, with advice and technical assistance, even re-equipping them. But Russia can provide its own equipment.

General Shevtsov did not completely rule out Russian membership in NATO, but in discounting the prospect of real standardization of equipment between Russian and NATO forces, he has pointed out perhaps the greatest obstacle, not to Russian peacekeeping in NATO-led operations (General MacKenzie sees few obstacles for that), but to any more enhanced cooperation than exists now. Joint Article 5 operations between NATO and Russia not foreseeable.
On the operational level, military cooperation between Russia and NATO has been a success. Russia is a member of PfP—not enormously proactive at present, but as General MacKenzie put it, "certainly signed up to the principles of the Partnership for Peace." One of these principles, of course, is participating in joint crisis management operations. By contributing an airborne brigade to IFOR/SFOR's Multinational Division North, under U.S. command, Russia has demonstrated a commitment to this genre of collaboration.

Russian participation in NATO-led activities is under a more specialized arrangement than for any of the other Partners. For example, all other IFOR/SFOR contingents report through the normal chain of command, Russia made it a condition of participation not to be under NATO operational control. The special arrangement worked out was for Russian troops, through General Shevtsov, to be under operational control of then-SACEUR General Joulwan personally. General Shevtsov's official title was made "Deputy of General G. Joulwan for Russian Forces." /\n
GEN MACKENZIE: We only need to look at what we are doing with the Russians at the moment [joint participation in IFOR/SFOR] to see that there is an enormous amount of linkage and dialogue already.

COL GEN SHEVTSOV: Without close interaction between Russia and NATO, we would fail to achieve security in Europe. The basis for this interaction is NATO-Russian-US cooperation in Bosnia. There the results have been excellent [General Mackenzie agrees with this] and, based on this cooperation, many military experts in NATO now talk of permanent Russian relations or liaisons with NATO. I speak not of Russian partnership in NATO itself, but rather a more realistic view of steps for cooperation in the short term.

GEN MACKENZIE: I think within a reasonable time frame what we should expect is for enhanced cooperation. We should expect dialogue to be improved. We should expect formal links to be improved, and to work together.

What seems to be in store for the future is continued, perhaps even enhanced, cooperation in crisis management. Russian Foreign Minister Yevgeny Primakov expressed an interest last December in future collaboration on crisis intervention, peacekeeping, tactical systems, and compatibility of equipment and military infrastructure. /62/ These are the next logical steps, and are also the goals of other Partners.

On the political level relations are somewhat more strained. For some time, NATO and Russia have been at odds over NATO expansion eastward, with Russia strongly opposed. /63/ It has oft been said that NATO's decision to expand will not be subject to a Russian veto, /64/ but in January 1997 negotiations began for a "Charter" (the Russians are calling it a "document") to formalize arrangements for consultation and collaboration between NATO and Russia. This Charter is expected to be concluded, before new invitations for NATO membership are expected to be issued.

A February poll showed almost one-third of the Russian population opposed to NATO expansion. /65/ Although not legally binding and not legally necessary for NATO expansion
eastward, NATO wants very much to give Russia something to soften the political blow to its leadership. /66/ Said Minister Primakov last December, "we need a document which really contains very specific, very concrete provisions which deal with our concerns." /67/

**COL GEN SHEVTSOV:** The conclusion of a document will reduce the level of threat and insecurity in Europe, and will give more stability and cooperation between the two sides.

What are Russia's concerns? For one thing, Russia wants formal consultation arrangements with NATO. NATO appears willing to accommodate this; in fact the NAC already has existing informal arrangements for consultation with Russia:

**LT COL MCALEA:** The North Atlantic Council has been good about involving Russia in many important decisions. We are assuring that much of what we do is transparent to Russia for example, notifying Russia in advance of troop movements. In discussions involving NATO policy, we have "16 plus-1 meetings" - all 16 NATO members plus Russia.

The effect of formalizing these arrangements will be to maintain the kind of "transparency" needed to boost Russia's confidence in NATO's peaceful intentions without granting Russia any veto power over NATO policy decisions.

Russia is also concerned about NATO stationing forces, both nuclear and conventional, in former Warsaw Pact territory. Russia wants assurances that nuclear forces will not be stationed any closer to Russia.

**LT COL MCALEA:** My understanding is that Russia is concerned about how NATO deploys its nuclear capability .... If Poland, the Czech Republic and Hungary join NATO, it's not a question of NATO forces will go there, but when _______. There is no reason in principle why they couldn't be stationed there, but there has to be a reason for their presence.

Russian Defense Minister Igor Rodionov pointed out last December that if Poland, the Czech Republic and Hungary join NATO, the Alliance's land forces will increase 15 to 20 percent, shifting the balance of forces strongly into NATO's favor. /68/ U.S. Secretary of State Madeleine Albright has proposed to reduce the NATO arms ceiling under the Conventional Forces in Europe (CFE) treaty and permit Russia to redeploy equipment to even out the imbalance. /69/ These measures, if put into place, should allay Russia's fears.

In addition, it is easy to imagine Russia being highly concerned about the erosion of its "buffer zone." Both Secretary-General Solana and Secretary Christopher have referred to strengthening ties with Ukraine, with Secretary Christopher going as far as making it a goal "to achieve Ukrainian integration with Europe.... We want to help Ukraine consolidate its independence ... by developing an enhanced relationship with NATO." /70/ Ukrainian membership in NATO could result in NATO forces stationed right on the Russian border, which understandably makes the Russians nervous. Russia would like an understanding that NATO will not expand its membership into the former Soviet republics. NATO may be unwilling to make such a guarantee. Ukrainian membership in the Alliance does not seem likely in the near future, though, because of the potential for real confrontation, not with the Yeltsin administration but with the opposition should it come to power.
VII. CONCLUSION

The world remains a dangerous place; low-level conflicts still threaten the security of nearby countries. NATO's transformation from superpower deterrent to regional policeman is complete, so NATO can now focus on absorbing new members. NATO expansion will happen and Russia will have to accept it. My prediction is that by the year 2000 NATO will include Poland and the Czech Republic, with Hungary also likely. Unless NATO military officials can solve certain problems, membership of Hungary also indicates a good chance of Slovakian membership too. NATO expansion will probably not end there. NATO will undergo some growing pains as it assimilates new forces, and it must be remembered that in the near future NATO may also be coping with French military reintegration into the Alliance. /71/

Because of the U.S. drawdown in Europe, the Western European Union and Partnership for Peace will become the vehicles for increased European involvement in low-level crises. The relatively quick European response to the Albanian situation is a good indication that the European forces are fully capable of carrying out this function without the United States. /72/ This does not mean that the U.S. operations tempo will change significantly, given continued U.S. involvement in the Middle East and in high-level crisis management.

In the political arena, NATO must continue to consult closely with Russia. Eventually the Russians will come to understand that NATO does not intend any threat to Russia, and even if Russia does not become a member of NATO, Russia will be that much more a part of Dr. Perry's "circle." This is a long-term process.

I disagree with Colonel Bengtsson's theory that PfP and OSCE may eventually subsume the Alliance. NATO's priority is and must remain defending its members against an armed attack from the outside. Collective defense is only a peripheral (and unlikely) function of the Partnership for Peace, and completely outside the purview of OSCE. For the Alliance to be subsumed, NATO would first have to cease to exist as we know it. Given the current environment of instability in and near Europe, this is not possible.

*Captain Brown (B.A., University of Mississippi, JD., New York University) is assigned as an assistant staff judge advocate, 86" Airlift Wing, Ramstein, Germany. He is a member of the Mississippi State Bar. This article was a year in the making and several acknowledgments are in order. First and foremost I would like to thank the interviewees, already named in the body of the article, who were kind enough to take time out from their busy schedules and permit themselves to be quoted in print. Additionally: Col David W. Chappell (USAF), 86 AW/JA; Mr. Max Johnson, SHAPE Legal Advisor; LTC Frank Richter (German Army) of the PCC, and LTC William Slayton (USA), Military Assistant to General Shevtsov, all for facilitating arrangements for these interviews.

2 The interview with General Shevtsov took place via an interpreter. All quotes of General Shevtsov are paraphrased from the translation.

3 Article 8 of the North Atlantic Treaty, which created NATO, reads, "Each Party declares that none of the international engagements now in force between it and any other of the Parties or any third State is in conflict with the provisions of this Treaty, and undertakes not to enter into any international engagement in conflict with this Treaty." North Atlantic Treaty, 4 April 1949, 34 U.N.T.S. 243, reprinted in British Command Paper, Cmd. 7789, p. 4. This, coupled with the renunciation of the use of force in Article 1, is basically a pledge that all NATO members shall be secure from each other.


6 Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Turkey, the United Kingdom and the United States.

7 France did not participate in the Alliance's military structure for decades, but according to French Defense Minister Charles Millon, has begun to "resume her role in appropriate NATO military bodies which do not encroach on her sovereignty." C. Millon, France and the Renewal of the Atlantic Alliance, 44 NATO REV. WEBEDITION 13 (No. 3, May 1996).


9 Pursuant to UN Security Council Resolution 1031 (1995), para. 14, NATO established a unified Implementation Force (IFOR) to implement the military aspects of the General Framework Agreement For Peace In Bosnia And Herzegovina, UN Doc. 2/1995/999. Last December, in accordance with S.C. Res. 1088 (1996), para. 18, NATO established a Stabilization Force (SFOR) as the "legal successor to IFOR."

10 Crisis management is an umbrella term for six distinct types of peace operations: Conflict Prevention operations are intended to prevent disputes from escalating into armed conflict or from spreading, and may include fact finding missions, consultation, warning, inspections, monitoring, and preventive deployments. Peacemaking is any diplomatic action conducted after commencement of conflict with the aim of establishing a peaceful settlement. Peacekeeping is the containment, moderation, and/or termination of hostilities between or within States, through intervention by an impartial third party (and with the consent of the warring parties). Peace Enforcement is military action to restore peace in an area of conflict, and is generally authorized by the UN Security Council under Chapter VII of the UN Charter, not necessarily with the consent of the warring parties. Peace Building is post-conflict action to identify and support structures which will tend to strengthen and solidify a political settlement in order to avoid a return to conflict. Humanitarian Operations are missions conducted to relieve human suffering, especially in circumstances where responsible authorities in the area are unable or unwilling to provide adequate service support to the population. Bi-MNC Directive for NATO Doctrine for Peace Support Operations, 11 Dec 1995, Chapter 1, para. 1-2(f) (PfP Unclassified).


13 Specifically, to act "as it [the assisting State] deems necessary." North Atlantic Treaty, supra note 3, at 2 (emphasis added).

14 Command and control.
15 Treaty For Collaboration In Economic, Social And Cultural Matters And For Collective Self-Defence ("Brussels Treaty"), 17 March 1948, 19 U.N.T.S. 51, as amended by Protocol Modifying And Completing the [Brussels Treaty] ("Paris Protocol"), 23 October 1954, 211 U.N.T.S. 342. The WEU's full members are Belgium, France, Germany, Greece, Italy, Luxembourg, the Netherlands, Portugal, Spain and the United Kingdom. Denmark and Ireland, who are both full members of the European Union (EU), opted out of WEU membership and became observers. Iceland, Norway and Turkey, who are members of NATO but non-members of the EU, are associate members of the WEU.


18 Id.


21 Id., Part II, para. 4, at 142.


23 The Petersberg Declaration, Part II, art. 2, reads "WEU member States declare that they are prepared to make available military units ... for military tasks conducted under the authority of WEU." Petersberg Declaration, supra note 20, at 142. This means WEU operations will be carried out by forces provided by WEU members, not by NATO. CJTF headquarters, however, may be concurrent with NATO headquarters. See note 33, infra.

24 Allied Command Europe, commanded by SACEUR, is one of the two Major NATO Commands. The other is Allied Command Atlantic (ACLANT), which is commanded by the Supreme Allied Commander Atlantic (SACLANT).

25 Joint Polish-Ukrainian-Lithuanian activities in IFOR are documented in H. Krolikowski, Peace through Partnership: Poland strengthens ties with Lithuania and Ukraine, 1/1997 JANE'S INT'L DEFENSE REV. 51. "The development of close relations with Ukraine and Lithuania constitutes a 'second tier' of the security package that Poland is proposing for the ultimate goal of improved regional security." Id. at 53.

26 Capt Brown's word, not the Colonel's.

27 Partnership for Peace Invitation, 3rd para., reprinted in NATO PARTNERSHIP FOR PEACE 2 (NATO, 1994).

28 Albania, Armenia, Austria, Azerbaijan, Belarus, Bulgaria, Czech Republic, Estonia, Finland, FYROM, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Poland, Romania, Russia, Slovakia, Slovenia, Sweden, Turkmenistan, Ukraine and Uzbekistan. In addition, Switzerland joined PfP in December 1996.

30 Id., para. 8, at 8.


32 Mr. Cragg also theorizes that CJTF operations could also be used for Article 5 operations, which of course would not necessarily include PfP countries. Id.

33 Writes Mr. Cragg, "In the course of developing the CJTF concept, the Allies have agreed that for NATO applications, the 'nuclei' of CJTF headquarters will be established on a permanent basis within selected Alliance headquarters." Id. He also points out that WEU could request use of a CJTF headquarters for a WEU operation.

34 PfP Framework Document, supra, para. 7, at 7. From January to May 1995 the PARP participants were Albania, Bulgaria, Czech Republic, Estonia, Finland, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia, Sweden and Ukraine. A. Cragg, The Partnership For Peace Planning And Review Process, 43 NATO REV. WEBEDITION 23 (No. 6, Nov 1995).

35 Search And Rescue.


38 W. Cimoszewicz, Building Poland's Security: Membership of NATO a Key Objective 44 NATO Rev. WEBEDITION 3 (No. 3, May 1996).

39 I. Golob, Preparing for membership: Slovenia's expanding ties to NATO 44 NATO Rev. WEBEDITION 24 (No. 6, Nov 1996). Emphasis added. This "transatlantic link" can only be achieved by joining NATO.

40 C. Stankevicius, NATO enlargement and the indivisibility of security in Europe: A view from Lithuania 44 NATO Rev. WEBEDITION 21 (No. 5, Sep 1996).

41 J. Dalbins, Baltic Cooperation - The Key To Wider Security 44 NATO Rev. WEBEDITION 7 (No. 1, Jan 1996).

42 Austria, Finland, Irelan and Sweden have all been frequent contributors to UN peacekeeping operations since the 1950's. See THE BLUE HELMETS: A REVIEW OF UNITED NATIONS PEACEKEEPING 421-440 (United Nations, 2d ed., 1990), U.N. Sales No. E.90.1.18.


46 Id. at chap. 1, para. 8.

47 Id. at chap. 4, para. 45.
48 Id. at chap. 1, para 6 and chap 2, para 17.

49 Id. at chap. 3, para. 38.

50 Id. at chap. 4, para. 44.

51 Id. at para. 43.

52 Id. at chap. 2, para. 30.

53 "NATO's Enlargement," supra note 45.

54 Slovenia also adjoins Hungary, but unlike Slovakia, its border with Hungary is very short and contains no major roads going into Hungary.

55 See C. Cretzan (AP), Romania Presses for Spot in NATO EuRoPEAN STARS AND STRIPES, 15 Feb 97, at 5. A Hungarian minority may also be a concern with respect to Slovakia.

56 Carl Bildt is the former Prime Minister of Sweden and currently the U.N. High Representative.


59 Study on NATO Enlargement, supra note 45, at chap. 2, para. 20.


61 The legal groundwork for Russian participation in IFOR was laid in four separate special arrangements: a Principles Memorandum between General Joulwan and General Shevtsov, a command arrangement chart signed by U.S. and Russian Defense Ministers, a Terms of Reference Memorandum, and an operational directive for the Independent Russian Brigade in IFOR. The IFOR Participation Agreement for Russia reads, "The overall authority for conducting operations and operational command is entrusted with the Supreme Commander of IFOR, General G. Joulwan. The Russian military contingent is directly subordinated to Colonel General L.P. Shevtsov." IFOR Participation Agreement, NATO-Russia, 11-13 March 1996, NATO Doc. SG/96/261(E) (on file with author). This is different from other contingents within Multinational Division North, who are under operational command of the Division Commander.


63 See, e.g., V. Crawley, Wary Russian official finds NATO links, EUROPEAN STARS AND STRIPES, 28 Sep 96, at 1; J. Ulbrich (AP), Comrades in Bosnia, adversaries over NATO, EUROPEAN STARS AND STRIPES, Dec. 9, 1996, at 1; V. Crawley, Russian minister says NATO returning `to bad old days, EUROPEAN STARS AND STRIPES, Dec. 19, 1996, at 4.

65 Id.

66 The Charter is not yet even signed, and Russian Communist Party leader Gennady Zyuganov is already attacking President Yeltsin, claiming he has "surrendered everything he could but national security, and now he has decided to trade this in, too." M. Landsberg (AP), *Foes Attack Yeltsin for NATO Stance*, EUROPEAN STARS AND STRIPES, Apr. 19, 1997, at 2.

67 V. Crawley, *supra* note 62.

68 V. Crawley, *supra* note 63.


70 Secretary Christopher, A New Atlantic Community For the 21st Century, Address in Stuttgart (Sep. 6, 1996) (transcript on file with author).

71 For example, France has been pressing NATO to allow a European, and preferably a Frenchman, to take over command of Allied Force Southern Europe (AFSOUTH). France keeping pressure on US. over NATO role, EUROPEAN STARS AND STRIPES, 1 Feb 97, at 10.

72 At press time, a multinational humanitarian relief operation in Albania was just underway, with the first soldiers arriving in country on 15 Apr 97. This is an all-European operation, with contributions from Austria, Denmark, France, Greece, Italy, Romania, Spain and Turkey. The Italian-led force's mission is to safeguard humanitarian aid deliveries. Albanian aid operation gets rolling, EUROPEAN STARS AND STRIPES, 16 Apr 97, at 7.
Claims Encountered During an Operational Contingency

CAPTAIN JEFFREY S. PALMER, USAF

I. INTRODUCTION

Military operations, including exercises, invariably result in some degree of damage to persons and property, both public and private. With the increasing number of operations involving U.S. forces, there is a corresponding increase in demand for judge advocates to accompany the force in a claims officer capacity. Understanding the applicable statutory schemes for the compensation of claims against the United States is critical in a contingency environment. The payment or nonpayment of claims can dramatically impact those in, and around, an operational contingency. Although never a factor as to whether claims are meritorious or not, the political repercussions resulting from an unfavorable adjudication of a claim can be serious. Therefore, the importance of thorough investigation and review of all claims cannot be overemphasized. The various categories of claims and the numerous variables which may affect those claims will be examined below to provide as clear guidance as is possible to the deployed claims team. While no substitute for current instructions and statutory guidelines, this guide should provide a practical overview of both claims processing and the unique considerations found in a contingency environment.

Although it may seem self evident, authority as a claims officer is conditioned upon the Air Force having single service claims responsibility (SSCR) for a particular geographic region or country. /1/ Often, a contingency may be operating in a locale where claims have not been previously adjudicated, and thus settlement authority not assigned. One must ensure that the Air Force has been assigned single service claims responsibility per official message traffic such as the Operations Plan (OPLAN) or Operations Order (OPORDER). It may be possible that the Department of Defense (DOD) has not designated SSCR, and the respective Unified CINC may then designate a service on an interim basis. Additionally, there may be a section on service responsibility for claims processing under any applicable Status of Forces Agreement (SOFA), making predeployment review of applicable international

Claims personnel should be aware that their authority is limited by geographic boundaries and that contingencies, such as regional conflicts or humanitarian operations, frequently spill over into neighboring countries. These areas may not be considered within the parameters of a claims team's settlement authority. Finally, claims teams should realize that there may be specific prohibitions on the payment of claims to certain enemy nationals. For example, in Iraq, initially no claims were payable to citizens of Iraq. When it became apparent that a portion of the population that was friendly to U.S. armed forces, the Kurds, were also excluded by this prohibition, an exception was carved out by DOD. Deployed claims personnel would likely be the party initiating the request for such an exception.

Simply because the Air Force may have single service claims responsibility, does not mean that any Judge Advocate may adjudicate tort claims. For example, a specifically appointed Foreign Claims Commission (FCC) is required for claims arising under the Foreign Claims Act. /2/ While a FCC may consist of as many as three persons, in the Air Force it is frequently a "commission" of one person, usually the claims officer. A deploying Judge Advocate must be appointed as a subordinate FCC of any authorized settlement authorities. There are various FCCs listed with their corresponding
settlement authority in AFI 51-501, paragraph 4.7. Similar appointment is required for processing of claims under other statutory compensation schemes. In all cases, claims personnel must forward claims packages beyond their settlement authority (including denial authority) to the appropriate settlement authority.

Where the Air Force does not have SSCR, claims should still be investigated and processed to the extent that the other branch of service requires. One final note on SSCR the SSCR designation means that the Air Force will be processing tort claims for damages or injuries caused by members of all U.S. armed forces, not just those attributed to Air Force personnel and operations.

In sum, for any deploying claims team, one primary goal which should be met during the predeployment phase, is to understand the existing limits of settlement authority. Where necessary, obtain proper designation. Where the scope of claims authority is unclear, seek the definitive answer. There should be no misunderstanding about what role a claims team is expected to play in a given contingency.

II. FOREIGN CLAIMS ACT (FCA) CLAIMS

These claims may likely be the most frequently encountered claims for a deployed claims officer. Because the FCA only applies outside the United States, deploying claims officers may not be well versed in the intricacies associated with FCA claims, and should take extra steps to ensure familiarity with the dynamics of these claims. /3/ Claimants are most commonly foreign inhabitants and their companies or business entities. U.S. DOD personnel and their dependents do not qualify for this compensation scheme. These claimants can also be foreign governments, as long as it's not the enemy force's government. Claims made under the FCA can be a critical factor in the public relations with a foreign population, and should be afforded the appropriate consideration. What is most unusual about FCA claims, is that while these claims for injury or property damage are based on the noncombat activities of U.S. armed forces, negligence is not a prerequisite to the payment of FCA claims. /4/

A. FCA as Ex Gratia

Claims processed under the FCA are distinct from those processed under other existing compensation schemes, such as the Military Claims Act /5/ or the International Agreement Claims Act /6/, in that one of the primary purposes of the FCA is to promote and maintain friendly relations with the host nation. In fact, as an act of grace (ex gratia), the FCA is broadly construed and the United States accepts responsibility for almost all damage the members and employees of its armed forces cause, and expeditiously settles meritorious claims. /7/ Unique to the FCA, is the fact that a settlement authority may approve a settlement even where an injury has resulted from a criminal act clearly outside the scope of employment. /8/ Not surprisingly, the prompt payment of a FCA claim can lead to the release of U.S. personnel from foreign criminal confinement and the dropping of charges against them. In this respect, the FCA has the ability to directly impact the success of a military installation's foreign criminal jurisdiction program in securing release of U.S. military personnel from foreign custody. /9/ Through the enterprising use of the FCA, countless military members around the world have been released from foreign law enforcement custody (often, to face disposition by U.S. armed forces), while at the same time compensation is made to victims and other aggrieved parties.

B. Abuse of the FCA

While the FCA is an act of grace, the merits of these, like all, claims must be thoroughly investigated and well documented. As mentioned above, denial of a politically sensitive claim may
have serious repercussions. Unquestionably, when the facts do not support a claim, denial is warranted. Nevertheless, claims teams should be prepared to substantiate their findings and recommendations. Witness statements, photographs and police reports are not only required in conjunction with the preparation of the seven point memorandum, but can be crucial in the event that a reconsideration is requested.

There have been incidents where a claim which was previously adjudicated and denied has been "re-filed," not as a reconsideration, but as a "new," fraudulently revised, claim. When there is a re-filing, the claimant is usually depending on the rapid turnover of deployed personnel and the lack of accurate record keeping common in a contingency environment. In some cases, a claimant expects a "fresh" look at the claim, while in others, the claim has been framed in a more favorable light to the claimant. Unbeknownst to most claimants, certain types of claims are specifically prohibited from payment under the FCA, such as those claims arising from private contractual relationships, landlord-tenant disputes, and those arising from domestic employees of U.S. military members. /10/ For that reason, claims investigators should be aware of "copy cat" claims.

This "copy cat" phenomenon has occurred where a FCA claim, or series of claims, is denied as nonpayable, and then a similar, but meritorious, FCA claim is approved for payment. As word of the paid claim gets out to the local community, other claims follow, bearing a remarkable resemblance to the paid claim. However, claims teams should consider "copycat" incidents an exceptional situation, and remember their overall obligation to consider each claim on its own merits. As always, claims personnel are prohibited from prejudging any claims. /11/

C. Logistical Considerations

In processing an approved FCA claim, deployed claims personnel will want to ensure that logistical arrangements for settlement are planned well in advance. For example, there should be an appointment of a paying agent for approved claims. Often, an operational environment in which the claimant resides may not have functioning banking facilities or the capability of electronic funds transfers. Cash payment may be the only viable mechanism for the transfer of a settlement payment. Depending on the amount of the settlement, there may be security issues for both the paying agent and the claimant. Adequate safeguards should be taken during a cash settlement to protect both the paying agent and the recipient. A public relations nightmare will result from a claimant who is robbed or murdered following a large FCA settlement and, thus, potential repercussions to the claimant should be carefully considered in advance.

Furthermore, settlement agreements should be prepared in English with a translation for the claimant. Settlements should also be explained by a translator because the claimant may be partially or completely illiterate. This safeguard ensures the claimant clearly understands the ramifications of executing a settlement agreement. As always, this settlement procedure should be well documented in anticipation of follow-on claims.

While payment should always be effected in the local currency, sometimes this is impracticable where the currency is not openly traded on world markets or its negotiability appears jeopardized by drastic devaluation. For example, during PROVIDE COMFORT, it was impracticable for both reasons stated above to make settlement payments to Iraqi Kurds in Iraqi Dinars, an essentially worthless currency. Settlements not made in the local currency should be coordinated with HQ USAF/JACC in advance.
D. FCA: A Public Relations Tool

The use of the FCA can be a genuinely effective tool to maintain good relations with the local population in which a military force is often immersed. It has sweeping application and can compensate for noncombat injury or damage caused by U.S. armed forces personnel. Additionally, it operates without being contingent upon determinations of "official capacity" or "negligence." Settlement authorities are vested with a high degree of discretion in the application of this compensation mechanism. However, because "local rules" are applied when assessing both fault and level of compensation, sound independent advice from an attorney familiar with the host nation laws should routinely be sought.

E. FCA & the Emotional Element

Finally, in the investigation of claims against U.S. armed forces, claims personnel must not succumb to the emotional aspects of claims arising in a contingency environment. In most deployment scenarios, standards of living for the indigenous population are deplorable and occasionally shocking. A local population may be devastated by indiscriminate combat. Compensation for losses suffered may be the sole means of survival for a claimant. Nevertheless, claims personnel are obligated to ensure that a claim is both meritorious and payable under an existing compensation scheme.

Avoid the "Santa Claus Syndrome," not only because there is no legal authority for claims payments based solely on compassion, but also because it creates a disparity in how other claimants may be treated by claims personnel who follow. Unfortunately, a certain degree of callousness is required to ensure compliance with the statutory obligations imposed on claims personnel. It is beneficial for all concerned when a claims team has familiarized themselves with the nongovernmental organizations (NGOs) operating in the area of the contingency. These organizations can often provide some humanitarian relief that U.S. armed forces may be precluded from providing. Directing NGOs to war victims and vice versa can ease some of the stress often associated with working within U.S. statutory parameters.

III. INTERNATIONAL AGREEMENTS CLAIMS ACT (IACA)

Some countries to which the U.S. armed forces deploy have a Status of Forces Agreement (SOFA) which typically contains provisions for the processing of claims arising from acts of "official duty" or resulting from the execution of military operations. These claims provisions usually address how various categories of claims are to be processed. Understanding the dynamics of these often complex claims is essential for deployed claims personnel. Given the historically successful operation of the Article VIII, paragraph 5, claims provisions of the NATO SOFA, it is probably appropriate to use some of those provisions as a model. Indeed, as the Partnership for Peace SOFA has specifically incorporated the NATO SOFA claims article, exploring these provisions may likely illustrate how SOFA claims would be processed by many deploying claims personnel worldwide (including some exercises in the United States).

A. Government-to-Government Claims

Usually, where property owned by a party to the SOFA and used by its armed forces is damaged by a member of the armed forces of another party, in the performance of official duty, these claims are waived. This means that each party to the SOFA waives all its claims against another
Contracting Party for damage to any property owned and used by its armed services, if the damage was (1) caused by a member or an employee of the armed services of another Contracting Party while executing his duties; or (2) arose from the use of any vehicle, vessel or aircraft owned by another Contracting Party and used by its armed services.

Typically, non-military government property claims are partially waived. For example, under the NATO SOFA, Art. VIII, paragraph 2, "In the case of damage caused or arising as stated in paragraph 1 to other property owned by a Contracting Party and located in its territory, the issue of liability of any other Contracting Party shall be determined and the amount of damage shall be assessed, unless the Contracting Parties concerned agree otherwise, by a sole arbitrator . . . ." The arbitrator also decides any counter-claim arising out of the same incident. NATO practice has been for States to "agree otherwise," and to reach a settlement themselves without recourse to an arbitrator. A decision to "agree otherwise" may be the utilization of the cost sharing percentage scheme, usually designed for third party claims or, in other circumstances, payment of actual damages attributed to the damage-causing force.

Some claims are waived completely, including those for $1400 or less /14/ and claims for injury or death of members of the armed services. /15/ Thus, in the case of the latter, each party to the SOFA usually waives all its claims against any other Contracting Party for injury or death suffered by any member of its armed services, while the member was engaged in his official duties. This provision is based upon the presumption that each Contracting Party is in the best position to address the injury or death of its own armed forces personnel, such as in the United States where Servicemen's Group Life Insurance (SGLI) and other death and funerary benefits are available for military personnel.

B. Third Party Claims

Claims arising out of acts or omissions of members of a force or civilian component done in the performance of official duty, or claims for which a visiting force may be liable under receiving state law, which cause damage to third parties (other than any of the Contracting Parties) shall be dealt with by the receiving state. This type of claim is commonly referred to as a "scope claim" because it occurs within the scope of the tortfeasor's official duty. A proper third party claimant may include: a natural person, a corporate entity, or a local and city government. Claimants generally must file their claim with the receiving state, although those presented to U.S. military officials should be forwarded for processing to the receiving state claims tribunal. The receiving state processes a scope claim by having local authorities investigate the incident. The receiving state then settles or denies the claim. If approved, settlement is paid to the claimant by the receiving state. Once paid, the claim "with full particulars" is communicated by the receiving state to the United States with a proposed allocation between them as to the amount paid (in accordance with the formula prescribed in the SOFA). The United States then reimburses the receiving state for its portion of all claims paid. This reimbursement is usually accomplished on a semiannual basis. The cost allocation formula /16/ allows for the satisfaction of claims through a distribution system between the Contracting Parties. Where the sending state alone is responsible for damages, the amount awarded or adjudged is divided as a 25 per cent charge to the receiving state and a 75 per cent charge to the sending state. Where more than one state is responsible for damage, the amount awarded or adjudged is distributed equally among them. When damages cannot be attributed specifically to one or more of the Contracting Parties' armed services, the amount awarded is again distributed equally. However, when the receiving state is not one of the states responsible, its contribution is only half that of each of the sending states.
In any case, the United States cannot claim immunity from the jurisdiction of the courts of the receiving state for members of a force or civilian component, except that, "A member of a force or civilian component shall not be subject to any proceedings for the enforcement of any judgment given against him in the receiving state in a matter arising from the performance of his official duties." This provision applies to both government to government, as well as third party scope claims.

### C. Non-scope Claims

Claims against members of a force or civilian component arising out of tortious acts not done in the performance of official duty are almost always addressed in SOFAs. Usually, the authorities of the receiving state consider the claim, assess compensation to the claimant in a fair and reasonable manner (taking into account all the circumstances of the case, including the conduct of the injured person), and prepare a report on the matter. The report is delivered to the United States, who decides whether they will offer an ex gratia payment, and if so, of what amount. This is the interplay between the IACA and the FCA. When an injury results from acts outside the scope of employment, most SOFAs will not provide compensation. Thus, any compensation made by the United States is entirely on an ex gratia basis. It is important to note, however, that claims denied by a competent tribunal established under a SOFA, may not be subsequently paid under the FCA.

Unlike "scope claims," servicemembers may be sued in civil court (or criminally prosecuted) for tortious acts committed outside their official duties. Article VIII, Paragraph 6 of the NATO SOFA states: "Nothing in this paragraph shall affect the jurisdiction of the courts of the receiving State to entertain an action against a member of a force or a civilian component unless and until there has been payment in full satisfaction of the claim." While the United States is not legally responsible for non-scope claims, the FCA is often used for precisely these purposes. If a claim is settled in full satisfaction under the provisions of the FCA, a civil action in the courts of the receiving state is usually barred under provisions of the SOFA.

### D. Related Issues - Contracts, Real Estate & War Claims

Contract claims are usually specifically excluded from processing under both the FCA and the IACA and are settled in accordance with the terms of the contract or applicable international and domestic law. Similarly, payment for claims involving real estate are also not allowed. These include claims for rent, damage, or other payments involving acquisition, use, and possession of real property. The exception to this is where property is damaged during a "noncombat activity" or the claim can be framed as a trespass tort, even though claimed as rent. A continuing trespass is not, however, payable under AFI 51-501, paragraph 4.15.9. Additionally, war related claims, such as claims for war damage, are not payable under either of these compensation schemes.

While variations will exist in claims provisions from SOFA to SOFA, claims personnel will generally find that certain types of claims are waived between governments, there is a payment scheme for cost sharing the claims of third parties, and immunities exist for individual military and civilian personnel acting in an official capacity. Predeployment planning should include a thorough review of the applicable SOFA claims provisions. An understanding of the receiving state's procedures for settling claims is critical, even where the Air Force does not have SSCR. Deployed claims personnel can reasonably expect and plan for technical assistance from the servicing
command claims service. A common foundation on the SOFA enumerated procedures will unquestionably facilitate claims adjudication.

IV. SOFAs AND U.S. FCA COMPARED

• The U.S. FCA does not apply to "in scope" claims if there is a SOFA which establishes a cost-sharing formula for official duty claims.

• Payments under the SOFA are shared by the receiving and sending State; payments under the FCA are paid in full by the United States. Advance payments are possible under the FCA, but not under the SOFA unless the Host Nation law authorizes and the Host Nation claims authority will make such payments.

• Claimants under the FCA may only request reconsideration; under a SOFA, claimants have all rights, to include civil litigation, as provided by the law of the Host Nation.

• Proper claimants under the SOFA ("third parties") differ from proper claimants under the FCA (essentially inhabitants of a foreign country and foreign governments).

V. MILITARY CLAIMS ACT (MCA)

This third claims mechanism may also be encountered by deployed claims personnel and has a specific application distinct from the FCA and the IACA. Unlike the FCA, claimants may be U.S. citizens, U.S. military personnel and civilian employees. Barred from claiming are foreign inhabitants, foreign governments and municipalities. Another distinction from the FCA is that tortious acts must have been done "within the scope of employment." /21/ Medical malpractice of dependents accompanying a military member overseas are the most common claims processed under the MCA. Since most claims for property damage to military personnel and civilian employees are processed under the Personnel Claims Act, and dependents are not usually present during a deployment, there is limited application of this statutory compensation scheme during contingency operations.

The MCA has two bases of liability for claims processed under its provisions. /22/ The first are those claims based upon negligent or wrongful acts or omissions that military or civilian personnel of the U.S. armed forces commit while acting within the scope of their employment. The second are those claims which arise from "noncombat activities" of the U.S. armed forces, without regard to establishing a negligent act or omission. In these cases, causation and damages need only be demonstrated. A classic example of such a noncombat activity is where an engine or armament falls off an aircraft and causes property damage.

Some of the specific limitations on claims processed under the MCA are that they cannot be paid for claims arising from assessment of a customs duty, or for those stemming from contractual transactions, express or implied. Additionally, MCA claims are not payable where the claim is for personal injury or death of a U.S. military member incident to his or her service, or for personal injury or death of a foreign military personnel incident to their military service. 23 In an era of coalition operations, that last prohibition on payment is an important, and often controversial, one.

In determining liability, the law applied to an MCA claim by a settlement authority stem from general principles of American tort law and the pure comparative negligence rule. The same
Applies when a settlement authority is determining damages. Principles of strict liability never apply and punitive damages are not payable under the MCA.

VI. COMBAT CLAIMS

A recurring theme throughout U.S. statutory compensation schemes is that claims arising from combat activity or combat-related activity are not payable. For example, claims that arise "directly or indirectly from an act" of the U.S. armed forces in combat, or that arise from an "action by an enemy" are not compensable under the FCA. Similar prohibitions are included in the MCA, and most SOFAs will restrict any payment of "war claims." However, it is important to recognize that noncombat claims will likely arise in a combat setting. Claims personnel will need to carefully discriminate between these payable claims and the prohibited combat-related claims. Making such a distinction may seem arbitrary to the claimant population, and could serve as an impetus for "copy cat" claims described above. Unfortunately, it is widely recognized that the denial of combat claims can undermine support of U.S. military efforts from the local population. While the United States has dealt with combat claims after several recent conflicts, this was only on an ad hoc basis effected through diplomatic and political channels. In other words, compensation was achieved outside the existing compensation schemes. As a deployed claims examiner, the prohibition on paying combat claims is without exception, and controversy concerning this prohibition should be expected.

Another controversial area of combat claims can be those resulting from "friendly fire." In this era of coalition operations, incidents of friendly fire have come to the forefront of public attention, largely due to the extent of present day media coverage. While resolution of these incidents is usually accomplished at the diplomatic or political levels, deploying claims personnel should understand the legal parameters placed on the payment of such claims, and be capable of articulating those to the operational commanders faced with these crises. Some may question whether an act of "friendly fire" can be a combat related if the perceived target is actually an ally. This protracted analysis is unnecessary. Under the FCA and the MCA, claims resulting from injury or death to foreign military personnel are barred where it is incident to their military service. "Incident to service" has been broadly defined to include virtually every military-related activity. This prohibition on the payment to allies killed at the hands of U.S. armed forces is in effect regardless of whether the act is defined as "combat action" or not.

Likewise, as mentioned above, usually all claims between Contracting parties to a SOFA for death or personal injury of members of an armed force caused by members of another armed force (in the performance of their official duties) are waived. Thus, acts of "friendly fire," whether classified as combat acts or not, are not payable under any existing statutory scheme where the injured parties are foreign military personnel engaged in some form of joint military operation. Again, the basis for these prohibitions on payment stems from the fact that most states have a death benefit or other compensatory mechanism for the surviving family of military members.
Table 1.1 Determining Appropriate Statutory Compensation Schemes
(without regard to merit)

<table>
<thead>
<tr>
<th></th>
<th>Claims resulting from official acts</th>
<th>Claims resulting from combat acts</th>
<th>Claims resulting from unofficial acts</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCA</td>
<td>Yes, if cannot be a IACA claim</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>MCA</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>IACA</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Solatia, where customary</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

While the above table is, no doubt, an oversimplification of the complex considerations which are generally required of the tort claim process, it may be useful as an illustrative tool for purposes of comparison.

VII. SOLATIA

In some foreign countries, especially parts of the Far East and Southwest Asia, a person who is involved in an accident is expected to immediately express sympathy to the victim or the victim's family by making a solatium payment. Military branches involved in an incident should make solatium payment regardless of the assignment of SSCR to another branch. Payments are usually nominal in amount and are intended and received as an expression of sympathy and condolence rather than an admission of wrongdoing. Solatium may be made as a payment of money or "in kind," or a combination of the two. Examples of "in kind" solatia are floral arrangements and fruit baskets. Promptness of payment is crucial in most countries and the presence of the U.S. tortfeasor at the time the solatium is made may be required by local custom. In some cultures, a party to a fatal incident may be expected to attend the decedent's funeral. Remarkably, it is possible for solatium payment to be made for death or injury resulting from combat activities. /28/ Claims personnel should familiarize themselves with the local solatia customs concerning the importance of timing, participants, type of payment and customary amount of solatium.

Solatium payments are not "claims," but the incident giving rise to a solatium payment will often result in a claim. /29/ Where a subsequent claim has been filed under one of the claims statutes, payment of solatia may be considered when assessing settlement damages. Since liability is not at issue with the payment of solatia, no settlement agreement is ever required, and may be considered offensive. Payment of solatia are not paid from claims funds, but rather are paid out of O&M funds. Additionally, a solatium payment is not intended to be a substitute for an advance payment of a claim as may be authorized under AFI 51-501, paragraph 1.18. In the absence of command instruction, coordination with HQ USAF/JACC should be sought prior to making solatium payments, due to the political sensitivity of solatium payments and the incidents upon which they are based.

While each military branch has an independent obligation to ensure that solatia is made where appropriate, the individual involved in the incident may also have an incentive to comply
with the solatia custom on his own volition. Incidents giving rise to a solatium payment may likely involve a violation of local laws, such as traffic regulations or ordinances. Many countries have criminal negligence statutes under which a party may be criminally prosecuted. Compliance with local solatia customs has, on more than one occasion, led to the dropping of charges for crimes based on negligence.

VIII. CONCLUSION

Understanding the dynamics and interplay of the various existing claims schemes is paramount to effective service as a claims officer in a contingency environment. There is, however, little substitute for experience, most of which is impossible to glean from a CONUS assignment. Where possible, predeployment preparation can be extremely beneficial, especially where one can obtain debriefings from claims personnel formerly stationed in the area of the contingency. Gaining insight into the indigenous population surrounding the contingency will not only assist one with learning the local customs, but may also help identify potential pitfalls associated with claims resulting from a U.S. military presence.

Appendix A

Simplified Guide to Processing Ex Gratia Claims under the FCA

A. Scope. Claims may be for death, injury or property damage. The incident giving rise to the claim must arise outside of the United States, its territories, commonwealths or possessions.

B. Payment criteria

1. Causation, not negligence
   a. Non-combatant activities
   b. Act of military member or civilian employee

2. Scope of employment only applicable if tortfeasor is an indigenous employee (i.e., an employee paid and supervised directly by the United States), prisoner of war or interned enemy alien

3. Two year statute of limitations

C. Proper claimants

1. "Any foreign country or any political subdivision or inhabitant of a foreign country." (10 USC 2374), including:
a. Inhabitants of any foreign country including U.S. national residents but excluding members of the armed service, the civilian component or their dependents assigned to the receiving state who are normally excluded.
b. Foreign companies, partnerships and business entities
c. Foreign governments and their political subdivisions
2. U.S. corporations with a place of business in the country where the claim arose
3. Foreign military personnel, if the injury, death or property loss did not occur during a joint military activity, or is otherwise not incident to the active duty of the claimant.

D. Improper claimants or claims:

1. U.S. military personnel
2. U.S. civilian employees, including local inhabitant employees, injured in the scope of employment
3. Dependents accompanying U.S. armed services or civilian employees
4. Foreign military personnel for injury, death or property losses arising incident to service
5. National governments, including their nationals, corporations and other legal entities, which are engaged in armed conflict with the United States or its allies.
6. U.S. tourists
7. SOFA claimants, whether paid or denied
8. Claims involving private contractual relationships between U.S. forces personnel and third parties for:
   a. Leases
   b. Public utilities
   c. Hiring of domestic servants
   d. Private debts
9. Claims arising out of personal activities of family members, guests, servants, or pets of members and employees of the U.S. armed services
10. Claims based solely on compassionate grounds or bastardy
11. Claims based on Patent infringement
12. Insurers and subrogees
13. Attorney fees, punitive damages, a judgment or interest in a judgment, bail or court costs
14. Where the claimant has been contributorily negligent and that doctrine is followed under local law.

E. Applicable law

1. Law and standard of care in the country where the incident occurred.
2. No deduction for collateral compensation except for payment from an insurance policy for which a U.S. military member or civilian employee has paid.

F. Settlement process
1. Claim application. A claim, submitted within two years of the incident giving rise to the claim, should state the time, date, place, and nature of the incident; state the nature and extent of any injury, loss or damage; and request compensation in a definite amount which may be in local currency or U.S. dollars.

2. Foreign Claims Commission. The claim will be considered and settled by a foreign claims commission consisting of U.S. military officers (usually judge advocates) appointed by a senior local U.S. military commander. Commissions generally have a geographical area of responsibility and settle all claims for the United States irrespective of the military service involved.
   a. The Commission
      (1) Considers the claim application
      (2) Seeks a recommendation from the Host Nation
      (3) Conducts an informal investigation and interview local witnesses if necessary
      (4) Adjudicates the claim and, either denies the claim or pays the claim (if the claimant signs a settlement agreement)
      (5) Reconsiders a prior adjudication

---

* Captain Palmer (B.A., Auburn University; J.D., University of Baltimore; LL.M, Georgetown University) is an Instructor, International Training Detachment, Naval Justice School). He is a member of the Maryland Bar.

1 Department of Defense Dir. 5515.8, Single Service Assignment of Responsibility for Processing of Claims (9 June 1990).


3 A simple guide to processing FCA (Ex Gratia) Claims is attached as Appendix A.


7 Although superseded, AFR 112-1, Claims and Tort Litigation, para. 8-15 (31 Oct. 1989) contains an excellent discussion of the applicability of the Foreign Claims Act [hereinafter AFR 112-1 (S)].

8 AFI 51-501, supra note 4, at para. 4.14.

9 See generally, AFI 51-703, Foreign Criminal Jurisdiction, Section A (6 May 1994) (discussing pretrial custody in foreign court cases).

10 AFI, 51-501, supra note 4, at para. 4.15 (lists a variety claims that cannot be paid under the FCA).

11 Id. at para. 1.13.

12 Id. at para. 4.16.

13 NATO SOFA, Art. VIII, para. 1.

14 NATO SOFA, Art. VIII, para. 2(f).
15 NATO SOFA, Art. VIII, para. 4.

16 NATO SOFA, Art. VIII, para. 5(e).

17 Id. at 5(g).

18 NATO SOFA, Art. VIII, para. 5, excludes "contractual claims." See also, AM 51-501, supra note 4, at para. 4.15.1

19 THE JUDGE ADVOCATE GENERAL'S SCHOOL (UNITED STATES ARMY), OPERATIONAL LAW HANDBOOK 10-9 (1996) [hereinafter Army Handbook].


21 AFI 51-501, supra note 4, at para. 3.5.


23 See, AFI 51-501, supra note 4, at para. 3.6 (MCA Exclusions).

24 10 U.S.C. § 2734; AFI 51-501 supra note 4, at para. 4.15.10

25 For a discussion of the payment of combat claims in Viet Nam, Grenada and Panama, see Army Handbook, supra note 19, at 10-6.

26 Compensation for the April 14, 1994, Blackhawk helicopter shootdown in which French, Turkish, British and Kurdish (Iraqi) personnel were among the casualties was resolved at the SECDEF level, using discretionary funds, as no existing statutory compensation scheme provided relief.

27 See Daberkow v. United States, 581 F.2d 785 (9th Cir. 1978) (held that a suit under the Federal Torts Claims Act brought by the survivors of a German serviceman killed incident to joint military activities was barred by Feres Doctrine); see Feres v. United States, 340 U.S. 135(1950).


29 See, AFR 112-1(S), supra note 7, at para. 8-15(c) (provides general discussion on solatium payments).
The JCS Standing Rules of Engagement: A Judge Advocate's Primer

PROFESSOR RICHARD J. GRUNAWALT

I. INTRODUCTION

The Standing Rules of Engagement (SROE) promulgated by Chairman of the Joint Chiefs of Staff Instruction 3121.01 provides policy guidance and procedures governing self-defense and mission accomplishment for US commanders during all military operations and contingencies. Judge advocates contemplating assignment to operational law billets must be fully conversant with these SROE. This article is designed to assist in that process.

The Armed Forces of the United States constitute without question the most powerful, technologically sophisticated and professionally respected military organization in the world. Some 1.5 million strong, the men and women of the United States Army, Navy, Air Force, Marine Corps and Coast Guard are either "on-station" around the globe or are prepared to deploy whenever and wherever they are directed to do so by the National Command Authorities (NCA). Rules of engagement delineate the circumstance when those forces are authorized to initiate or continue armed engagement with foreign forces or terrorist units wherever they may be encountered.

Carl von Clausewitz, the renowned military strategist of the last century, wrote that:

War is not merely an act of policy but a true political instrument, a continuation of political inter-course, carried on with other means ... the political object is the goal, war is the means of reaching it, and means can never be considered in isolation from the purpose.

Von Clausewitz' premise reminds us that application of the military instrument, at whatever level of intensity, is always pursuant to an overarching national political purpose. Article II of the Constitution vests the executive power of the United States, and responsibility for the development and execution of the foreign policy of our nation, in the President. Article II further provides that the President is the Commander in Chief of the armed forces. Under this fundamental constitutional construct, the military forces of the United States are at all times and for all purposes under the control of, and responsive to, civilian leadership. In a Clausewitzian sense, rules of engagement serve the most fundamental of political purposes - they ensure that the military instrument of the United States is indeed employed pursuant to the overarching national political purposes of our nation.

Rules of engagement shape the application of military force to national political objectives by:
(a) providing standing guidance on the use of force during time of peace;
(b) controlling the application of force during transition from peace to war;
(c) controlling combat operations during time of war; and
(d) controlling the application of force during transition from war back to peace.

At all times, our rules of engagement are designed to provide for the safety and survival of U.S. military forces that come into harm's way and to ensure successful accomplishment of any mission that those forces may be tasked to undertake. Our rules of engagement are also the principal mechanism of ensuring that U.S. military forces are at all times in full compliance with our obligations under domestic as well as international law.

U.S. rules of engagement are, therefore, based upon three pillars - national policy, operational requirements and law. To be truly effective, the rules of engagement that govern the military forces of the United States must be fully consistent with the political objectives of our national policy, the dictates of the law, and the safety and survival of our forces during the prompt and effective accomplishment of their mission.

In October 1994, the NCA approved the Standing Rules of Engagement for US Forces. Issued by the Chairman of the Joint Chiefs of Staff in the form of a Chairman's Instruction (CJCSI 3121.01), they replace the JCS Peacetime Rules of Engagement which had been last promulgated in 1988. The SROE consist of the basic Chairman's Instruction and four enclosures which set forth "Standing Rules of Engagement for U.S. Forces" (Enclosure A), "Supplemental Measures" (Enclosure B), "Compendium and Combatant Commander's Special ROE" (Enclosure C), and "References" (Enclosure D). A Glossary of abbreviations, acronyms, terms and definitions is also included.

A. The Chairman's Instruction

The basic Chairman Instruction (CJCSI 3121.01) is just two pages in length. The purpose paragraph of the instruction establishes that the SROE serve two distinct purposes: implementing the inherent right of self-defense and providing guidance for the application of force for mission accomplishment. At the outset of this discussion of the SROE, it is imperative to keep in mind these two purposes, self-defense and mission accomplishment, as a clear understanding of the differences between the two is critical to the proper understanding and implementation of the SROE.

The Chairman's Instruction provides that the SROE apply to U.S. forces during all military operations and contingencies and the policies and procedures established by the SROE remain in effect until rescinded. Moreover, they may be augmented by supplemental ROE for specific operations or mission.

As a general rule, the SROE apply to all U.S. forces at all places at all times. As the title to the document underscores, these are standing ROE. They are not limited to peacetime application, but are designed to remain effective in prolonged conflict as well. There are no "wartime" ROE awaiting implementation at the first outbreak of hostilities. The SROE, augmented as necessary by supplemental rules, are the bedrock of U.S. military engagement throughout the spectrum of conflict.

The basic Chairman's Instruction notes that the NCA approves ROE for U.S. forces and that the Joint Operations Division (J-3) of the Joint Staff is responsible for their maintenance. This later
observation is worthy of elaboration. The development, maintenance and implementation of ROE are the province of the operational directorate - not the staff judge advocate, not the intelligence officer, not the planner, and not the logistician. All of the latter have important roles to play in this process, but it is imperative that both the operational commander and the judge advocate (or other staff specialists) understand that ROE are properly within the responsibility of the operations directorate. Judge advocates in operational law positions must be well versed in ROE and must be prepared to support the commander and the operations directorate as fully and effectively as possible in their development and interpretation. The commander and the mission will not be well served, however, if unwarranted deference is made to the special ROE expertise that we expect of the operational lawyer.

The Chairman's Instruction notes that "Enclosure A [the first 8 pages of Enclosure A] is unclassified and intended to be used as a coordination tool with U.S. allies for the development of combined or multinational ROE that are consistent with these SROE." /10/ Promulgation of the underlying principles and policies of the SROE in an unclassified format is a major improvement over past practice. Heretofore, our ROE were classified SECRET-NOFORN (no foreign nationals) in their entirety. Given the reality of coalition warfare and the day-to-day occurrence of combined operations in the MOOTW /11/ arena, the utility of fostering commonality in basic ROE precepts with allied forces is obvious. Moreover, the promulgation of basic ROE principles in an unclassified format facilitates a broader understanding of the policies and procedures of the SROE among U.S. forces.

B. Structure of the SROE

Any meaningful effort to become conversant with the SROE should begin with an examination of the Table of Contents of that document. Consisting of four Enclosures and the Glossary, the SROE must be seen as an integral whole; a sophisticated system rather than a litany of disparate rules. Proper implementation of the SROE, whether in regard to self-defense or mission accomplishment, requires that commanders - at whatever echelon of command - and the operational lawyers providing guidance and assistance to them, comprehend the SROE as a system. That comprehension begins with a familiarity of the Table of Contents.

Enclosure A, entitled "Standing Rules" sets forth the purpose, scope and policy of the SROE. As noted above, the first eight pages of Enclosure A are unclassified. It is here that one finds the fundamental expression of U.S. policy regarding rules of engagement. The unclassified provisions are supported by four classified Appendices which, in turn, contain a number of Annexes, which are also classified. Appendix A - General Standing Rules - builds upon the general provisions of the unclassified text by, inter alia, delineating where the authority to declare forces hostile is fixed, and by providing guidance on operational security (OPSEC), tactical military deception, and security operations at U.S. diplomatic and consular facilities abroad. The three Annexes thereunder address "Command and Control and Information Warfare" (Annex A), "Counterdrug Support Operations" (Annex B) and "Noncombatant Evacuation Operations" (Annex C)./12/

Appendix B of Enclosure A is entitled "US Seaborne Forces" and provides more definitive guidance for U.S. forces engaged in or supporting seaborne operations. Note that the guidance applies to all seaborne operations and is not limited to Navy, Marine Corps or Coast Guard activities. Air Force units providing Civil Air Patrol (CAP), refueling, reconnaissance, strike, etc., support for seaborne operations are embraced by this Appendix, as are Army units operating from or in support of seaborne platforms. Two annexes support Appendix B - "Defense of US Citizens and Their Property at Sea" (Annex A) and "Recovery of US Government Property at Sea" (Annex B). /13/
Appendix C, entitled "Air Operations" provides guidance for all air operations other than those in support of seaborne operations. Naval aviation, when "feet-dry" or otherwise in support of other than seaborne operations, falls under Appendix C. These are not "U.S. Air Force" rules, they are U.S. air forces rules. /14/ Appendix D, "Land Operations," similarly embraces all U.S. ground forces irrespective of Service affiliation. Thus, they govern, e.g., the use of force by U.S. Air Force security police engaged in air base defense. /15/

Enclosure B, "Supplemental Measures," provides the means to tailor mission accomplishment rules to the particular circumstances at hand. Supplemental measures provide tactically realistic guidance to operational commanders regarding the employment of force in mission accomplishment. Consisting of a numbered series of authorizations and restrictions, supplemental measures, applied through a formatted message system, are designed to ensure that mission accomplishment rules reflect the dynamic realities of the mission setting. To make them more "user friendly" the supplemental measures are set out in four Annexes - "General Supplemental Measures List" (Annex A), "Supplemental Measures List for Maritime Operations" (Annex B), "Supplemental Measures List for Air Operations" (Annex C), and "Supplemental Measures List for Land Operations" (Annex D). A fifth Annex describes the formatted message system (Annex E).

Enclosure C contains a "Compendium" of other ROE-related guidance as well as the "Combatant Commander's Special ROE." Each of the Unified Combatant Commanders (CINC's) (currently 9 in number - 5 geographic and 4 functional /16/) as well as the Commander, U.S. Element, North American Defense Command (NORAD) is provided an opportunity to include theater specific or function-specific ROE in the SROE. Those CINC specific rules, which of course require prior approval by the NCA, are set forth in Annexes A through J./17/

Enclosure D, entitled References, lists a series of DOD Directives, Joint publications and other doctrinal authority pertaining to military operations and capabilities.

Lastly, is the Glossary of abbreviations, acronyms, terms and definitions. It is important to note here that the Glossary, like each of the Enclosures, is an integral and essential part of the SROE structure. Amplifying policy guidance, in the form of definitional expressions, is often found in the Glossary.

II. SELF-DEFENSE

The inherent right of self-defense, as articulated in customary international law and reflected in the Charter of the United Nations," is the basis of the self defense provisions of the SROE. Under international law, the predicate for actions taken in self-defense consists of two elements - necessity and proportionality. Necessity is defined in the law as the presence of an imminent danger of an armed attack. /19/ In military parlance, and in the SROE, necessity is expressed as the occurrence of a hostile act or demonstration of hostile intent, e.g., someone is shooting at you or is about to do so. The proportionality element of the self-defense equation establishes the nature and magnitude of the response that is permitted when the necessity element is present. Proportionality, an often misunderstood concept, is not a body-count equation. Proportionality does not mean that if they killed six of our people, we kill six of theirs. Nor does it mean if they fired at us with a 166 millimeter howitzer, we are allowed to respond in kind. As defined in international law and in the SROE proportionality is the degree of force, that is reasonable in terms of intensity, duration and magnitude, required to decisively counter the hostile act or demonstration of hostile intent that constitutes the necessity part of the equation - but no more than that. /20/
Under the SROE, self-defense is addressed at two levels, the unit level (or unit self-defense) and the national level (or national self-defense.) To fully comprehend the concept of self-defense in the SROE, it is important to understand the nature of these two levels.

A. Unit Self-defense

Unit self-defense is the authority and obligation of commanders to defend their units from hostile acts and demonstrations of hostile intent. Determining the existence of a hostile act or demonstration of hostile intent is a function of the professional military judgment of the on-scene commander. The fundamental policy within the SROE pertaining to unit self-defense is expressed as follows: "These rules do not limit a commander's inherent authority and obligation to use all necessary means available and to take all appropriate action in self-defense of the commander's unit and other U.S. forces in the vicinity. /21/

This policy pronouncement is the only guidance in the SROE that is presented in all capital letters and all bold print. Its importance is also reflected in the fact that it is repeated, verbatim, ten times throughout the document. A close analysis of this policy statement is therefore in order.

The words "These rules do not limit" highlight that notwithstanding other guidance contained in the SROE, this expression of policy is paramount and immutable. "A Commander's inherent authority and obligation" establishes the fundamental premise that all commanders at every echelon of command are both authorized and obligated to defend the forces entrusted to their command. It is not a matter of discretion. The commander will defend his forces as an inherent function of command. "To use all necessary means available" instructs that in exercising this authority and obligation, the commander may employ the military capability, e.g., forces, weapons, tactics at hand (other than those weapons that are specifically controlled at all times by the NCA), as the commander determines is necessary. "And to take all appropriate action in self-defense" refers to the proportionality part of the self-defense equation. The responsive action must be reasonable in intensity, duration and magnitude based upon all of the facts known to that commander at that time. "Of the commander's unit" refers to the aircraft, squadron, ship, tank, squad, platoon, division, etc. that constitutes the "unit" of that particular "commander." "And other U.S. forces in the vicinity" imposes on the commander the authority and obligation of self-defense of any other US forces entity that may be present. Consequently, an Air Force or Navy aircraft commander has the obligation to come to the defense of an Army or Marine unit on the ground that is confronted with a hostile act or demonstration of hostile intent. This authority and obligation of unit self-defense does not extend to the defense of other U.S. citizens and property or to foreign forces. The SROE provide separate guidance for such contingencies.

Individual self-defense, that is, the authority and obligation of self-defense of individual military members within a unit, is a subset of unit self-defense. That means that the individual soldier or marine on patrol in the streets of Mogadishu has the authority and obligation to defend himself and other U.S. force members. /22/

As noted previously, determination by an on-scene commander that the "unit" is being subjected to a hostile act or a demonstration of hostile intent is necessarily a matter of professional military judgment. While a hostile act is ordinarily self-evident - you generally know when you are being shot at - the existence of a demonstration of hostile intent is necessarily a most difficult determination to make. Admiral Frank Kelso, USN, while addressing commanders participating in a ROE symposium some years ago, remarked,
"The determination of hostile intent is the single most difficult decision that a commander has to make during peacetime." /23/

The rationale behind this observation is compelling. It is difficult to define the intention of another party under the best of circumstances. When that judgment must be made in a dynamic operational context on the basis of incomplete and often conflicting information, and when the on-scene commander may not have the luxury of 90 seconds to make a decision, the complexity of the equation is several orders of magnitude greater. Moreover, the commander must always bear in mind the terrible consequences of being wrong. To be overly cautious may result in the destruction of the unit. Conversely, to be too fast to respond may risk death or injury to persons innocent of hostile intention. Therefore, the guidance in the SROE recognizes that the determination of hostile intent is necessarily a matter of sound military judgment; judgment that must take into consideration the military evidence of the situation, i.e., the capabilities and physical actions of the person or platform presenting a threat. The on-scene commander must also consider the intelligence information that has been provided, e.g., indications and warnings, as well as the political backdrop against which these events are unfolding.

B. National Self-defense

National self-defense involves actions to defend "the United States, US forces, and in certain circumstances, US citizens and their property, US command assets, and other designated non-US forces, foreign nationals and their property" from hostile acts and demonstrations of hostile intent. /24/ The exercise of national self-defense ordinarily involves the act of declaring a foreign force or terrorist unit hostile. Once such an entity has been declared hostile by appropriate authority, the on-scene commander no longer need observe a hostile act or demonstration of hostile intent before engaging that force or unit. For obvious reasons, the authority to declare a force hostile is very carefully circumscribed.

The SROE provide that the authority to defend non-U.S. forces, "collective self-defense," is a subset of national self-defense that only the NCA may authorize.

C. Action in Self-defense

Amplifying "all necessary means available" and "all appropriate action", the SROE establish the following guidelines for use of force in self-defense:

a. Use of force is ordinarily a measure of last resort. When the situation permits, a potentially hostile force should be warned and given an opportunity to withdraw.

b. When force is in fact required, it must be proportional. This means that the amount of force to use must not exceed that which is required to decisively counter the hostile act or demonstration of hostile intent.

c. Once the hostile act or demonstration of hostile intent has been successfully countered, or the threat is otherwise no longer imminent, the authority to continue the engagement ceases. /25/
The SROE generally contemplate that the on-scene commander will make every effort to contact superiors in the chain of command, report the circumstances as they unfold, and obtain any additional guidance that may pertain. However, the SROE also recognize that there may very well be no opportunity to do so. In any case, the authority and obligation of the on-scene commander to defend his or her unit remains undiminished.

III. MISSION ACCOMPLISHMENT

The second basic purpose of the SROE is to provide guidance for mission accomplishment. This purpose is distinct from that of self-defense. Mission accomplishment is a function of how U.S. forces are to be employed in the execution of their assigned tasks. This includes the what, the when, the where, and the how of the mission. Mission accomplishment guidance under the SROE will take the form of supplemental measures promulgated by appropriate authority. Enclosure B to the SROE sets forth this system of supplemental measures. At the outset, Enclosure B states that such measures define limits or grant authority for mission accomplishment, not self-defense. To emphasize this point, the following policy pronouncement is set out in that Enclosure: "Supplemental measures do not limit a commander's inherent authority and obligation to use all necessary means available and to take all appropriate action in self-defense of the commander's unit and other U.S. forces in the vicinity." /26/

A hypothetical example may be useful to illustrate this precept - that supplemental measures do not bear on self-defense. Assume that an operational commander has been tasked to enforce a "no-fly zone" to prevent intrusion into a defined airspace by military aircraft of a particular nation. Assume further that supplementary measures under the SROE have been promulgated providing guidance for the accomplishment of that mission. One such measure provides that intruding aircraft are not to be so engaged without the express authority of the designated area air defense commander. Clearly, an F-16 pilot engaged in that mission will comply with that supplemental measure, e.g., he or she will not engage intruding aircraft absent specific authority from the designated air defense commander to do so. However, let us now assume that our F-16 pilot, while on patrol of the "no-fly zone", encounters an aircraft that he or she determines is demonstrating hostile intent and time does not permit contacting the air defense commander. Is that pilot authorized to engage the threatening aircraft notwithstanding the supplemental measure necessitating authorization from the air defense commander? Of course. The supplemental measure here under consideration, like any and all supplemental measures, has nothing whatsoever to do with self-defense. In this instance, the F-16 pilot is authorized (and obliged!) "... to use all necessary means available and to take all appropriate action in self-defense..." /27/ If that pilot determines that engagement of the intruding aircraft is necessary and appropriate in order to decisively counter the imminent threat that it poses, he or she would be fully justified in doing so.

It is also important to bear in mind that supplemental measures are designed to facilitate command and control of the force. Any measure listed in Enclosure B of the SROE may be requested by any echelon of command. The level of authority necessary to approve a particular measure depends upon the nature of the measure under consideration. This approval authority is set out in the SROE. It is also important to understand that if there is no listed supplemental measure that "fits" the contemplated need, the requesting or approving commander is free to draft a measure that does "fit". Indeed, the listings of supplemental measures in Enclosure B contain numerous "spare" numbers just for that purpose.

IV. LESSONS LEARNED

A primer on rules of engagement would not be complete without a brief discussion of the principal "lessons learned" that caused the SROE to evolve as it has. Lessons learned are more often than not the product of something that has gone wrong often tragically wrong. A comprehensive assessment of ROE
lessons learned over the past two decades is obviously beyond the scope of this paper. However, the following examples should prove insightful;

A. ROE are Dynamic

To be effective, ROE must reflect operational reality. As the mission evolves, as it inevitably will, so too must the ROE. This is particularly true with respect to the threat, which is a function of both capabilities and intentions - ours as well as that of potential adversaries. ROE that are adequately "robust" in one setting may be decidedly less so in another.

B. ROE Are Not Written in Stone

It is important to appreciate the difference between the Ten Commandments, which are depicted as chiseled in stone for all eternity, and ROE. By their very nature, ROE are designed to be questioned, and when necessary, changed. Indeed, commanders at every echelon of command have the obligation to always question the ROE provided to them. If the authority provided is considered to be inadequate, excessive or unclear, that concern must be voiced. The system of the SROE is designed with that purpose in mind.

C. Mind-set

How ROE are actually implemented by the operational commander on the scene may very well be a function of the "mind-set" of that particular individual. In the compressed time equation of a hostile act or demonstration of hostile intent encounter, when a potentially fateful decision may have to be taken on literally a moment's notice, the mind-set that the commander awoke with that morning may be decisive. If that mind-set is one of safety over security, of "try not to hurt anyone", that commander's response may be quite different than that of the commander with a mind-set of "don't take the first hit." The point here is that there is more to this business of ROE than promulgating written guidance. It is also important to understand how that guidance is being inculcated in the thought processes of the commander - the mind-set.

D. Common Understanding

All too often ROE take on one meaning at one echelon of command and quite another at a higher or lower echelon. It was with this problem in mind during the Iran-Iraq "Tanker War" in the Persian Gulf (1987-88) that the Chairman of the Joint Chiefs of Staff met privately with the Commander, Middle East Command to discuss application of the applicable ROE in a variety of possible settings. Their purpose of course, was to ensure that the Chairman and the on scene commander had a common understanding of the ROE.

E. Tailored to the User

The document described in this article, the SROE provides the policies and procedures that govern all U.S. forces commanders - from CINC's to sergeants. Necessarily, the SROE are broad based, detailed and, in a word, complex. Consequently, the guidance of the SROE must be tailored to the circumstance of its application. This may take the form of supplemental ROE for specific operations or missions. It may also take the form of basic rules reproduced on plasticised cards pinned to the flak jacket of individual troopers or inserted into the combat mission folder (CMF) of aircrew members. Whatever the mechanism, the need to tailor the SROE to the user's requirements cannot be overstated.
V. CONCLUSION

This "primer" on the SROE is just that - a primer. It is a place to begin what, for the operational lawyer, must become a career-long pursuit. There are no "ultimate experts" in the business of rules of engagement. The subject is far too important to be taken lightly and far too complex to be studied cavalierly. Premised upon national policy, international and domestic law, and operational necessity, the SROE ensure that U.S. military forces are at all times responsive to the direction of the constitutionally established civilian leadership of our nation. The SROE implement the inherent right of self-defense for those forces and provide to them guidance for the application of force for mission accomplishment across the spectrum of military operations and contingencies. No small accomplishment.

*Professor Grunawalt (B.A., J.D., University of Michigan) is Director, Oceans Law and Policy Department, United States Naval War College.

1 Chairman Joint Chiefs of Staff Instruction 3121.02, Standing Rules of Engagement for United States Forces (1994) [hereinafter CJCSI 3121.02].

2 The "National Command Authorities", a plural term, is defined as "The President and the Secretary of Defense or their duly deputized alternates or successors. Commonly referred to as NCA." Joint Pub. 1-02, Dictionary of Military and Associated Terms (1994) at 253.

3 The SROE defines rules of engagement as "Directives issued by competent military authority which delineate the circumstances and limitations under which U.S. forces will initiate and/or continue combat engagement with other forces encountered." CJCSI 3121.02, supra note 1, at A-5. This definition has been specifically held to include terrorist units. Id.

4 CARL VON CLAUSEWITZ, ON WAR 87 (Michael Howard & Peter Paret eds., 1984).

5 U.S. CONST. art. II. Article II, § 1 provides, "The executive Power shall be vested in a President of the United States of America ...." Id.

6 Id. Article II, § 2, also provides that "the President shall be Commander in Chief of the Army and Navy of the United States." Id. Of course, the Congress also has a role under the Constitution in the governance of the armed forces. Article I, § 8 provides, inter alia, that:

   The Congress shall have Power to lay and collect Taxes ... and provide for the common
   Defense and general Welfare of the United States;

   To raise and support Armies ...

   To provide and maintain a Navy;

   To make Rules for the Government and Regulation of the land and naval forces ....

   U.S. Const. art I, § 8.


8 The 1988 Peacetime Rules of Engagement for U.S. Forces were promulgated to the Unified and Specified Combatant Commanders and Commander U.S. Element, NORAD, by Memorandum of the Secretary of the Joint Staff, Oct. 28, 1988. Paragraph 1 of the memorandum stated: "The Secretary of Defense has approved the attached 'Peacetime Rules of Engagement for U.S. Forces,' which is forwarded for your compliance."
1988 rules were always more versatile than the word "Peacetime" in the title might suggest. Replacement of "Peacetime" with the term "Standing", results in a far more descriptive title to the current rules. Memorandum from Secretary of the Joint Staff for Unified and Specified Combatant Commanders and Commander U.S. Element, NORAD, Peacetime Rules of Engagement for U.S. Forces (Oct. 28 1988) (on file with author).

9 See CJCSI 3121.02, supra note 1.

10 CJCSI 3121.02, supra note 1, at 2.

11 The term "Military Operations Other Than War," "encompasses the use of military capabilities across the range of military operations short of war. These military actions can be applied to complement any combination of the other instruments of national power and occur before, during, and after war. Also called MOOTW." Joint Pub. 3-07, Joint Doctrine for Military Operations Other Than War p. GL-3 (1995).

12 CJCSI 3121.02, supra note 1, at app. A.

13 Id. at app. B.

14 Id. at app. C.

15 Id. at app. D.

16 The five geographic CINCs are Commander in Chief U.S. Atlantic Command (USCINCACOM), Commander in Chief U.S. European Command (USCINCEUR), Commander in Chief U.S. Pacific Command (USCINCPAC), Commander in Chief U.S. Central Command (USCINCCENT), and Commander in Chief U.S. Southern Command, (USCINCSOUTH). The four functional CINCs are Commander in Chief U.S. Strategic Command, (USCINCSTRAT), Commander in Chief U.S. Transportation Command (USCINCTRANS), Commander in Chief U.S. Special Operations Command (USCINCSOC), and Commander in Chief U.S. Space Command (USCINCSPACE). CJCSI 3121.02, supra note 1, at B-1, C-1.

17 To date, only USCINCENT, USCINCPAC and USCINCSOUTH have promulgated NCA approved Combatant Commander's Special ROE. (Annexes B, D and F, respectively).


20 Id. at 330-332.

21 CJCSI 3121.02, supra note 1, at A-3.

22 The glossary of the SROE provides the following amplifying guidance on the concept of individual self-defense:

... It is critical that individuals are aware of and train to the principle that they have the authority to use all available means and to take all appropriate action to defend themselves
and other U.S. personnel in their vicinity. In the implementation of these SROE and other ROE, commanders have the obligation to ensure that the individuals within that commander's unit understand when and how they may use force in self-defense. While individuals assigned to a unit respond to a hostile act or hostile intent in the exercise of their inherent right of self-defense, their use of force must remain consistent with lawful orders of superiors, the rules contained in this document, and other applicable rules of engagement promulgated for the mission or AOR.

Id. at GL-10.


24 CJCSI 3121.02, supra note 1, at A-4.

25 Id. at A-6.

26 Id. at B-1.

27 Id.
Fiscal Law Constraints Upon Exercise-Related Activities

MR. W. DARRELL PHILLIPS

I. INTRODUCTION

Imagine that your unit is deploying for a joint combined exercise /1/ in the country of Ruwalia. Your unit will be based on a Ruwalian airbase that has not been recently used or maintained. Shortly after you arrive, your boss, the JTF commander, asks you for some advice. It seems that the Ruwalian base commander has approached him and requested some assistance with the base infrastructure. Due to tropical weather, neglect, and lack of funding, the base security physical layout is totally inadequate. The guard posts and security fences around the base have largely fallen down, and earthen berms around the aircraft have largely washed away. Furthermore, there is only one small well, and the nearest fresh water is a river three miles away. The Ruwalians would like us to rebuild the guard posts, fences, and berms, and drill a new well which will be adequate for the combined operation. Since some U.S. Army engineers are part of the JTF, we have the capability. The JTF commander's question to you is, can we legally do it?

A few days later, another question comes up. Your unit has deployed a medical team, including some dentists, as part of the exercise, but they have little to do. Their commander has noticed the sad state of medical and dental care in this remote area, and would like to set up an outpatient clinic during the exercise to treat the local civilian inhabitants. Nothing too fancy - some physical exams, immunizations for the children, and dental care. Are we permitted to treat the local inhabitants?

For the last few decades, and particularly since 1980, U.S. armed forces have been engaged in exercises throughout the world. Although the main purpose of these exercises has been, and continues to be, training of U.S. personnel, a number of diverse activities occur during these exercises. Some of these activities, such as exercise-related construction and humanitarian and civic assistance may also provide an incidental benefit to the host country, its military, and its inhabitants. The issue is whether U.S. law allows such secondary benefit to these countries.

This article will examine the appropriate types of such assistance and discuss the proper funding for those activities. The seminal point for today's funding strictures was the General Accounting Office (GAO) examination of Department of Defense activities during the "Ahuas Tara 11" (also called "Big Pine Tree" or "Pine Tree") series of exercises in Honduras in 1983. /2/ The GAO's 1984 and 1986 opinions as to the legality of Defense actions led to increased Congressional scrutiny of exercise-related activities, which has continued to intensify and spread.

The first section briefly reviews the relevant accounting principles for government spending: purpose, time and amount. The focus will then shift to the Ahuas Tara 11 activities and the GAO opinions, and conclude with an analysis of the current legislation concerning the major categories of exercise related activities: construction, training, and humanitarian and civic assistance. Particular emphasis will be placed upon funding sources, funding limitations, and reporting requirements.

II. ACCOUNTING PRINCIPLES

A. Purpose
Federal appropriations are governed by U.S.C. § 1301 et seq. The law establishes two basic limitations upon the use of appropriations:

(a) Appropriations shall be applied only to the objects for which the appropriations were made except as otherwise provided by law.

(d) A law may be construed to make an appropriation out of the Treasury only if the law specifically states that an appropriation is made.

Based upon this statute, the Comptroller General has, in many instances, determined exactly which purposes are authorized and the source of the funds that may be expended to legally carry out those purposes. Basically, three conditions must be met to determine whether a certain expense is proper and necessary:

1. First, the expenditure must be reasonably related to the purposes for which the appropriation was made.
2. Second, the expenditure must not be prohibited by law.
3. Finally, the expenditure must not fall specifically within the scope of some other category of appropriations even if the more appropriate funding source is exhausted and therefore unavailable.

When we examine the subject of "exercise-related activities," the major purpose violations have involved either crossing the line between the Operations and Maintenance (O&M) appropriations category and the construction appropriations category, or crossing the line between valid exercise-related activities and security assistance activities.

B. Time

The "time" statute, 31 U.S.C. § 1502, establishes what has been termed the "bona fide needs" rule:

(a) The balance of an appropriation or fund limited for an obligation to a definite period is available only for payment of expenses properly incurred during the period of availability or to complete contracts properly made within that period of availability and obligated consistent with section 1501 of this title. However, the obligation or fund is not available for expenditure for a period beyond the period otherwise authorized by law.

C. Amount
The "amount" statute, 31 U.S.C. § 1341, forbids an officer or employee of the United States from committing certain acts; two are relevant to exercise-related activities:

A. making or authorizing an expenditure or obligation exceeding an amount available in an appropriation or fund for the expenditure or obligation; or

B. involving the government in a contract or obligation for the payment of money before an appropriation is made unless authorized by law.

This provision is part of the statutory web known collectively (but not formally) as the "Anti-Deficiency Act." This portion of the appropriations law is probably the best known by the general military community as the law that JAGs quote to keep them from doing some action they feel is necessary. To ensure you only place legal limits on commanders in appropriate cases (and do not overlook possible legal ways to allow the action to be done) you must become familiar with the many appropriations laws discussed in this article.

Other provisions of that "act" require reporting violations to the President and Congress, authorize adverse personnel actions in response to violations, and provide criminal penalties. Within the Department of Defense, the Under Secretary of Defense (Comptroller) mandates, effective 31 December 1994, taking action "commensurate with the circumstances and severity" of the violation and reporting such action and why it is appropriate.

II. GAO's AHUAS TARA II 1984 OPINION

In 1983, U.S. forces participated in joint military exercises in Honduras which were conducted to provide realistic field training to combat and support personnel. As part of the exercise, U.S. forces had to build the necessary infrastructure to support their operations. This included building roads and buildings which would be left behind at the end of the exercise. The Honorable Bill Alexander, a member of the U.S. House of Representatives, became concerned about what he felt could be improper use of appropriated funds provided the military for combat training. Like the examples set forth in the beginning of this article, he questioned if the military could use their training funds in a way that directly accrued to the benefit of a foreign country.

On June 22, 1984, the General Accounting Office provided a formal legal opinion to Representative Alexander. The GAO opinion concerned the results of investigations into three activities: construction, training, and humanitarian and civic assistance (HCA). Significant funding violations were discovered in each activity.

A. Construction Activities

United States Army engineers and U.S. Navy Seabees had, as part of Ahuas Tara II, constructed four base camps to house and/or support 3,000 U.S. troops. Within or near those camps were a number of buildings, runways, and roads located in the exercise area. The GAO was primarily concerned about one issue, the source of the funding for these activities.

As 10 U.S.C. § 2805, entitled "unspecified minor construction," then read, DoD could use exercise Operations and Maintenance (hereinafter O&M) funds to finance "minor construction projects under $200,000." According to the GAO, "[a]part from this specific authority, however,
DoD’s construction expenses may not be charged to O&M as operational costs, but must be charged to funds available for military construction (or, in some cases, security assistance)." /21/

The GAO concluded that "the majority of construction activities could not be funded out of O&M as ordinary operational expenses of the joint exercise;” /22/ but should have been funded as either military construction /23/ or security assistance (e.g., under the Foreign Military Construction Sales program /24/). GAO then opined that reimbursement should be made from the proper appropriation(s), to the extent that funds remained available. Accordingly, GAO transmitted its decision to DoD "with a request that DoD make funding adjustments, where feasible, and where not feasible, report Antideficiency Act violations and take appropriate administrative action under 31 U.S.C. § 1349." /25/

B. Training Activities

As part of its Ahuas Tara 11 review, the GAO determined that U.S. forces had conducted three types of training: Army medical personnel provided three 5-week combat medic training courses to approximately 100 Hondurans; Army artillery personnel provided 3-4 weeks of instruction on 105mm artillery to two Honduran artillery battalions; and Army Special Forces personnel provided basic and/or advanced classroom and field training, to four Honduran battalions, on mortars, fire-direction, and counterinsurgency tactics.

GAO and DoD differed in their characterizations of the nature and extent of this training. GAO described it as similar to that provided by security assistance-funded teams at a training camp in Honduras, while DoD considered it "joint review and practicing of tactics and techniques for interoperability, including some 'minor individual remedial preparation' for safety and standardization. /26/

GAO generally accepted DoD's assertion that some familiarization and safety instruction is necessary, prior to an exercise, in order to assure interoperability. Nevertheless, GAO stressed that, where extensive interoperability training is in fact necessary, it should be conducted as part of a security assistance program. GAO also noted that an Army JAG staff review had expressed a similar opinion. /27/ GAO also largely disregarded DoD's assertion that the training benefited U.S. forces' readiness, remarking the fact that the training provided a "concurrent benefit" for U.S. forces did not remove it from Security Assistance. /28/

In summary, GAO found the training should have been funded as security assistance and DoD thereby violated 31 U.S.C. § 1301(a), and possibly the Antideficiency Act. GAO urged DoD to make a final determination, based upon the availability of funds, to reimburse the "improperly used" O&M funds. /29/

C. Humanitarian And Civic Assistance

Finally, GAO reviewed the broad scope of HCA provided throughout Ahuas Tara II. It determined that DoD personnel treated over 46,000 Honduran medical patients and 7,000 Honduran dental patients, administered 100,000 immunizations, /30/ and treated more than 37,000 Honduran animals. Additionally, DoD transported U.S.-donated medical supplies, clothing, and food to various Honduran locations. Navy Seabees also constructed a schoolhouse using materials donated by the U.S. Agency for International Development ("USAID"). /31/
The problem was, DoD had little or no statutory or inherent authority to conduct HCA, other than on a reimbursable basis on behalf of the U.S. Department of State or USAID, with reimbursement under either the Economy Act /32/ or as part of a security assistance program. GAO found similar sentiments in the Army JAG staff review of the exercise proposal, and in DoD General Counsel's reply to the GAO's request for an explanation of DoD's authority to conduct HCA. /33/

In summary, GAO determined that the HCA activities came within the scope of other appropriations categories and could not have been financed out of O&M funds. Therefore, GAO recommended that unexpended Security Assistance funds should be used to reimburse the O&M account, and DoD should seek Congressional action to provide a statutory basis for conducting HCA. /34/

II. GAOS "AHUAS TARA II" 1986 OPINION

On 31 January 1986, GAO again provided a formal opinion to Congressman Alexander, in response to his 19 April 1985 request. /35/ GAO noted DoD's "considerable amount of disagreement" with the 1984 opinion, and noted that they had "reevaluated our previous conclusions in some detail. [However], we reaffirm the legal conclusions reached in our previous decision." /36/

A. Exercise-Related Construction

GAO's major additional analysis examined the types of costs that could properly be included within the statutory $200,000 O&M limit. GAO referred to U.S. Army Regulation (AR) 415-35, which implemented 10 U.S.C. § 2805 and categorized construction costs as either "funded" or unfunded." According to AR 415-35, as a general rule only "funded" costs are included in computing the overall cost of a construction project. "Funded" costs include, for example, materials, supplies, services, installed equipment, transportation costs, costs of travel and per diem for troop labor, site preparation costs, and equipment use costs (for maintenance and operation of government equipment). "Unfunded" costs are those expenses provided and accounted for separately from the funded costs, and are often referred to as "sunk costs." They would not be included in computing the project cost, and include such items as those from military personnel appropriations (i.e., the pay and benefits of military personnel involved in the project), government equipment depreciation, and planning and design costs for the project. /37/

GAO accepted those categories and generally found that DoD had used them in accounting for Ahuas Tara II. GAO also agreed that transportation costs, and costs of military personnel travel and per diem, could be excluded from the exercise O&M expenses, since they would generally be paid by the Joint Chiefs of Staff ("JCS") from the JCS's "O&M - Defense Agencies" appropriations. Nevertheless, GAO found that DoD appeared to have violated the $200,000 project limit "in at least several instances." GAO recommended that, in future, DoD budget for funds for exercise-related construction in its "unspecified minor military construction" account request. /38/

B. Training

By letter of 31 December 1984, Deputy Defense Secretary Taft informed GAO that "funding adjustments had been made in the amount of $110,000 for those activities identified in the Decision that exceeded [safety and orientation] requirements." /39/
The primary remaining dispute was over the training provided by U.S. Army Special Forces personnel. DoD asserted that part of the mission of Special Forces (SF) is to train indigenous personnel (often called Foreign Internal Defense, or FID, training), and that banning the use of O&M funds could severely restrict SF personnel's ability to prepare themselves for that role. While generally accepting that argument, GAO still stressed the scale of such operations, continuing to distinguish between Special Forces' training of host nation personnel in order to meet SF's own training needs, and training on a scale normally provided through security assistance programs. GAO recommended that Congress consider passing legislation to clarify the training role of Special Forces.\(^{40}\)

C. Humanitarian And Civic Assistance

On 12 October 1984, Congress legislated specific authority for DoD to use O&M appropriations for HCA "incidental" to authorized operations.\(^{41}\) Consequently, GAO's 1986 opinion was generally limited to examining whether DoD's activities were incidental to the exercise. Based upon the extensive amount of HCA during Ahuas Tara II (described supra), GAO determined that it would have violated the subsequent authorization. However, GAO did appear to accept DoD's position that, even prior to the authorization, exercise personnel had inherent authority "to conduct training activities that result in an incidental humanitarian benefit,\(^{43}\) to host nation citizens, and "the mere fact that O&M-funded activities create a civic or humanitarian benefit does not require that the activities be funded from other appropriations.\(^{44}\)"

III. CURRENT AUTHORITIES FOR EXERCISE-RELATED ACTIVITIES

A. Exercise-Related Construction

10 U.S.C. § 2805 provides statutory authority for two types of "unspecified military construction": "minor military construction projects" (using military construction, or MILCON, funds) and "unspecified military construction projects" (using O&M funds). Some of the requirements in 10 U.S.C. § 2805 apply to all unspecified military construction projects, whether in the United States or overseas, and whether exercise-related or not; some requirements apply only to exercise-related projects outside the United States.

Minor military construction projects are those with an approved cost equal to or less than $1,500,000. In 1996, Congress granted additional authority to permit approved costs of up to $3,000,000 for a project "intended solely to correct a deficiency that is life-threatening, health-threatening, or safety-threatening."\(^{45}\) Other limitations may also apply.

The Secretary of a military department (e.g., the Secretary of the Air Force) may not, during any fiscal year, use more than $5,000,000 total of that year's minor military construction funding for exercise-related unspecified minor military construction projects coordinated or directed by the JCS and performed outside the United States (i.e., using no more than $5,000,000 of MILCON funding for construction projects costing no more than $1,500,000 [or $3,000,000] each during overseas exercises coordinated or directed by the JCS).\(^{46}\)

No minor military construction project costing more that $500,000 (whether in the United States or overseas) can be carried out unless the Secretary approves it in advance. When a Secretary approves a project for more that $500,000, written notice has to be given to the appropriate Congressional committees, and work may only begin 21 days after the committees receive the notice.
Unspecified military construction projects use military department (not JCS) O&M funds and are generally limited to $500,000 costs per project; however, in 1996 Congress also granted authority to use up to $1,000,000 for a project "intended solely to correct a deficiency that is life-threatening, health threatening, or safety-threatening." Congress imposes one additional significant limitation on the use of O&M funds for exercise-related construction: the funds may not be used with respect to any project coordinated or directed by the JCS outside the United States. However, not every "joint" exercise is coordinated or directed by the JCS - it is possible for two or more departments to carry out a joint exercise without JCS involvement. In such a case, department O&M funds could be used for exercise-related construction without violating the statute.

In addition to the specific statutory authority to conduct unspecified military construction, GAO recognized that DoD has some inherent authority to perform exercise-related engineering activities, using exercise O&M funds, that result in the construction of "minor structures clearly of a temporary nature and intended to be used for only a temporary period." In its 1984 Ahuas Tara II opinion, GAO stated that it had previously acknowledged that such structures are not public buildings or public improvements within the ambit of 41 U.S.C. § 12, the basic construction authority statute. The GAO quoted AR 350-28, wherein "temporary latrines" were cited as an example of such a "minor [and] temporary" structure, provided they are authorized by the exercise directive. The GAO reiterated this point in its 1986 opinion, stating "[w]e have previously recognized that 'clearly minor and temporary' construction may be financed as operational expenses of an exercise." Congress also provided guidance; in discussing the proper use of O&M funds during an operation, this language appeared: Minor and temporary structures (e.g., tent platforms, field latrines, funding (sic) shelters, range targets) which are completely removed at the end of an exercise may be funded through operations and maintenance accounts, as may construction related to service directed training deployments, as limited by [10 U.S.C. § 2805(c)].

B. Exercise-Related Training Activities

There is no overall statutory authority for exercise-related training activities, which are also referred to as Deployments for Training (DFTs) or Joint Combined Exercises for Training (JCETs). Therefore, careful attention must be paid to the GAO's conclusion that familiarization and safety training designed to improve interoperability is proper, unless it rises to the level normally provided as part of a Security Assistance program. Obviously, the primary purpose of the training must be to improve the operational readiness skills of the involved U.S. personnel, with the benefit to host nation personnel being only minor and incidental.

However, Congress has passed a confusing web of statutes which provide authority (and sometimes additional funding) to provide training, education, and/or support to foreign military forces. Some of these are in Title 10 of the United States Code ("Armed Forces") and some are in Title 22 ("Foreign Relations and Intercourse"). Obviously, the source of the authority will affect not only funding, but also the timing of and approval for the activities.

Following the disagreement between DoD and GAO as to the permissible use of O&M funds for Special Forces' activities, Congress enacted 10 U.S.C. § 2011 ("Special operations forces: training with friendly foreign forces"), effective 5 December 1991. At the outset, it is critical to note that this statute is not an additional funding source; it simply authorizes use of O&M funds for certain expenses. The statute also specifically requires that the "primary purpose of the training ... shall be to train the special operations forces of the [United States] combatant command."
The statute (sometimes referred to as the "SOF Exception") authorizes the United States Special Operations Command (USSOCOM) commander, or the commander of any other unified or specified command, to pay or authorize payment for certain expenses. These include the expenses of training U.S. special operations forces personnel during combined exercises, the expenses of deploying the U.S. special operations forces for the training, and the "incremental expenses" of a "friendly developing country."

10 U.S.C. § 168, the "military-to-military contact" statute, authorizes the Secretary of Defense to provide funds to CINCs of unified commands to encourage a democratic orientation of defense establishments and military forces of other countries. The statute authorizes a wide range of activities, including traveling contact teams, military liaison teams, reciprocal exchanges of personnel, seminars and conferences, and distribution of publications. Funds are in addition to those which are otherwise available for those activities; however, § 168 funds may not be used for activities for which funding was sought but not authorized. The Secretary of State has to approve any activity with a foreign country, and only foreign countries approved for Foreign Assistance Act funding are eligible for § 168 activities.

Starting with § 1111 of the National Defense Authorization Act for Fiscal Years 1990 and 1991, Congress has annually authorized the Chairman of the JCS to provide appropriated funds to the commanders of the combatant commands, or other officers designated by the Chairman, for a variety of purposes. This authorization was codified into permanent legislation through the enactment of 10 U.S.C. § 166a, effective 5 December 1991. Starting with § 1111, the annual amount has always been $25,000,000.

Among the authorized activities are several applicable to exercise related training:

1. Force training;

2. Joint exercises (including activities of participating foreign countries);
3. Military education and training to military and related civilian personnel of foreign countries (including transportation, translation, and administrative expenses); and
4. Personnel expenses of defense personnel for bilateral and regional cooperation programs.

The statute specifies that the amounts provided shall be in addition to amounts otherwise available for that activity for that fiscal year (thereby avoiding any potential "purpose" and "amount" problems). However, funds may not be provided under this section for any activity that has been denied authorization by Congress.

Congress has also imposed priority and amount limitations. The Chairman "should give priority consideration to requests for funds for . . . activities that would enhance the warfighting capability, readiness, and sustainability" of a requesting combatant command, and funds to be used outside the areas of responsibility of any combatant command must "reduce the threat to, or otherwise increase, the national security of the United States." Finally, the current form of 10 U.S.C. § 166a limits to $1,000,000 the amount used to pay the expenses of foreign countries participating in joint exercises (reference 2 supra) and to $2,000,000 the military education and training provided to foreign military and civilian personnel (reference 3 supra).
The "LATAM COOP" statute, 10 U.S.C. § 1050, /62/ provides an extremely broad, although geographically limited, authority. The entire statute reads:

The Secretary of a military department may pay the travel, subsistence, and special compensation of officers and students of Latin American countries and other expenses that the Secretary considers necessary for Latin American cooperation. (emphasis added)

One recurring use of this authority has been the education provided as part of the LATAM SMEE (Subject Matter Expert Exchange) program, whereby U.S. judge advocates provide legal training to legal officers and other personnel of Latin American armed forces.

An additional statute that may provide some assistance in preparing for combined exercises is 10 U.S.C. § 1051, /63/ which authorizes payment of personnel expenses of defense personnel of developing countries. While the statute does not address the payment of exercise-related training expenses, it does authorize the Secretary of Defense to pay for such personnel to attend a bilateral or regional conference, seminar, or similar meeting if the Secretary feels such attendance would be in the United States' national security interests. Additionally, the Secretary may pay "such other expenses in connection with any such conference, seminar, or similar meeting as the Secretary considers in the national security interests of the United States." /64/ Note that this authority is clearly in addition to that under the LATAM COOP statute (supra). /65/

10 U.S.C. § 201 /66/ establishes what is often termed the "Developing Countries Combined Exercise Program," or DCCEP. The statute authorizes the Secretary of Defense, after coordination with the Secretary of State, to pay the "incremental expenses" /67/ incurred by a developing country as the "direct result" of participating in a bilateral or multilateral military exercise. The exercise must be undertaken primarily to enhance U.S. security interests and the Secretary of Defense must determine that the developing country's participation is "necessary to the achievement of the fundamental objectives of the exercise" and that the country cannot participate without U.S. assistance. By 1 March of each year, the Secretary of Defense has to submit a report to Congress, listing the benefited countries and the amounts expended.

C. Humanitarian and Civic Assistance

As GAO pointed out in its 1984 opinion, at that time the Department of Defense had no statutory authority to perform humanitarian and civic assistance, except under the Economy Act or as part of a security assistance program.

In 1986, Congress enacted DoD's first statutory authority in 10 U.S.C. § 401. /68/ Since that time, Congress has added a whole series of interrelated statutes, now known collectively as "Overseas Humanitarian, Disaster, and Civic Assistance" and abbreviated as OHDACA. /69/ Those statutes include 10 U.S.C. §§ 401, 402, 404, 2547, and 2551. Rather than being funded independently, starting with the DoD Appropriation Act for Fiscal Year 1996 they are funded as a total appropriation; in both FY 96 and FY 97 the annual amount has been $49,000,000.
10 U.S.C. § 401 authorizes two categories of HCA activities "provided in conjunction with military operations." The first, and primary, authority permits HCA funded from OHDACA appropriations "in conjunction with" authorized military activities in foreign countries; the second permits the "incurring of minimal expenditures" out of non-OHDACA appropriations, including O&M funding.

The first step to determine whether a proposed HCA activity is permissible is to define what types are permitted. In enacting the OHDACA provision, Congress used specific limiting language in 10 U.S.C. § 401(a). Permissible activities in a host country include only (emphasis added):

a. medical, dental, and veterinary care provided in rural areas of the country;

b. construction of rudimentary surface transportation systems;

c. well drilling and construction of basic sanitation facilities;

d. rudimentary construction and repair of public facilities; and

e. detection and clearance of landmines, including appropriate education, training, and technical assistance. However, no U.S. armed forces member, while providing this assistance, may engage in the "physical detection, lifting, or destroying of landmines" (unless for the concurrent purpose of supporting a U.S. military operation), or provide such assistance as part of a military operation that does not involve U.S. forces.

Not only must OHDACA-funded HCA be carried out in conjunction with authorized military operations, it is only authorized if the Secretary of a military department determines that the HCA will promote U.S. and host country security interests and the specific operational skills of U.S. personnel providing it. Furthermore, the Secretary of State has to specifically approve the planned HCA.

The HCA may complement, but must not duplicate, any other U.S. aid to the country, must serve the basic economic and social needs of the country's people, and may not be provided, directly or indirectly, to any individual, group, or organization engaged in military or paramilitary activity.

The second HCA authority, 10 U.S.C. § 401(c)(2), permits DoD to incur "minimal expenditures" for HCA out of non-OHDACA funds; however, DoD O&M funds may only be obligated for "incidental costs" of carrying out such HCA.

Initially, the amendment, the "minimal expenditures" language seemed to allow use of non-OHDACA funds, including DoD O&M appropriations, for a wider range of HCA activities than is currently found in the statute. However, any ambiguity was resolved with the statute's amendment as part of the DoD FY 94 Authorization Act. It now appears that DoD may only use O&M funds to perform HCA activities "in conjunction with authorized military operations." In other words, DoD can only use O&M funds to pay for "incidental costs" of an OHDACA-funded HCA activity.
In a memorandum dated 28 February 1994, the Chief, International and Operational Law Division, Office of The Judge Advocate General, U.S. Army, opined that the revised wording of 10 U.S.C. § 401(c)(2) does permit use of O&M funds for minor expenditures without pre-planning, obtaining the approval of the Secretary of State, or using the specified OHDACA funding for the HCA. However, other § 401(a) requirements (promotion of U.S. and host country interests; promotion of specific operational skills of the U.S. participants; promotion of the basic social and economic needs of the host populace; prohibition of benefits to military or paramilitary; and prohibition against duplicating services provided by another U.S. government agency) would still apply.\footnote{The statute also contains its own reporting requirement: no later than 1 March of each year, the Secretary of Defense must inform Congress of the countries, assistance, and expenses of providing HCA for the previous year.} The statute also contains its own reporting requirement: no later than 1 March of each year, the Secretary of Defense must inform Congress of the countries, assistance, and expenses of providing HCA for the previous year.\footnote{The statute also contains its own reporting requirement: no later than 1 March of each year, the Secretary of Defense must inform Congress of the countries, assistance, and expenses of providing HCA for the previous year.} 

**IV. CONCLUSION**

With today's rapidly increasing operations tempo, and the wide range of countries in which United States forces exercise, a judge advocate or paralegal must be aware of the potential for violating the complex web of fiscal statutes. This is one area in which client education can go a long way. As soon as you hear about an upcoming exercise, get involved with the planners and determine what kinds of activities we expect to conduct, with whom, and with what funds. If the unit is sending an advance team or survey team, make sure you brief them on just what they can and cannot do.

Based upon years of lecturing at the Contingency Wartime Planning Course, which educates over 700 planners a year, I can assure you that these teams rarely, if ever, include a judge advocate or paralegal (the best plan would be to get yourself on the team). Their mission is to smooth the way for the exercise, and they often are unaware of their limitations. Occasionally, they enter into unauthorized negotiations which commit the United States to undesired, but possibly binding, international agreements, or they agree to repair or upgrade host nation infrastructure, which may violate fiscal law statutes or directives. Make sure that someone from the legal office goes on the exercise and is prepared to recognize and deal with fiscal law problems. When you are asked about a problem, make sure you create a paper trail that will demonstrate to auditors or the General Accounting Office exactly why, and on what legal authority, we took a given action. Only by constant attention can we avoid unlawful use of funds and the resulting criticism and possible Congressional inquiries.

* Mr Phillips (B.A., J.D., Southern Methodist University, M.P.S., Auburn University) is Chief, International and Operations Law at the Air Force Judge Advocate General School, Maxwell Air Force Base, Alabama. He is a member of the Alabama and Texas State Bars.

1 Joint exercises involve more than one United States armed force; combined exercises involve forces from more than one country. For the purposes of this article, "combined exercises" refers to the forces of the United States and at least one foreign country.

2 See infra notes 9-20 and accompanying text.


4 Id.
5 Legal limitations on spending Federal money have been a hotly contested area of debate for many years. For a
general review of the battles over government appropriations, the budget deficit and Congressional actions, see Kate


7 See infra notes 20-29 and accompanying text discussing legal constraints on use of O&M funds vice security
assistance funds.


9 Id. This "use it or lose it" principle has been heavily criticized as being inefficient and an impediment to
innovations and improvements. See, e.g. Karen L. Manos, Antideficiency Act without an M Account: Reasserting
Congressional 'power of the purse').


11 While not directly relevant to exercises, this section requires heads of federal agencies to expend fiscal year funds
to prevent the need for supplemental or deficiency appropriations and requires them to avoid exhaustion of funds

12 Courts have held that the law's limitation on officials to impose contract obligations on the U.S. applies equally
to contracts by implication as they do to contracts expressly made. See Hercules Inc. v. U.S., 116 S.Ct. 981; 134

13 The other statutes are 31 U.S.C. §§ 1342 et seq and 1511-1519. 31 U.S.C. 1342 et seq places limitations on
acceptance of voluntary services which might be used to perform duties which should be paid by public funding.
The "emergency" exception, allowing acceptance in cases where acceptance would save human life or property, was
recently limited to only those instances where such dangers are "imminent". Pub. L. 104-92, Title 111, § 310, Jan. 6,

14 For an in-depth perspective on this concern that there are too many useless rules undermining legitimate defense
needs, see Peter-Raven Hausen and William C. Banks, Pulling the Purse Strings of the Commander in Chief, 80 VA.

15 Possible adverse personnel actions against government employee violators include a minimum one month's
separation without pay, with longer periods as "circumstances warrant," to removal. 31 U.S.C. § 1349. The
imposition of these penalties requires either willful violation of the law, (See Kimm v. Dept. of Treas., 61 F.3d. 888
(Fed. Cir. 1995) or reckless disregard of whether their actions are illegal. (See Gotshall v. Dept. of A.F., 37
M.S.P.R. 27 (M.S.P.R. 1988).

16 Criminal penalties include a fine of up to $5,000 and imprisonment for not more than 2 years, or both. 31 U.S.C.

17 Under Secretary of Defense (Comptroller) letter to the Department of Defense (Dec. 19 1994) (on file with
author).

18 63 Comp. Gen. supra note 6 at 422

19 Described in detail at 63 Comp. Gen.422 supra at 428-32.

20 10 U.S.C. § 2805(c) (1994) Congress raised this amount to $300,000 per project in 1991 and to $500,000 per
project in 1996, as well as adding a provision authorizing up to $1,000,000 for a project "intended solely to correct a
deficiency that is life-threatening, healththreatening, or safety-threatening." Id.
21 63 Comp. Gen. at 422.

22 Id. at 436.


26 Id. at 441.

27 Id. at 441.

28 Id. at 442.

29 Id. at 443.

30 The number was raised to 200,000 in GAO's 1986 opinion.

31 Id. at 444.


33 63 Comp. Gen. at 444.

34 Id. at 425.

35 DoD Use of Operations and Maintenance Appropriations in Honduras, B-213137 (January 30, 1986) (unpub.).

36 Id. at 1.

37 Id., Enclosure 15.

38 Id. at 16.

39 Id. at 21.


41 Originally authorized as sections of successive DoD appropriations acts, it was codified as 10 U.S.C. § 401 (1994).

42 B-213137 (January 30, 1986), Enclosure at 31.

43 Id. at 33.

44 Id. at 34.


46 Each fiscal year, Congress appropriates to each military department a specified amount for unspecified minor military construction. However, regardless of the total appropriation, no military department may use more than $5,000,000 during a fiscal year for such construction during overseas exercises coordinated or directed by the JCS. 10 U.S.C. § 2805(a)(2) (1994).

47 There are no additional or specific O & M funds for these projects; they would have to be funded out of the department's overall O & M appropriation.
The statute defines "special operations forces" as including civil affairs forces and psychological operations forces, in addition to the traditional "special forces" (e.g., Army Special Forces, Navy SEALs). 10 U.S.C. § 2011(d)(1) (1994).

55 Defined in 10 U.S.C. § 2011(d)(2) (1994) as the "reasonable and proper costs of rations, fuel, training ammunition, transportation, and other goods and services consumed by each country, except that the term does not include pay, allowances, and other normal costs of such country's personnel." Id.


60 10 U.S.C. § 166a(c) (1994).


70 Definitions are found at 10 U.S.C. § 401(e).


DAJA-IO, Memorandum for DoD General Counsel, Subject: Amendment to 10 U.S.C. Section 401(c)(2), 28 February 1994.

10 U.S.C. § 401(d).
I. INTRODUCTION

After World War II, codified international law recognized that historic monuments, archaeological sites, and other artwork is considered the property of all mankind, rather than that of a single state. This recognition was codified in the 1954 Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict, /1/ and reaffirmed in article 53 of the 1977 Additional Protocols to the Geneva Conventions of 1949. /2/ The viability of the 1954 Hague Convention came into question during the 1991 Gulf War when Iraqi aircraft were intentionally located near the remains of a 3,000 year old Sumerian temple. /3/ The United States Air Force was faced with the question of whether to attack these aircraft, thereby risking collateral damage to the ancient monument - which the Convention would permit - or to avoid the area and the military targets. /4/ The command authority opted for the latter option. As the Middle East, North Korea, and Southern Europe remain areas of political military instability, the likelihood that this type of situation could again arise is great.

The United States is greatly interested in preserving and protecting cultural property. Historically, the United States has been a leader in promoting national laws to protect cultural property. /5/ Additionally, the United States, through a number of both federal and state laws has served as an international policeman for protecting cultural property. /6/ An attorney need only research through the myriad of federal and state laws, and judicial decisions to see the tremendous emphasis placed on the preservation of historic and cultural sites and objects to confirm this national interest /7/. The military attorney should recognize that from the beginning of this nation, the American military has placed an overarching interest in preserving recognized laws of warfare. /8/ These recognized laws include the doctrine of necessity, which envisions that where an enemy places fortifications or other objects of military value near a historic site, the historic site should lose its protected status.

This article examines the depth of customary international law /9/ - that is the accepted practices and norms of the international community - with respect to cultural property, the 1954 Hague Convention and Additional Protocol One, and Department of Defense and Air Force policy. In order to properly understand the legal basis for protecting cultural properties under international law, it is essential to review the development of these protections. It is also essential to gain a basic knowledge of the basic principles of the law of armed conflict. /10/ Section I will discuss the evolution toward a customary development of an international law of war to protect cultural properties. This section also notes the basic principles of the law of armed conflict. Section II examines the terms of the 1954 Hague Convention, and Additional Protocol One to the Geneva Convention. Section II also applies the various provisions of the 1954 Convention into historic perspective for the purpose of reviewing its effectiveness. Section III will analyze current Department of Defense and Air Force policy. This article will conclude that the 1954 Hague Convention is a reflection of customary international law, but has never risen per se to the level of customary international law. Moreover, while the United States and its military allies follow, when possible, the basic framework of the 1954 Hague Convention, they are not bound by it. This article will also discuss the pitfalls of Additional Protocol One.
To date, the United States and several of its western allies have not signed the additional protocols. Finally, DOD and Air Force policy is analyzed against the backdrop of customary international law.

II. HISTORIC DEVELOPMENT OF A CUSTOMARY INTERNATIONAL LAW

Since the beginnings of organized society, warfare has encompassed the occupation of land and destruction of property. Indeed, from ancient times, success in war and the subjugation of the conquered populations have often depended on the wholesale destruction of that population's religious and political centers. Despite this character of war, there has been a countervailing view that certain properties should be free from pillage and destruction. This view dates back to antiquity. For example, the Greek Historian, Herodotus (ca. 484-430 BC), chastised the Persian king Xerxes for plundering Greek and Egyptian religious and political centers. Thus, by 480 BC, the Greeks clearly believed that cultural or ancient treasures should be, if at all possible, left unmolested in wartime. Thus, the origin of a customary prohibition against the destruction of cultural properties dates to at least as far back as classical Greece and perhaps sometime into prior antiquity. That the Greeks were successful in the Persian Wars ensured a continuance of a European, or at least a Mediterranean development of laws and legal custom. Nowhere was an adherence to this early law of war more pronounced than with Alexander the Great (350-326 BC). Alexander's view on the protection of historic properties was certainly more enlightened than Xerxes'. His conquest of Persia was marked by a desire to preserve ancient treasures for the enhancement of a Hellenistic empire. It is probable that Alexander's early education by such luminaries as Aristotle left a desire to create museums and other centers of education ornamented by other culture's treasures. The enlightened attitudes of Greek and Macedonian war policy makers left a tradition that prevailed though subsequent European history. The Roman Republic and Empire, with its interest in both economic and political expansion would destroy cities and other cultures as a measure of last resort. However, Roman history is replete with examples of this "last resort" philosophy. The destruction of Carthage after the Third Punic War (149-146 BC) provides a classic example on this point. The Romans adopted the Greek tradition concerning the treatment towards the historic objects of others during periods of conquest and armed conflict. This customary tradition included a propensity for preservation whenever possible. From the fall of Rome through the Renaissance, the attitude of preservation when possible prevailed at least in the minds of theorists and philosophers.

The next significant juncture on the limitations of warfare in regard to centers of cultural property did not occur until over a thousand years after the destruction of the western Roman Empire. In the period of the devastating Thirty Years War (1618-1648) one of the founding scholars of international law, Hugo Grotius (1583-1645) attempted to create a basic framework to limit the destruction in both lives and property that the Europe-wide conflict had produced. The Thirty Years War had been more destructive to Continental Europe, than any prior conflict, and it would remain unrivaled in that aspect until World War One. Indeed, in the Treaty of Westphalia, the signatory nations conceded that the claims of destruction were so complex as to preclude any recovery. In the 18th Century, Emeric de. Vattel advanced the premise that nations should fight wars with the limited purpose of defeating the enemy's forces. Vattel argued, "Devastations and destructions and seizures motivated by hatred and passion, however, are clearly unnecessary and wrong: doubly wrong indeed, if they also destroy some of the common property of mankind - its inheritance from the past, or its means of subsistence and enrichment in the present."
Both Grotius' and de. Vattel's philosophy proved appropriate for the limited wars of the 18th century. These wars tended to be brief, isolated, and expensive, thereby limiting their potential for massive destruction. /23/ By the close of the 18th century, adherence to the standards of Grotius and de. Vattel became problematic due to the increased scope of military conflict, such as the French Revolutionary wars. Napoleon's conquests provided ready exceptions to the development of a customary international law of warfare. While his armies generally, attempted to adhere to the principles of both Grotius and E. de. Vattel, historians and legal scholars point out that French armies from Egypt to Moscow absconded with a massive collection of art and antiquities. However, Napoleon's systematic looting of European art was not done for booty, but to propel the Louvre into the civilized world's center of art and antiquities. /24/ This theft of art was not a particularly unusual feature of warfare. Napoleon routinely engaged in this practice on a greater scale than anyone since the Roman Empire. In several respects, the wars fought by Napoleon were a watershed for war in the industrial age. This practice would have a direct effect on the growing emphasis to protect cultural properties. Additionally, after Napoleon's final defeat at Waterloo, France was required under the Second Treaty of Paris to restore works of art to their original state. The British Representative to the Congress of Vienna, Viscount Castlereagh had circulated a memorandum which stated that the removal of artwork, "was contrary to every principle of justice and to the usage of modern warfare." /25/

During the Napoleonic period, a concept that cultural property was the property of all humanity, rather than as a prize of plunder, emerged in international law. For example, in the American and British War of 1812, certain American scientific prints and paintings were seized by the Royal Navy from an American Vessel, The Marquis de Somerueles. The petitioners, a Philadelphia science organization challenged this act in a British Admiralty Court. Sir Alexander Croke, Judge of the Vice Admiralty Court in Halifax, Nova Scotia summarized the disposition of law regarding such properties in the admiralty case, The Marquis de Somerueles." Sir Alexander posited that: "The same law of nations, which prescribes that all property belonging to the enemy shall be liable to confiscation, has likewise its modifications and relaxations of that rule. The arts and sciences admitted amongst all civilisations as forming an exception to the severe rights of warfare, and as entitled to favour and protection. They are considered not as the peculium of this, or that nation, but as belonging to the common interests of the whole species." /27/

Interestingly, the next significant development in the laws of war originated in the United States during the Civil War. The War Department and Abraham Lincoln were increasingly concerned with the Confederate's use of guerrilla warfare. In 1862, Henry W. Halleck, General-in-Chief of the Union Armies, sought Professor Francis Lieber's help in drafting a code of laws to govern the conduct of the war./28/ Lieber's code was adopted by the Army as General Order No. 100 in 1863. Several of its provisions remained significant for providing definition to principles underlying the laws of war, as well as by defining war. Lieber defined Necessity as, "those measures which are indispensable for securing the ends of the war, and which are lawful according to the modern law and usages of war.” /29/ Necessity, according to Lieber's Code, "admits all direct destruction of life and limb or armed enemies, and of other persons whose destruction is incidentally unavoidable in armed contests of the war . . . .” /30/ Of particular significance to this essay was the Code's attempts at securing the safety of classical works of art, museums, scientific collections, and libraries. /31/ The Code placed on both the defender and the attacker a duty of securing such sites or items, "against all avoidable injury, even when they are contained in fortified places whilst besieged and bombarded. /32/ General Order No.100 remained an important law of war reference until the close of the 19th Century when international attempts to codify a law resulted in the first international agreement on the law of war.
One of the many effects of the industrial revolution was to increase a nation-state's capability to conduct war. A corollary to this increased capability was that warfare became more violent and overall destructive. By the close of the 19th Century, an international movement to reduce the destructiveness of war culminated in the two Hague Conventions which were concluded in 1899, 1907. The 1899 and 1907 Hague Conventions produced a codified international law of warfare. Similar provisions in both Conventions prohibited an invading army from pillaging, and required invaders to respect the laws of the conquered territory. These Conventions also prohibited the confiscation of private property. Finally, cultural objects and structures were protected under both conventions, and violations of the Conventions were subject to international sanctions. Military lawyers, however, must make note that both Conventions permitted the destruction of cultural sites and objects, if recognized under the necessities or exigencies of war.

The rules established under the Hague Conventions were initially tested in the First World War. Regions rich in historic and culturally important sites were affected by widespread combat. Incidents such as the German razing of Belgium's Louvain University, and the bombing of the medieval Rheims Cathedral in France, triggered international outrage. So too did the looting of occupied museums and cathedrals. This outrage was manifested in article 245 of the Treaty of Versailles which forced Germany to return all stolen property of historic significance. Equally important was the use of airpower during the conflict. For the first time in history, major population centers were bombarded from the air. The capacity of air forces to destroy enemy production and population centers from a distance became a reality. This new feature of modern warfare was recognized in international law tribunals. As a result, in the 1920's and 1930's, the United States moved to protect historic sites from destruction by initiating an international agreement collectively as the Roerich Pact. This Pact was limited in its application and extent, but it did embody the basic tenets of customary international law with respect to cultural properties. Additionally, the United States Department of State, the Japanese Imperial Foreign Office, and certain smaller European nation's diplomatic agencies attempted to codify the rules of air war into a body of law known as the 1923 Hague Air Rules. The proposed 1923 Hague Air Rules were never adopted by any nation because the draft set of rules proved too strict to be acceptable to all powers. Nonetheless, cultural property was addressed in the proposed Hague Air Rules. Two proposed articles required commanders to spare, whenever possible, buildings dedicated to public worship, monuments and provided for a neutral inspection system to establish safety areas near these sites.

Despite international outrage caused by the German Army's excesses in World War I, in the immediate aftermath of the war all of the belligerent nations began formulating war doctrine for the next anticipated conflict. In terms of airpower, Great Britain, Germany, and France concentrated on a heavy bomber doctrine. With the emergence of heavy bombers in the inter-war period, the likelihood for the destruction of historic and cultural sites dramatically increased. During World War II, European and Asian cultural landmarks were extremely damaged or destroyed outright. Germany in particular conducted a campaign of widespread looting of Europe's art treasures. Moreover, as no region was immune from battle, historic sites and objects were jeopardized by war across the globe. As an example, during the Italian Campaign, Allied generals deemed it necessary to level the medieval monastery at Monte Cassino which blocked the access to Rome. The Monte Cassino episode, by no means an isolated event, came to symbolize the need for greater protections of cultural properties in wartime.

What had been achieved through the war crimes trials of World War II as well as the growth of international law analysis after the war, was an acceptance of a customary internal law of war with respect to the protection of cultural properties.
destruction of cultural properties was seen as an internationally unlawful activity. /52/ With this acceptance came a desire for codification of this customary law. In short, the wholesale destruction of Europe's cities and the widespread looting of Europe's treasures by German occupying forces accelerated the movement for an effective international legal protection of historic and cultural property. Nonetheless, as the following two sections will illuminate, the 1954 Hague Convention failed to take into account the exigencies of war, and two of the fundamental accepted principles: necessity and proportionality.

III. 1954 HAGUE CONVENTION

A. History

Forty-five countries signed the 1954 Hague Convention at its inception. Currently, seventy-five countries have ratified or acceded to the Hague Convention. /53/ The variety of signatory countries, with their diverse cultures and divergent political views, indicates the breadth of support for the underlying principles of the Convention. It does not necessarily raise all the provisions of the Convention to customary international law. Indeed, in the cold war era doctrine of massive retaliation, there could be little application of the Convention to total war. Nonetheless, for the purposes of non-nuclear engagements, the Convention was acceptable to a number of nations and organizations. It was not acceptable to the United States, Great Britain, or Canada, among other nations, because of its restrictiveness and stretch beyond customary international law.

The preamble to the 1954 Convention describes armed conflict as the underlying basis for invoking its rules. /55/ The genesis of the 1954 Convention can be traced to article 56 of the 1907 Convention. /56/ Article 56 of the 1907 Convention states that "all seizure or destruction or willful damage done to the institutions of this charter, historic documents, works of art and science, is forbidden, and should be made subject to legal proceedings."/57/

However, unlike its predecessor conventions, the 1954 Convention introduced the term "cultural property" and gave it definition. /58/ Moreover, the 1954 Convention expanded protection for cultural property to all armed conflicts rather than just full-scale wars by eliminating the loopholes of the 1899 and 1907 Conventions. /59/ The 1954 Convention also designated an international symbol for nations in order to protect cultural property. The presence of cultural property is to be indicated by a blue and white shield. /60/ This shield may be placed as an insignia on sites or flown in flag form. /61/ Finally, the 1954 Convention created an International Register of Cultural Property Under Special Protection (Register). /62/ However, to date, the Register is woefully incomplete. /63/

Article 3 places an affirmative duty on signatory parties to protect cultural property situated within their territory. /64/ This is reinforced by Article 4 which also places an affirmative duty on all signatory parties to respect cultural property situated both within their own territory and additionally in the territory of other states. /65/ Additionally, Article 4 disallows the use of cultural property or the protective insignia to protect military equipment or forces. /66/ Article 4 also disallows the destruction of cultural property for the purposes of reprisal. /67/ Moreover, Article 4 does not permit a violating state to plead a defense of ignorance. /68/

Protection of cultural property in occupied territories is governed by Article 5. /69/ Article 5 requires an occupying force to allow the "competent authorities" of the occupied territory to ensure preservation and protection of cultural property. /70/ In circumstances where the occupied territory lacks competent authorities, the occupying forces are under a duty to assist in the repair of damaged sites and monuments. /71/ On this point, the 1954 Convention
is without clear guidance. /72/ For example, Israeli archaeologic excavations in the occupied territories and in the Golan Heights were made by several of the world's foremost archaeologists, which prompted Arab protests. UNESCO responded to Arab pressure over these excavations and withheld financial assistance for Israeli science and education projects. /73/

Article 7 delegates the signatories to, "introduce in peacetime into their military regulations or instructions such provisions as may ensure observance of [the 1954 Convention] and to foster in the members of their armed forces a spirit of respect for the culture and property of all peoples.” /74/ Moreover, the Convention sets forth as an objective for each signatory to employ specialists whose purpose is to foster respect and security for the principles of cultural property protections. /75/

The 1954 Convention recognizes the exigencies of war by permitting each state to construct a limited number of refuges for moveable cultural property via Article 8. /76/ As a result, defending nations must situate these refuges at adequate distances from large industrial centers and important military objectives. /77/ A state may not place such objects at an airdrome or port of entry. The exception to this rule is where the state has constructed "bombproof' shelters for moveable objects. /78/ Nonetheless, a defending nation's failure to carry out this affirmative duty to isolate its cultural properties results in the loss of protected status for them.

Articles 9, 10, and 11 create conditional immunity and subsequent withdrawal of immunity for cultural property sites. Article 9 creates an internationally recognized emblem for the protection of cultural properties. (see appendix 1) The use of this emblem creates a recognized immunity from bombardment or air attack. /79/ Where a state engages in an unlawful ruse, or purposefully endangers its cultural property by design, immunity is considered withdrawn. /80/ This includes withdrawal of immunity for cultural property listed on the Register. /81/ Additionally, where objects of cultural property are being transported, a state may seek the protections of the Convention by labeling the transport vehicles with the emblem and by notifying the opposing state. /82/

Articles 12 and 13 cover the transportation of cultural property. Modes of transportation are generally immune from attack as long as the appropriate symbol is displayed and the other parties have been notified. /83/ In cases of urgency, notification can be waived, but under no circumstances may the transporting party display the use of the emblem unless immunity has been expressly granted to it through the Register or some other recognized means. /84/

Articles 14 and 15 encompass basic 20th Century customary laws of warfare. Article 14 prohibits the seizure of cultural property as prizes or trophies of war. /85/ While the concerns over the looting and pillaging of artwork and antiquities dates back beyond Alexander the Great, Article 14 was created in direct response to the German Military's looting during World War II. Individuals such as Herman Goring acquired massive collections of classic artwork during the war. Moreover, several high ranking Nazi officials were tried and convicted of crimes involving the destruction and pillage of cultural property. One of the Nuremberg defendants, Alfred Rosenberg, set up an organization titled the 'Hohe Schule' and under Hitler's orders created the 'Einsatzstab Rosenberg' which plundered artwork and cultural property throughout Europe. According to the International Military Tribunal, more than 21,903 art objects were looted by Rosenberg's group. /86/ This practice was condemned in a joint declaration by the victorious powers in 1945. /87/

Neither Article 14, nor the declaration, stopped Iraqi forces from pillaging in Kuwait during their brief occupation. During the conflict, the United Nations Security Council demanded the return of Kuwait's collections of Islamic Art. 18 The Kuwait National Museum, as well as the
Seif Palace Reception Library, were destroyed. Tariq Aziz, then Iraq's foreign minister, promised to return these items.\(^89\) This return was mostly accomplished by October 1991.\(^90\)

The 1954 Convention views persons involved in the transport, identification, and protection of cultural properties as non-combatants under Article 15.\(^91\) The 1954 Convention never answers the question as to whether uniformed personnel - otherwise viewed as combatants under international law working in these tasks are also to be considered non-combatants. However, an international identity card is authorized. Each contracting party decides the format of their respective identity card; there is no standard card design. The Convention provided an example as a guideline, but not a requirement.\(^92\) (see appendix 2)

Articles 16 and 17 govern the use of the distinctive emblem.\(^93\) A state that willfully and unlawfully uses the emblem engages in perfidy.\(^94\) The rationale of this rule is that if protected status or protective emblems are abused, they lose their overall effectiveness and put protected persons and places at additional risk.\(^95\)

In the late 1960's and early 1970's, the Convention was invoked to protect cultural properties in both Cambodia and in the Middle East.\(^96\) In 1975, Cambodian loyalist troops (of the Lon Nol regime) attempted to use the thousand-year old temple of Preah Vihear as a stronghold against the Khmer Rouge. The loyalists used the sanctioned emblem, but did so under illicit circumstances. Moreover, ownership over the Preah Vihear temple was already in dispute with Thailand.\(^97\) Because the Lon Nol troops represented a government which had signed the 1954 Convention, there was little support for continued fighting within the temple's perimeter. Finally, if damage to the ancient site had occurred, both the Khmer Rouge and the Thai government would have had recourse through the 1954 Convention against the loyalist troops.\(^98\)

In the 1980's, the Near East and Persia became a locus of concern for protecting cultural properties. In 1982, Israel invaded Lebanon. The neighbor Arab nations submitted a resolution to the United Nations General Assembly requesting that Israel make full restitution for damaged archives and other monuments.\(^99\) The General Assembly Resolution did not cite the 1954 Convention or the additional protocol. Instead, the Resolution relied on customary international law arguments. In all probability, the complex situation in Lebanon, involved Palestinian irregulars, a Syrian sponsored force, and other splinter groups that were already violating the 1954 Convention on their own accord. Additionally, by the time of the Israeli invasion, the Lebanese government had collapsed and no recognized entity was capable of lodging complaints against any of the warring parties.\(^100\) Finally, Israel had not specifically violated the strict letter of the law in the 1954 Convention.

During the Iran-Iraq War of the early 1980's, the 1954 Convention was given international consideration. Iraqi forces attacked cultural sites in Iran that were not listed on the International Register, but which had been noted to the 1972 World Heritage Convention by Iran.\(^101\) The World Heritage Convention was attended by a variety of nations which sought to register sites of cultural importance for preservation and for reasons environmental endangerment. Both Iraq and Iran signed the 1954 Convention without reservation, but the United Nations was impotent in enforcing its provisions.\(^102\) United Nations impotency in enforcing the 1954 Convention was seen during the Soviet occupation of Afghanistan.\(^103\)

During the Gulf War, a legal regime was set-up to effectively adhere to the letter and the spirit of the 1954 Convention. This regime did not recognize the 1954 Convention as binding, but rather the
regime recognized the Convention as an advisory document. Of the coalition members, the United States, Great Britain, and Canada were not signatories. According to the DoD Report to Congress, military members in the coalition forces received law of armed conflict training. As a result, the 1954 Convention's provisions were followed during the war. /104/ It is presumptive to state with certainty that the United States accepts the 1954 Hague Convention's provisions as customary international law. Nonetheless, the United States and the Coalition forces honored the spirit of the Convention. Iraqi forces did not adhere to the Convention and pillaged Kuwait of private property. Finally, the Hague Convention is applicable to the current conflict in the former Yugoslavia. While Yugoslavia existed it had over 9000 registered historic landmarks from the Roman, Byzantine, Renaissance, Islamic, Baroque, and Gothic periods. Many historic structures, such as during the siege of Dubrovnik, suffered extensive damage. Also, artwork was looted by several parties. It may be the case that war crimes trials will indict individuals responsible for the devastation of historic sites.

With the existence of international controls for the protection of civilians or sites in wartime, why aren't the violator states punished? This question has been debated and explored at length and it is particularly salient because of the customary international law status of the 1954 Hague Convention protections. Whitney R. Harris, both a United States prosecuting attorney at the Nuremberg War Crimes Trials, and an eminent legal scholar in the field, provides a parallel answer. The primary reason the Nuremberg precedent has not been applied following the several military conflicts of the last half century is that they have, for the most part, been terminated by cease fire agreements which made it impossible to obtain personal jurisdiction over suspected war criminals. In two cases where unconditional surrender could have been imposed upon aggressor nations - Argentina's seizure of the Falkland Islands, and Iraq's seizure, by force of Kuwait - the victorious powers elected to permit the leadership that had committed aggression to remain in power, and the aggressors therefore escaped prosecution and punishment. /105/ So to, does the failure of enforcement of the Hague protections.

B. Additional Protocol One

Between 1974 and 1977 a number of countries attempted to update the 1949 Geneva Conventions relating to the Protection of Victims of International Armed Conflicts. The Conference declared that the 1954 Hague Convention was, "of paramount importance for the international protection of the cultural heritage of mankind." /106/ Article 53 /107/ of Additional Protocol One reaffirms the tenets of the 1954 Hague Convention, and encourages states - such as the United States - to become a signatory party. Article 16 of Additional Protocol II is substantially similar to Article 53. The fact that as late as 1977, there was an urging of non-signatory parties to sign the 1954 Hague Convention is one indication that the 1954 Hague Convention is a reflection of customary international law, rather than per se customary international law. /108/

The greatest departure from customary international law by Additional Protocol One is that the attacker assumes a greater burden than ever before for the protection of cultural properties. /109/ Prior to 1977, responsibility for the protection of cultural properties rested with the defender and not the attacker. /110/ The 1954 Hague Convention at least recognized that the defender had greater control of the cultural properties within its borders. It also recognized in the inevitability of collateral damage incident to military operations. The Additional Protocol ignores both the exigencies of war, and the principles of necessity and proportionality to an unacceptable degree, and in contrary to customary international law. /111/ This philosophy is found in Article 52 of the Additional Protocol which not only defines acceptable military targets but presupposes that all peacetime non-military targets remain non-military in wartime. /112/ Article 52 is problematic because too many states have shielded lawful military targets on or near sites of cultural property. /113/ Article 53 is to be read 'subject to other relevant instruments,' namely Article 52. If the United States and its allies are to act as global policemen, the Additional
Protocol places an onerous burden on any operation where the protection of cultural property is an important issue. In sum, the Additional Protocol steps outside of the boundaries of customary international law of war with regard to the protection of cultural property, by shifting the burden to the attacker and ignoring the exigencies of war which would tend to encourage the shielding of legitimate military targets by placing them in or near cultural property sites.

IV. PROTECTION OF CULTURAL PROPERTIES IN OPERATION: DEPARTMENT OF DEFENSE AND UNITED STATES AIR FORCE

Department of Defense Directive 5100.77 /114/ requires all branches of the armed forces to comply with the law of war in conducting military operations and related activities of armed conflict regardless of how the operation is characterized. /115/ The DoD directive directs that the service branches "institute and implement programs to prevent violations of the law of war." Training armed services members in the Law of War (often referred to as the law of armed conflict) is requirement of the 1949 Geneva Conventions. The United States Air Force implements the DoD Directive through AFP 110-34, discussed below, as well as requiring annual LOAC training for all of its active duty members. /116/

United States Air Force policy for protecting cultural objects during armed conflict is found in Air Force Publication 110-34. /117/ The policy speaks to reasonableness but maintains a duty on the defender state to accord to either the 1954 Convention, 1925 Roerich Pact, or a valid custom of protection. /118/ Objects and sites of cultural value may be attacked whenever the enemy uses such objects for the protection and cover of military equipment or other military purposes. /119/ AFP 110-34 also recognizes that while the United States is not a signatory to the 1954 Convention, many of our allies are not also, in particular the United Kingdom, and most of our recent adversaries are signatories. /120/ As such, the United States Air Force recognizes the emblem found in Article 16 of the 1954 Hague Convention. 121

A variety of instances make a cultural property object or site a legitimate target. Military targets can include any areas that house or support a military mission. /122/ This is a more realistic interpretation of customary international law than is Additional Protocol One. Thus, an area in which the enemy stores armored vehicles, aircraft, weapons production sites, or other production sites vital to warfare (i.e. petroleum processing plants or energy production centers) are all technically considered valid targets. /123/

An equally salient provision in AFP 110-34 relates to collateral damage. It is up to the commander in the field, based on the facts known at the time, to determine whether the risk of collateral damage is necessary for the accomplishment of a legitimate mission, or when collateral damage becomes excessive. /124/ This is an eminently more realistic standard than found in Additional Protocol One.

In Operation Desert Storm, the Coalition forces proved that they could adhere to the limits of customary international law and prevail. Coalition forces could have lawfully attacked military threats in and around centers of cultural importance. However, in accordance with the set Rules of Engagement - set by the commanders in charge of the war - they did not strike these areas when cultural objects were likely to suffer collateral damage. /125/ This remained so despite Iraq's failure to comport with international law by segregating its military targets from centers of cultural property. /126/ For instance, the Sumerian temple, which Iraq found as a welcome location for a few of its fighter aircraft, was a legitimate target. The Rules of Engagement, created by the commanders, would make it so only if it were an absolute necessity. The scenario that played out
evidenced that the 1954 Hague Convention, as a reflection of a customary international law of war to protect cultural properties, was an appropriate and practical guide to follow. Had those aircraft been suspected as nuclear ready, an airstrike would have been permissible. Under the regime envisioned by Additional Protocol One, such a strike would not have been permissible. No customary international law of war would permit the utter devastation of an internationally recognized coalition force because of a de minimis lingering doubt.

V. CONCLUSION

The protection of cultural properties in armed conflict has long been recognized to be an important consideration for participant states and military forces in these conflicts. For over two millennium, a custom has evolved to force states to recognize and live up to the requirements of customary international law. Additionally, customary international law places requirements on both attacker and aggressor states, as well as occupation forces. Finally, customary international law permits the use of the doctrines of necessity and proportionality to overcome the protections afforded to cultural property sites and objects. The 1954 Hague Convention is a reflection of the development of customary international law, and both the military attorney and commander should see the Convention as such. However, the 1954 Convention Hague is binding law in most of its provisions, and thus is a salient guide to what that law is. The 1977 Additional Protocol is not an accurate assessment on the law of war in regard to the protections which cultural properties should be afforded during armed conflict. Where a defender state harbors items of military value, or has done so previously - and for that matter, when the available intelligence shows so - in or near cultural property, the property loses its legal protections. And, while no commander wishes to create another Monte Cassino, the loss of lives and possibly objectives may very well outweigh the protections for the site or object.

* Captain Joshua E. Kastenberg (B.A., UCLA; J.D., Marquette University Law School) is an assistant staff judge advocate at Whiteman AFB, Missouri. He is a member of the Wisconsin State Bar. The author gratefully acknowledges the help and insight of Lt Col. Dwight K. Keller, Lt. Col Dennis Shepherd, Lt Col. Curtiss R. Petrek, 509th Bomb Wing, Whiteman AFB, and in particular Group Captain Alan M. Hemmingway, Director of Air Force Legal Services, Royal Australian Air Force, Canberra, Australia.


2 Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protections of Victims of International Armed Conflicts, June 8, 1977, art. 37(1), 1125 U.N.T.S. 3 [hereinafter Additional Protocol I]. There were two additional protocols. Additional Protocol I relates to the protection of victims of international armed conflicts. Additional Protocol II relates to the protection of victims of non-international armed conflicts. For the purposes of the essay, only Protocol I is utilized.


4 DoD Report, supra note 2, at app. O, pg. 3. The report states that, "Coalition forces continued to respect Iraqi cultural property, even where Iraqi forces used such property to shield targets from attack. However, some indirect damage may have occurred to some Iraqi property due to the concussive effect of munitions directed against Iraqi targets some distance away from the cultural sites." Id.


7 See, e.g Federal Republic of Germany v. Elicofon, 478 F.2d 231 (2d Cir. 1973), cert denied, 415 U.S. 931 (1974) (allowing German gov't to recover stolen WWII painting held by U.S. art dealer); United States v. Hollingshead, 494 F.2d 1154 (9th Cir. 1974) (applying National Stolen Properties Act to antiquities taken from foreign countries); United States v. McClain, 593 F.2d 658 (5th Cir. 1979)(holding same as Hollingshead supra); Kunstsammlugen Zu Weimar v. Elicofon, (678 F.2d 1982) (allowing use of foreign law on protection of art to recover painting held by U.S. art dealer); Autocephalous Greek-Orthodox Church of Cyprus v. Goldberg and Feldman Fine Arts Inc, 917 F.2d 278 (7th Cir. 1990)(tolling statute of limitations to recover stolen art until owner discovers location of stolen property); Republic of Turkey v. OKS Partners, 797 F.Supp. 64 (S.D.N.Y. 1990) (applying civil RICO statute to conspiracy theft of stolen antiquities). For a complete law review synopsis of laws and cases affecting cultural property in civilian practice, see Joshua E. Kastenberg, Assessing the Available Actions for Recovery in Cultural Property Cases, 56 DEPAUL J. ART & ENT. LAW 39(1995).

8 See Russell F. Weigley, American Strategy from its Beginnings through the First World War, in MAKERS OF MODERN STRATEGY 408, 412, (Paret ed. 1986). [hereinafter Modern Strategy] Weigley writes that Washington feared the "tendency of irregular war, with its violations of the international rules of war, to tear apart the entire social contract, as well as his specific concern to guard the dignity of the American cause as an essential part of the new nation's claim to equality of status among the nations of the world." Id. Moreover, in the Civil War, the Union adopted a code of war named for its founder Professor Francis Lieber to ensure certain wartime conduct. This code was designed to prevent further degeneration of fighting to brutality. See GENERAL ORDER NO. 100 APR. 14, 1863, in 3 U.S. DEPT. OF WAR, THE WAR OF THE REBELLION: A COMPILATION OF THE OFFICIAL RECORDS OF THE UNION AND CONFEDERATE ARMIES (SER. III) 148, 151 (1902). [hereinafter Lieber Code]

9 The charter to the International Court of Justice defines customary international law as, "the evidence of a general practice accepted as law." I.C.J., art. 38 , (Sept. 14 1929). Customary international law has also been defined as, over varying periods of time certain international practices have been found to be reasonable and wise in the conduct of foreign relations, in considerable measure the result of a balancing of interests. Such practices have attained the stature of accepted principles or norms and are recognized as international law or practice. Accordingly, there are in the field of international law, public and private, certain well recognized principles or norms.  AFP 110-31, International Law, The Conduct of Armed Conflict and Air Operations, 10 (1976). [hereinafter AFP 110-31] AFP 110-31 notes the basic principles of armed conflict as: Necessity (defined as permitting the application of only that degree of regulated force not otherwise prohibited by the laws of war, required for the partial or complete submission of the enemy with the least expenditure of life and physical resources); Humanity (defined as not permitting the infliction of injury, suffering or destruction not actually necessary to accomplish the mission); Chivalry (defined as the conduct of conflicts within well
recognized formalities and courtesies and forbidding treacherous misconduct, the use of poison or the misuse of protective flags or devices). Id.

11 For example, an ancient law of war can be found in the Old Testament. The war code of DEUTERONOMY states:

When you draw near a city to fight against it, offer terms of peace to it. And if its answer to you is peace and it opens to you, then all the people who are found in it shall do forced labor for you and shall serve you. But if it makes no peace with you, but makes war against you, then you shall besiege it; and when the Lord your God gives it to your hand you shall put all its males to the sword, but the women, and the little ones, and the cattle, and everything else in the city, all its spoil, you shall take as booty for yourselves; and you shall enjoy the spoil of your enemies, which the Lord your God has given you. Thus you shall do to all the cities which are very far from you.... you shall save nothing alive that breathes, but you shall utterly destroy them, the Hittites and the Amorites, the Canaanites and the Perizittes, the Hivites and the Jebusites, as the Lord your God has commanded; that they may not teach you to do according to all their abominable practices which they have done in the services of their gods, and so to sin against the Lord your God.

DEUTERONOMY 20.10.

This Deuteronomic tradition, which was more or less a reflection of early civilizations' views, was to have a profound impact on the Christian view of warfare through the Crusades. The ultimate aim of warfare became the destruction of the enemy's center of religious beliefs because out of these religious beliefs came societal cohesion. Without societal cohesion, the conquered society would easily be assimilated into the conquering state and lose its identity.

Another ancient example can be found in the annals of the ninth century King Ashurnaisirpal II of Assyria regarding the destruction of an enemy city:

With the masses of my troops and by my furious battle onset, I stormed, I captured the city; 600 of their warriors I put to the sword; 3000 captives I burned with fire; I did not leave a single one of them alive to serve as hostage. Hulai, their governor, I captured alive. Their corpses I formed into pillars; their young men and maidens I burned in the fire. Hulai, their governor, I flayed his skin I spread upon the wall of the city of Damdamusa; the city I destroyed, I devastated, I burned with fire.


12 HERODOTUS, THE PERSIAN WARS Ch. VII, para. 7.8 (Francis Godolphin trans., Modern Library College ed. 1942)

Herodotus writes that Xerxes declared his intention, "to undertake war and not to rest until having conquered and burnt all Athens." Id. While not a unique form of warfare to the ancient Near East, Herodotus discusses this statement in the context of a violation of a Greek law of war. Xerxes had not limited his anger to Athens and his style of warfare was well known to Herodotus and the Greeks. For example, according to Herodotus, Xerxes ordered one of his more renowned generals, Megabyxus to destroy a Babylonian rebellion through the destruction of its religious and cultural center. "At the end of this successful campaign, Nebuchadnezer's fortifications and zigurat were demolished. Babylon's great estates carved, looted, and ravaged. As a supreme insult, an eighteen foot statue of the god Bel Marduk, built almost of solid gold, was taken and melted into bullion. Babylon's theocratic monarchy was destroyed and the city lost its last vestige of independence." Id. For a particularly good explanation of Xerxes' actions see PETER GREEN, THE GRECO-PERSIAN WARS 58 (1996). Even by 480 BC, Babylon was a center of antiquity and the destruction of its thousand-year old religious center, was in fact an intentional demolition of what was then considered a world treasure.
13 E.g., upon Alexander's conquest of Babylon, he revitalized its historic and religious center which had been devastated by Persian rule. Of all the cities conquered, only the burning of the Persian capitol Persepolis was an exception, and Alexander later regretted this action. See A.B. BOSWORTH, CONQUEST AND EMPIRE: THE REIGN OF ALEXANDER THE GREAT 87 (1988).

14 Id.


16 See BRIAN CAVEN, THE PUNIC WARS 273-295 (1980). After Carthage's second revival following the defeat of Hannibal, the Roman Republic's government concluded that the necessity of Carthage's destruction far outweighed any economic gain which Rome could accrue by a continued trade relationship. Id.

17 In the Mediaeval and Renaissance periods, discussion of a doctrine of just war became prevalent. St. Augustine, for example, saw warfare as only just when carried out for motives of charity. See St. Augustine, City of God 27 (Henry Bettenson trans. 1971). Machiavelli and Erasmus believed in the limitations of just war, and not warfare for the purpose of annihilating one's enemy.

18 See, e.g. MACHIAVELLI, ARTA DELLA GUERRA [THE ART OF WAR] 48-51 (Bobs-Merrill trans. 1965). Machiavelli felt that wars should be short, but brutal to the soldiers on the field. His considerations on laws of war stemmed from his belief that soldiers should come from the soil for which they fight; that the use of mercenaries in wartime not only undermined the Roman Empire, but also made war a lawless endeavor. See Felix Gilbert, Machiavelli, The Renaissance and the Art of War, in MAKERS OF MODERN STRATEGY 11, 21-31, (Paret ed. 1986).

19 HUGO GROTIIUS, DE JURE BELLII AC PACIS LIBIRI TRES [THREE BOOKS ON THE LAW OF WAR AND PEACE] 1625 (Francis W. Kelsey trans. 1925). Grotius wrote, "such a work is all the more necessary because in our day, as in former times, there is no lack of men who view this branch. of law with contempt as having no reality outside of an empty name." Id. at 92. According to noted historian Geoffrey Parker, Central Europe, in the period of the Thirty Years War, suffered greater destruction and death than at any period prior to 1939. Grotious and his contemporaries were appalled by what appeared to be limitless suffering and destruction. See GEOFFREY PARKER, THE THIRTY YEARS WAR 208-218 (1984).

20 PEACE TREATY BETWEEN THE HOLY ROMAN EMPEROR AND THE KING OF FRANCE AND THEIR RESPECTIVE ALLIES. [hereinafter Treaty of Westphalia], Oct. 24, 1648, art II (Tufts University, Olde English trans. 1997). The Treaty of Westphalia later states in art. XLVII from this general restitution shall be exempted things which cannot be restor'd, as things moveable and moving, Fruits gather'd, Things alienated by the authority of the Chiefs of the Party, Things destroy'd, ruined, and converted to other uses for the publick security, as publick and particular buildings, whether Sacred or Profane, publick or private Gages, which have been, by suprise of the Enemys, pillage'd confiscated, lawfully sold, or voluntarily bestow'd. Id.


23 See Henry Guerlac, Vauban: The Impact of Science on War, in MAKERS OF MODERN STRATEGY 65-97 (PARET ed. 1986). Guerlac writes that, "the enlightened monarchies of the eighteenth
century tried to spare their civilian populations, both for humane reasons, and as potential sources of revenue. Id. at 93.

24 See PROCTOR PATTERSON JONES, NAPOLEON: AN INTIMATE ACCOUNT OF THE YEARS OF SUPREMACY 1800-1814, 257 (1992). Moreover, Napoleon saw himself as creating a center in Paris for revolutionary monuments to civilization rather than merely seeking French glory and enrichment. Id.


26 (1813) Stewarts Vice-Admiralty Reports, 482.

27 Id.


29 Lieber Code, supra note 7, at 148.

30 Id.

31 Id. at 151.

32 Id. at 150.

33 There are a number of outstanding sources on the subject of industrial revolution, technology developments, and war. Several of these sources are listed below, but by no means is this a complete list. See JOHN KEEGAN, THE SECOND WORLD WAR 14-15 (1989); THEODORE ROPP, WAR IN THE MODERN WORLD (1962); MARTIN VAN CREVALD, TECHNOLOGY AND WAR: FROM 2000 B.C. TO THE PRESENT (1989); MARTIN VAN CREVALD SUPPLYING WAR: LOGISTICS FROM WALLENSTEIN TO PATTON (1977); WALTER MILLIS, ARMS AND MEN: A STUDY IN AMERICAN MILITARY HISTORY (1956); RUSSELL F. WEIGLEY, THE AMERICAN WAY OF WAR: A HISTORY OF THE UNITED STATES MILITARY STRATEGY AND POLICY (1984); and, WILLIAM MCELWEE, THE ART OF WAR: WATERLOO TO MONS (1975).

34 Convention with Certain Powers Respecting the Laws and Customs of War on Land, July 29, 1899, 32 Stat. 1803 (1903), T.S. No. 403. [hereinafter 1899 Convention].

35 Convention with Other Powers Respecting the Laws and Customs of War on Land, Oct 18, 1907, 36 Stat. 2277, T.S. No. 539.

36 For example, read Article 43 of the 1899 Convention. 1899 Convention, supra note 34.

37 See 1899 Convention, supra note 34.

38 Article 56 states that, "[a]ll seizure of, and destruction, or intentional damage done to such institutions, to historical monuments, works of art or science, is prohibited, and should be made the subject of proceedings." Id.

39 Article 27 reads:
In sieges and bombardments, all necessary steps should be taken to spare, as far as possible edifices devoted to religion, art, science, and charity, hospitals, and places where the sick and wounded are collected, provided these are not used at the same time for military purposes. The besieged should indicate these buildings or places by some particular and visible signs, which should previously be notified to the assailants.

Id.

40 Fighting occurred in areas ranging from the "Cradle of Civilization" (Basra - 1915, Kut el Amara -1915-1916, and Baghdad 1917); Palestine, including the capture of Jerusalem which the Turks evacuated intact to spare any damage the that city in 1917 and the Sinai (1915-1917); France (including the shelling of Paris 1914-1918), Macedonia (Salonika 1916-1918), Turkey (Gallipoli), Britain (London bombed by the German Air Force in 1916-1918); China and the Pacific; Belgium; and throughout central and eastern Europe. This is by no means a complete list, but a general scope of events. See generally James Stokesbury, WORLD WAR I (1984).

41 Treaty of Versailles, June 28, 1919, art. 245, reprinted in, 2 Bevans 43; 3 Malloy 3229. Article 245 states that:

within six months after coming into force, of the present Treaty, the German Government must restore to the French Government the trophies, archives, historical souvenirs, or works of art carried away from France by the German authorities in the course of the war of 1870-1871, and during this last war, in accordance with a list which will be communicated to it by the French Government.

Id.


43 See Coenca Brothers v. Germany (1927), in ANNUAL DIGEST OF PUBLIC INTERNATIONAL LAW CASES 570-72 (McNair and Lauterpacht, eds. London 1931). Coenca Brothers, was a mixed German and Greek tribunal which adjudicated a claim against Germany for damages stemming from the German aerial bombing of Salonica, Greece during the war. The plaintiffs prevailed as a result of the German commander failing to provide proper warning in accordance with article 26 of the Annex to the 1907 Hague Convention. Additionally, at the time of the bombing, Greece was a neutral country in that it was occupied by allied troops, but was not an active participant in the war until a later date.


46 Hays Parks, supra note 28, at 35.

47 Id.

48 There are a number of sources on this topic. The most salient are: David Maclsaac, Voices from the Central Blue. The Air Power Theorists, in MAKERS OF MODERN STRATEGY 624-647 (Paret ed. 1986); Viscount Hugh Trenchard, Aipower and National Security, in THE IMPACT OF AIRPOWER 211 (Emme. ed 1956); Edward Warner, Douhet, Mitchell, de Seversky: Theories of Air Warfare, in MAKERS OF MODERN STRATEGY 485-503 (Eadie ed. 1943); ROBIN HIGHAM, ARMED FORCES

49 In contravention of the Hague Convention, Hitler's Germany amassed the largest collection of European treasures since Napoleon. According to the Nuremberg indictment, Germany's plunder was a destructive as it was confiscatory; over 500 museums were decimated, including major repositories in Leningrad and Stalingrad. Over 21,000 items of arts paintings, furniture, textiles, and similar valuable antiquities were taken. In order to restore artifacts and artwork to the rightful owner, the United States created, a State Department agency, The Commission for the Protection and Salvaging of Artistic and Historic Monuments in Europe. German disregard for cultural monuments led the Soviet Union to evacuate mass numbers of books and artifacts from historic centers and museums. The Leningrad Library alone shipped off over 300,000 of its priceless collection and many of the art museums placed their collections in deep basements for the duration of the war. German behavior can be contrasted with allied leadership which made, in comparison, diligent efforts to preserve ancient treasures. For example, prior to Lt. General Bernard Law Montgomery's 8th Army 1942 El Alamein offensive, the renowned archaeologist Sir Leonard Wooley was consulted in an effort to preserve the existence of known archaeological monuments in North Africa. See LYNN H. NICHOLAS, THE RAPE OF EUROPE 215 (1994). Moreover, in 1943, the United Nations issued a declaration calling invalid all forced transfers of art and other properties in enemy controlled territory. Id. Finally, the decision to exclude Kyoto as an atom bomb target occurred because of that city's important place in Japanese history. See Air Force Pamphlet 110-34, Commanders Handbook on the Law of Armed Conflict (July 25, 1980). [hereinafter AFP 110-34] Perhaps the best example of Allied doctrine is General Order 65, December 29, 1943, circulated by General Dwight D. Eisenhower, Supreme Commander Headquarters Allied Expeditionary Forces (SHAEF) regarding the protection of historic monuments during the Italian campaign:

Today we are fighting in a country which has contributed a great deal to our cultural inheritance, a country rich in monuments which by their creation helped and now in their age illustrate the growth of civilization which is ours. We are bound to respect these monuments so far as war allows. If we have to choose between destroying a famous building and sacrificing our own men, then our men's lives count infinitely more and the buildings must go. But the choice is not always as clear-cut as that. In many cases, the monuments can be spared without any detriment to operational needs. Nothing can stand against the argument of military necessity. But the phrase, "military necessity" is sometimes used where it would be more truthful to speak of military convenience or even personal convenience. I do not want cloak slackness or indifference.

10 DIGEST OF INTERNATIONAL LAW, 438 (MAJORIE M. WHITEMAN ED. 1968). See also Hays Parks, supra note 28, at 61.

50 In March 1944, Lt. General Mark Clark's Fifth Us Army and the British Eighth Army under the command of Lt. General Oliver Leese (with Field Marshal Harold Alexander in overall command) were fighting a ponderous campaign up the Italian Peninsula. Leese, Alexander, Clark, and the ANZAC commander Bernard Freyberg believed that the medieval monastery was being used as an observation post. However, only after allied aircraft bombarded the monastery did the Wehrmacht occupy it. Their occupation forced the campaign to an eventual standstill costing greater numbers of lives and equipment, and creating a veritable propaganda source for the Germans to use on both their own population, but also to win back Italian support for the war. See M. BLUMENSON, U.S. ARMY IN WORLD WAR II, SALERNO TO CASINO 395-418 (1969). See also III THE ARMY AIR FORCES IN WORLD WAR II, EUROPE - ARGUMENT TO V-E DAY, 362-364 (W. Craven & J. Cate, eds. 1951). Finally, the United States Army pays particular attention to this episode. See DEPT. OF THE ARMY PAM 27-50-127 (1983).


53 Parties to the 1954 Hague Convention include: Albania, Australia, Austria, Belgium, Brazil, Bulgaria, Burkina-Faso, Burma, Cameroon, Cyprus, Cuba, Dominican Republic, Ecuador, Egypt, France, Gabon, Germany, Ghana, Greece, Guatemala, Guinea, Holy See, Hunger, India, Indonesia, Iran, Iraq, Israel, Italy, Ivory Coast, Jordan, Kampuchea, Kuwait, Lebanon, Libya, Liechtenstein, Luxembourg, Madagascar, Malaysia, Mali, Mexico, Monaco, Mongolia, Morocco, Netherlands, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Panama, Poland, Qatar, Rumania, Russia, Saudi Arabia, San Marino, Senegal, Spain, Sudan, Sweden, Switzerland, Syria, Tanzania, Thailand, Tunisia, Turkey, Yemen, and Zaire.

54 Indeed, the United States and the other nuclear powers had concerns with the convention because of its impossibility to enforce during a nuclear exchange. In January 1954, in one of the seminal speeches of the nuclear age, U.S. Secretary of State, John Foster Dulles announced that "the United States intended in the future to deter aggression by depending primarily on a great capacity to retaliate, instantly, by means and at places of our own choosing." John Foster Dulles, The Evolution of Foreign Policy, 30 DEPARTMENT OF STATE BULLETIN, Jan 25, 1954. Dulles' statement evolved into what became known as the doctrine of massive retaliation. Lawrence Freidman, The First Two Generations of Nuclear Strategists, in MAKERS OF MODERN STRATEGY 740 (Paret ed. 1986).

55 Hague Convention, supra note 1, at 240. The Convention states that its originators were "[g]uided by the principles concerning the protection of cultural property during armed conflict, as established in the Conventions of The Hague of 1899 and 1907 and the Washington Pact of 15 April 1935." Id.

56 Convention with Other Powers Respecting the Laws and Customs of War on Land, Oct 18, 1907, 36 Stat. 2277, art. 56, T.S. No. 539.

57 Id.

58 Cultural Property is defined as including both moveable and immovable property, but also buildings containing moveable property and centers containing concentrations of monuments. 1954 Hague Convention, supra note 1, art. 1, 249 U.N.T.S. at 242.


60 1954 Hague Convention, supra note 1, art. 16, 249 U.N.T.S. at 244.

61 Regulations for the Execution of the 1954 Hague Convention, supra note 1, art 12, 249 U.N.T.S. at 276.

62 1954 Hague Convention, supra note 1, art. 12, 249 U.N.T.S. at 276.

63 See FRITz KALSHOVEN, CONSTRAINTS ON THE WAGING OF WAR 38 (1987); Nahlik, supra note 22, at 1087.

64 1954 Hague Convention, supra note 1, art. 3, 249 U.N.T.S. at 244. This is a continuation of the philosophy encompassed in article 27 of the 1899 Hague Convention. See Convention with Certain Powers Respecting the Laws and Customs of War on Land, July 29, 1899, supra note 20, at art. 27.
65 1954 Hague Convention, supra note 1, art. 4, 249 U.N.T.S. at 244.

66 Id. Article 4 states, "contracting parties shall refrain from any use of the property and its immediate surroundings, or of the appliances in use for its protection for purposes which are likely to expose it to destruction or damage in the event or armed conflict." Id.

67 Id. Article 4(4) states "[parties] shall refrain from any act directed by way of reprisals against cultural property." Id.

68 Id. Article 4(5) states "[no...] party may evade the obligations incumbent upon it under the present Article, in respect of another ... party by reason of the fact that the latter has not applied the measures of safeguard referred to in Art 3." Id.

69 Id.

70 Id.

71 Id.


73 Id.

74 1954 Hague Convention, supra note 1, art. 7, at 246.

75 Id.

76 Id. at art. 8.

77 Id.

78 Id.

79 Id. See also Hays Parks, supra note 28, at 62. Professor Parks correctly asserts that "responsibility for the protection of objects in the main lay with the defender, not with the attacker, in that it is recognized that the former had the greatest control over the persons or objects for whom the protection was sought." Id.

80 1954 Hague Convention, supra note 1, art. 11, at 246.

81 Id.

82 Id.

83 Id. at art. 12, at 250.

84 Id., at art. 13. .

85 Id. at art. 14, at 252.

87 DECLARATION REGARDING THE FORCED TRANSFER OF PROPERTY IN ENEMY CONTROLLED TERRITORY, DEPARTMENT OF STATE BULLETIN, 21-22 (1949).

88 Penna, supra note 25, at 267.


90 Id.

91 1954 Hague Convention, supra note 1, art. 15, at 252.


93 Article 17 states:

USE OF THE EMBLEM

1. The distinctive emblem repeated three times may be used only as a means of identification of:

   (a) immovable cultural property under special protection;
   (b) the transport of cultural property under the conditions provided for in Articles 12 and 13;
   (c) improvised refuges provided for in the Regulations in the execution of the Convention.

2. The distinctive emblem may be used alone only as a means of identification of:

   (a) cultural property not under special protection
   (b) the persons responsible for the duties of control in accordance with the Regulations for the Execution of the Convention
   (c) the personnel engaged in the protection of cultural property;
   (d) the identity cards mentioned in the Regulations for the Execution of the Convention.

3. During an armed conflict, the use of the distinctive emblem in other cases than those mentioned in the preceding paragraphs of the present Article, and the use for any purpose whatever of a sign resembling the distinctive emblem, shall be forbidden.

4. The distinctive emblem may not be placed on any immovable cultural property unless at the same time there is displayed an authorization duly dated and signed by the competent authority of the High Contracting Party.

Id.

95 Acts of perfidy are defined as exceptions designed to invite the confidence of the enemy to lead him to believe that he is entitled to, or is obliged to accord, protected status under the law of armed conflict, with the intent to betray that confidence. Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protections of Victims of International Armed Conflicts, June 8, 1977, art. 37(l), 1125 U.N.T.S. 3. Again, this philosophy is first codified in the 1899 Hague, article 34 which states that: The envoy loses his rights of inviolability if it is proved beyond doubt that he has taken advantage of his privileged position to provoke or commit an act of treachery. See 1899 Convention, supra note 35, at art. 34.


97 See, e.g. Case Concerning The Temple at Preah Vihear (Cambodia v. Thailand), 1962 I.C.J. 6 (June 15).
98 The likelihood of the Thai Government pursuing an action against the loyalist government was unlikely. The Khmer Rouge was regarded as a universal enemy by both the loyalists and the Thai government.


100 See Michael Carver, Conventional Warfare in the Nuclear Age, in MAKERS of MODERN STRATEGY 789 (Paret ed. 1986).

101 The Jome Mosque in the city of Isathan was attacked by Iraqi forces. Inside the city were a number of ancient monuments, again, not listed on the Register. See Balkin, supra note 86, at 247.

102 The 1972 World Heritage Convention created an inventory to include, "documentation about the location of property in question and it's significance" Convention Concerning Protection of World Cultural Property and Natural Heritage Nov. 23, 1972 U.S.T. 40 (hereafter, 1972 World Heritage Convention). See also Meyer, supra note 71, at 365-66.


104 DoD Report, supra note 2, app. O at 3. The report states that, "Since U.S. military doctrine is prepared consistent with US law of war obligations and policies, the provisions of the 1954 Convention did not have any significant adverse effect on planning or executing military operations. Id.


Without prejudice to the provisions of the Hague Convention for the Protection of Cultural Property in the Event of Armed Conflict of 14 May 1954; and of other relevant international instruments, it is prohibited:

a. to commit any acts of hostility directed against the historic monments, works of art or places of worship which constitute cultural or spiritual heritage of peoples;

b. to use such objects in support of the military efforts;

c. to make such objects the object of reprisals.

Id.


109 Hays-Parks, supra note 24, at 62.

110 Id.

111 Id. Professor Hays Parks writes that the traditional burden placed on the defender "was abandoned in the Additional Protocols and the burden essentially shifted to the attacker despite clear evidence that many nations in the intervening years regularly used hospitals, cultural objects, civilian objects, and civilian population to shield lawful targets from attack." Id.
Additional Protocol, supra note 2, at art. 52, at 52. Article 52 reads in pertinent part that legitimate targets are "limited to those objects which by their nature, location, purpose, or use make an effective contribution to military action and whose total or partial destruction, capture, or neutralization, in the circumstances ruling at the time, offers a definite military advantage." [emphasis added] Id. Article 52 further reads that, in case of doubt, "a place of worship, a house, or other dwelling, or a school ... shall be presumed not to be so used." Id. As W Hays Parks correctly asserts, this presumption is tailor made for the defender. Hays Parks, supra note 28, at 136.

See DoD Report, supra note 3, app. O, at 3. During the Vietnam conflict as well, the North armed the temple of Ankor Wat.


DODD, supra note 114, at paras. D.1 & E.1.a(3).

See AFPD 51-4, Compliance with the Law of Armed Conflict (26 April 1993), at para 1.5.1.

See AFP 110-34, Commander's Handbook on the Law of Armed Conflict. (25 July 1980) at para 1.5.1. (AFP 110-34 to become AR 51-709).

Id.

Id.

Id.

Id.

Id.

Id. at 3.

Id. at 8. AFP 110-34, ch. 3-8(a), states:

No definite rule can be applied to determine if the civilian casualties that might result from the attack are excessive. The commander in each case, must make an honest and reasonable decision, based on all the facts known at the time, as to whether the military advantage from a particular attack is worth the expected civilian casualties. He must make this decision even if the enemy has deliberately used civilians to shield military objectives.

[emphasis added].

Id.

AFP 110-34, ch. 3-8(d) applies ch. 3-8(a) to objects and states:

A similar reasoning process should be used to decide whether excessive damage to these persons or objects would be caused by a particular attack, and whether some alternative form of attack would lessen collateral damage and casualties.

Id.

126 Id.
APPENDIX 1

HAGUE SYMBOL

APPENDIX 2

ROERICH PACT SYMBOL

SUGGESTED CARD
Front of Card

<table>
<thead>
<tr>
<th>Identity Card for personnel engaged in the protection of cultural property</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surname</td>
</tr>
<tr>
<td>First names</td>
</tr>
<tr>
<td>Date of Birth</td>
</tr>
<tr>
<td>Title or Rank</td>
</tr>
<tr>
<td>Function</td>
</tr>
</tbody>
</table>

is the bearer of this card under the terms of the Convention of The Hague, dated 14 May 1954, for the Protection of Cultural Property in the event of Armed Conflict.

<table>
<thead>
<tr>
<th>Date of issue</th>
<th>Number of Card</th>
</tr>
</thead>
</table>
Reverse Side of Card

Signature of bearer or fingerprints or both

Embossed stamp
of authority issuing card

Height

Eyes

Hair

Other distinguishing marks


YES, please send ______ subscriptions to:

Air Force Law Review (JLR) at $12 each year.
The total cost of my order is $_______.
Price includes regular shipping & handling and is subject to change. Add 25% for foreign.

Charge your order. It's easy!

Attention line (Please type or print)

Company name Room, floor, suite

Street address

City State Zip code+4

Daytime phone including area code

Purchase order number (optional)

For privacy protection, check the box below:

☐ Do not make my name available to other mailers

Check method of payment:

☐ Check payable to: Superintendent of Documents

☐ GPO Deposit Account

☐ VISA ☐ MasterCard ☐ Discover

Expiration date____/____/____

Thank you for your order!

Mail to: Superintendent of Documents
PO Box 371954, Pittsburgh PA 15250-7954

Important: Please include this completed order form with your remittance.
INFORMATION FOR CONTRIBUTORS

The Air Force Law Review publishes articles, notes, comments, and book reviews. The Editorial Board encourages readers to submit manuscripts on any area of law or legal practice that may be of interest to judge advocates and military lawyers. Because the Review is the publication of The Judge Advocate General's Department, USAF, Air Force judge advocates and civilian attorneys are particularly encouraged to contribute. Authors are invited to contact the Editor to discuss their ideas and proposed topics. The Review does not pay authors any compensation for items selected for publication.

Manuscript Review. The Editorial Board reviews all manuscripts to determine suitability for publication in light of space and editorial limitations. Manuscripts selected for publication undergo an editorial and technical review, as well as a policy and security clearance as required. The Editor will make necessary revisions or deletions without prior permission of or coordination with the author. Authors are responsible for the accuracy of all material submitted, including citations and other references. The Review generally does not publish material committed for publication in other journals. In lieu of reprints, authors are provided four copies of the issue containing their work.

Manuscript Form. Submit manuscripts on disks formatted in Microsoft Word word-processing format. One copy of the manuscript on letter-size paper is also required in addition to the disk. Authors need to retain at least one copy of their manuscript along with backup disks. Footnotes must follow the format prescribed by A UNIFORM SYSTEM OF CITATION (16th ed. 1996). Include appropriate biographical data concerning the author(s), such as rank, position, duty assignment, educational background, and bar affiliations. The Editorial Board will consider manuscripts of any length, but most articles selected for publication are generally 60 pages of text or less, and notes or comments are generally 20 pages of text or less. The Review will return unpublished manuscripts only upon request.