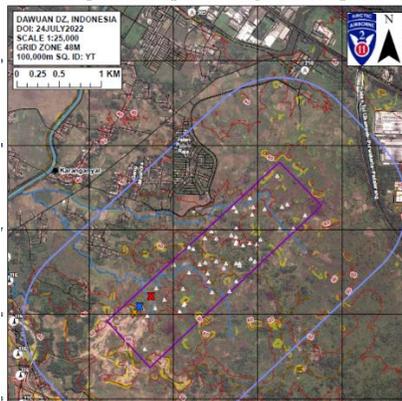


UNITED STATES AIR FORCE
GROUND ACCIDENT INVESTIGATION
BOARD REPORT



3d Air Support Operations Squadron
354th Fighter Wing
Eielson Air Force Base, Alaska



TYPE OF ACCIDENT: DROP ZONE SURVEY FATALITY
LOCATION: DAWUAN VILLAGE, BANDUNG, INDONESIA
DATE OF ACCIDENT: 22 APRIL 2024
BOARD PRESIDENT: COL JEFFREY RIVERS, USAF

Conducted IAW Air Force Instruction 51-307

**EXECUTIVE SUMMARY
UNITED STATES AIR FORCE
GROUND ACCIDENT INVESTIGATION**

**DROP ZONE SURVEY FATALITY
DAWUAN VILLAGE, BANDUNG, INDONESIA
22 APRIL 2024**

On 22 April 2024, Mishap Airman (MA), a major assigned to the 3d Air Support Operations Squadron (3 ASOS), Fort Wainwright, Alaska (AK) led a drop zone (DZ) survey team to assess the viability of a proposed DZ in the vicinity of Bandung, Indonesia in support of exercise Super Garuda Shield. The Indonesian Armed Forces (TNI) proposed one DZ with no other usable alternatives identified by the participating unit, the 11th Airborne Division (11ABN). The proposed DZ did not have a current survey assessment to account for DZ hazards and operational risk mitigation (ORM). To meet US requirements, MA, Survey Team 1 (ST1) a U.S Army staff sergeant, and Survey Team 2 (ST2) a U.S. Army major traveled to Indonesia to complete an official DZ survey of the proposed area on the afternoon of 22 April 2024.

The survey was executed on foot starting at a grouping of isolated buildings at 1100 hours local time (L) and continued until approximately 1330 hours L when ST1 and ST2 determined MA was missing. At the start of the survey, MA and ST1 were accompanied by ST2, Survey Team 3 (ST3), a U.S. Marines Gunnery Sergeant, two Japanese Defense force personnel, and a small group of local TNI members. The contingent walked from the northwestern to northeastern boundaries before it split up into two groups at approximately 1230 hours L. One group returned to the starting point buildings to establish a rally point (RP), and the other group, consisting of MA, ST1, one of the Japanese members, and a subset of the Indonesian members, walked southwest to survey the remainder of the proposed DZ. 150-200 meters into the walk, MA and ST1 decided to split up to cover more area, where MA would proceed alone walking along the eastern boundary of the DZ.

At approximately 1315 hours L, ST1 and ST2 received a cell phone text from MA claiming to be “dangerously tired” and directing ST1 to return to the RP where MA would meet up with the rest of the contingent. After approximately an hour and a half of no contact and a small-scale search, ST2 called the United States (US) Embassy in Jakarta to provide notification that MA was missing, and higher-level support was required for search and rescue. Utilizing local and US cellular carrier positional data of MA’s phone and an Embassy assembled PACOM Augmentation Team (PAT) search party, MA was discovered lying under a small tree near the eastern edge of the DZ at approximately 0040 hours L on 23 April 2024. MA was determined deceased by the medical personnel on scene. An autopsy later determined the cause of his death to be exertional heat injury with acute renal insufficiency.

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ACRONYMS AND ABBREVIATIONS

3 ASOS	3d Air Support Operations Squadron	ISR	Intelligence, Surveillance, and Reconnaissance
11ABN	11th Airborne Division	JBER	Joint Base Elmendorf-Richardson
ABN	Airborne	JBPHH	Joint Base Pearl Harbor-Hickam
AFB	Air Force Base	K	Thousand
AFI	Air Force Instruction	L	Local time
AFIP	Air Force Institute of Pathology	Lt Col	Lieutenant Colonel
AFPAM	Air Force Pamphlet	LZ	Landing Zone
AFTTP	Air Force Tactics, Techniques, and Procedures	MA	Mishap Airman
AFSC	Air Force Specialty Code	MAF	Mobility Air Force
AK	Alaska	MAJ	Army Major
AMLO	Air Mobility Liaison Officer	Maj	Air Force Major
ASOS	Air Support Operations Squadron	MAJCOM	Major Command
ASOG	Air Support Operations Group	MOS	Military Occupational Specialty
AT&T	American Telephone & Telegraph	mph	miles per hour
CALFEX	Combined Arms Live Fire Exercise	MSL	Mean Sea Level
CC	Commander	NAF	Numbered Air Force
Col	Colonel	NCOIC	Non-Commissioned Officer in Charge
DA	Defense Attache	ODC	Office of Defense Cooperation
DAFI	Department of the Air Force Instruction	OG	Operations Group
DAFMAN	Department of the Air Force Manual	Ops Tempo	Operations Tempo
DAO	Defense Attache Office	ORM	Operational Risk Management
DPAA	Defense POW/MIA Accounting Agency	OSI	Office of Special Investigations
DoD	Department of Defense	oz	Ounce
DZ	Drop Zone	PA	Public Affairs
F	Fahrenheit	PACAF	Pacific Air Forces
FAM	Functional Area Manager	PAT	PACOM Augmentation Team
FP	Force Protection	PRWG	Personnel Recovery Working Group
FPD	Force Protection Division	PHA	Physical Health Assessment
ft	feet	RP	Rally point
FW	Fighter Wing	RSO	Regional Security Office
GAIB	Ground Accident Investigation Board	RT	Rescue Team
GFC	ground force commander	SAR	Search and Rescue
HQ	Headquarters	SFC	Sergeant First Class
IAW	In accordance with	SME	Subject Matter Expert
INDOPACOM	Indo-Pacific Command	SOC PAC	Special Operations Command Pacific
		SSG	Army Staff Sergeant
		ST	Survey Team
		TNI	Indonesia Armed Forces

TSgt
US

Technical Sergeant
United States

USAF
UTC

United States Air Force
Unit Type Code

SUMMARY OF FACTS

1. AUTHORITY AND PURPOSE

a. Authority

On 6 June 2024, Lieutenant General Laura L. Lenderman, Deputy Commander, Pacific Air Forces (PACAF), appointed Colonel Jeffrey J. Rivers as Board President of a Ground Accident Investigation Board (GAIB) to investigate a Drop Zone (DZ) survey mishap that occurred near Dawuan Village, Bandung, Indonesia on 22 April 2024 (Tab Y-3). The GAIB conducted its investigation at Joint Base Elmendorf-Richardson (JBER), Alaska (AK) in accordance with (IAW) Air Force Instruction (AFI) 51-307, *Aerospace and Ground Accident Investigations* (Tab Y-3). Additional members of the GAIB include a Legal Advisor (Major) and a Recorder (Technical Sergeant) (Tab Y-3). One medical member (Lieutenant Colonel) and one Air Mobility Liaison Officer (AMLO) (Lieutenant Colonel) were appointed as Subject Matter Experts (SME) to advise and assist the Board. (Tab Y-8)

b. Purpose

In accordance with AFI 51-307, *Aerospace and Ground Accident Investigations*, this accident investigation board conducted a legal investigation to inquire into all the facts and circumstances surrounding this Air Force ground accident, prepare a publicly releasable report, and obtain and preserve all available evidence for use in litigation, claims, disciplinary action, and adverse administrative action.

2. ACCIDENT SUMMARY

On 22 April 2024, Mishap Airman (MA), a major assigned to the 3d Air Support Operations Squadron (3 ASOS), Fort Wainwright, Alaska (AK) led a drop zone (DZ) survey team to assess the viability of an Indonesian Armed Forces (TNI) proposed DZ in the vicinity of Bandung, Indonesia in support of exercise Super Garuda Shield, scheduled for 26 August - 6 September 2024 (Tab K-7, R-9 to R-11).

As the proposed DZ did not have a current survey assessment, to meet United States (US) requirements, MA and a Survey Team (ST) were assigned to review the proposed DZ and conduct an official assessment.

MA, Survey Team 1 (ST1), a U.S. Army staff sergeant, and Survey Team 2 (ST2), a U.S. Army major, arrived in Jakarta, Indonesia, on 20 April 2024 (Tab R-15, R-111). The following Monday, the survey was executed on foot starting at 1000 hours local time (L) and continued until approximately 1400 hours L when ST1 and ST2 realized they had not made positive contact with MA for some time (Tab V-3.7, R-50 to R-55, R-1-1, and R-114 to R-116). The weather on 22 April was clear with an average temperature of 90° Fahrenheit (F) with 60% humidity (Tab F-5 to F-6). The contingent walked from the northwestern to northeastern boundaries before it split up into two groups at approximately 1230 hours L (Tab V-1.14 to V-1.15). 150-200 meters into the

walk, MA and ST1 decided to split up to cover more area. Shortly thereafter, while on a hill, ST1 saw MA for the last time near a tree (Tab R-63).

At approximately 1315 hours L, ST1 and ST2 received a cell phone text from MA claiming to be “dangerously tired” and directed ST1 to return to the rally point (RP) where MA would meet up with the rest of the contingent (Tab R-64 to R-65). After a small-scale search that resulted in no contact with MA, ST2 called the US Embassy in Jakarta to provide notification that MA was missing and that higher-level support was required for search and rescue (Tab R-118 to R-119, and R-150). Utilizing local and US cellular carrier positional data of MA’s phone, MA was located. MA was discovered lying under a small tree near the eastern edge of the DZ at approximately 0040 hours L on 23 April 2024 (Tab R-104, R-155, and R-157).

MA was determined deceased by medical personnel on scene (Tab R-104).

3. BACKGROUND

a. Pacific Air Forces (PACAF)

PACAF's primary mission is to execute the National Defense Strategy and support the objectives of Indo-Pacific Command (INDOPACOM). PACAF must be agile, resilient, lethal, and revolutionary. As the Air Component, PACAF will integrate joint force air, space, and cyberspace capabilities to safeguard a free and open Indo-Pacific (Tab DD-3). PACAF, in coordination with other components, allies, and partners, provides INDOPACOM with continuous unrivaled air, space, and cyberspace capabilities to ensure regional stability and security. The command's vision is to provide an agile, accurately postured, undeterred, and lethal force capable of dedicating peerless effects from cooperation to conflict (Tab DD-3).



b. 354th Fighter Wing (354 FW)

The 354th FW is a unit at Eielson Air Force Base, AK (Tab DD-7). The 354th Fighter Wing’s mission is to deliver lethal airpower to Combatant Commanders in defense of National Military objectives (Tab DD-7). Uniquely postured in the Arctic, the 354 FW not only provides strategic airpower projection but also an ability to rapidly respond in a time of crisis (Tab DD-7). The Wing’s vision is to provide a team of professionals committed to embodying our legacy of Valor in Combat (Tab DD-7).



c. 3rd Air Support Operations Squadron (3 ASOS)

The 3 ASOS delivers on-call command and control and integrated fires to the joint force across INDOPACOM through Arctic, Air Assault, and Airborne expertise (Tab DD-9). The squadron’s vision is seamless joint force integration from pole to pole (Tab DD-9).



d. Air Mobility Liaison Officer (AMLO)

The AMLO mission spans strategic, operational, and tactical levels of war as determined by the ground force commander (GFC) intent and level of alignment (Tab BB-12). This mission set is designed to cover the full spectrum of military operations while meeting the mission essential tasks of the AMLO force: user education, air mobility coordination, and landing/drop zone operations (Tab BB-12). Operational level responsibilities flow from strategic plans into more detailed operational analysis (Tab BB-12). Tactical level responsibilities include guiding the aligned unit through the forward deployment process, assisting where necessary to enable follow-on air mobility requirements, and posturing to maintain awareness of possible issues throughout the forward area (Tab BB-12). The AMLO is uniquely trained to support DZ and landing zone (LZ) operations directly or as a force multiplier by training others IAW AFI 13-217, *Drop Zone and Landing Zone Operations* (Tab BB-12).

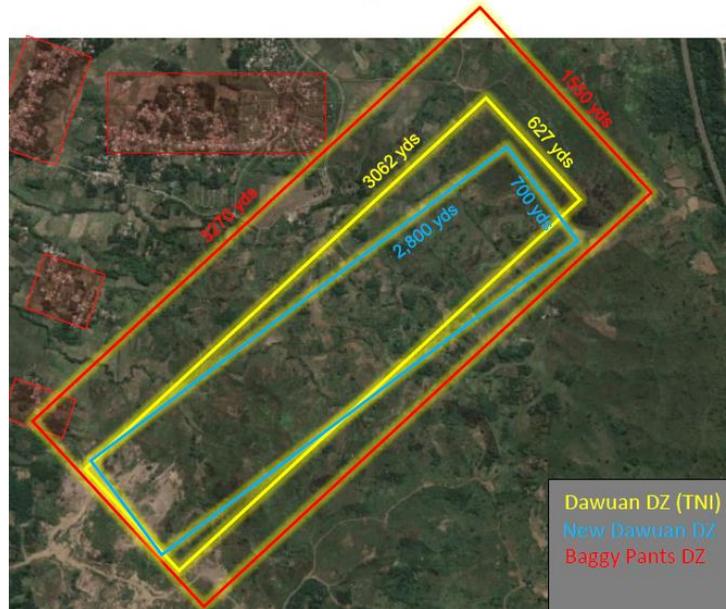
e. Exercise Super Garuda Shield

Super Garuda Shield is an annual multinational military exercise hosted by Indonesia and the United States, aimed at enhancing regional security and cooperation among Indo-Pacific nations (Tab EE-18 to EE-20). The exercise, which originally started as a bilateral engagement between the US and Indonesia in 2006, expanded in 2023 to include more than 4,000 service members from nations including Australia, Japan, Singapore, France, and the United Kingdom (Tab EE-18 and EE-24).

f. Dawuan Drop Zone (DZ) (also known as Baggy Pants DZ)

Dawuan DZ is an unapproved rectangular DZ in Jawa Barat, Western Indonesia (Tab EE-10 to EE-11). Dawuan DZ is 3063 yards long and 628 yards wide; its proposed boundaries are within the boundaries of the larger Baggy Pants DZ, a formerly approved DZ (Tab EE-3 to EE-5, Z-38). Numerous small buildings and structures were noted in the southern half of the DZ, and 40 feet (ft) to 60 ft trees were located along the northern and western edges of Baggy Pants DZ when it was last surveyed in March 2013 (Tab EE-3 to EE-5). When the survey team arrived at the DZ, they noted rolling terrain, rice paddies, overgrown vegetation, and large trees throughout the DZ area (Tab R-114). The United States Military conducted airdrop operations at Baggy Pants DZ between March 2013 and when the DZ was closed in March 2018 (Tab EE-3, R-129).

DZ Comparison



(Tab Z-38)

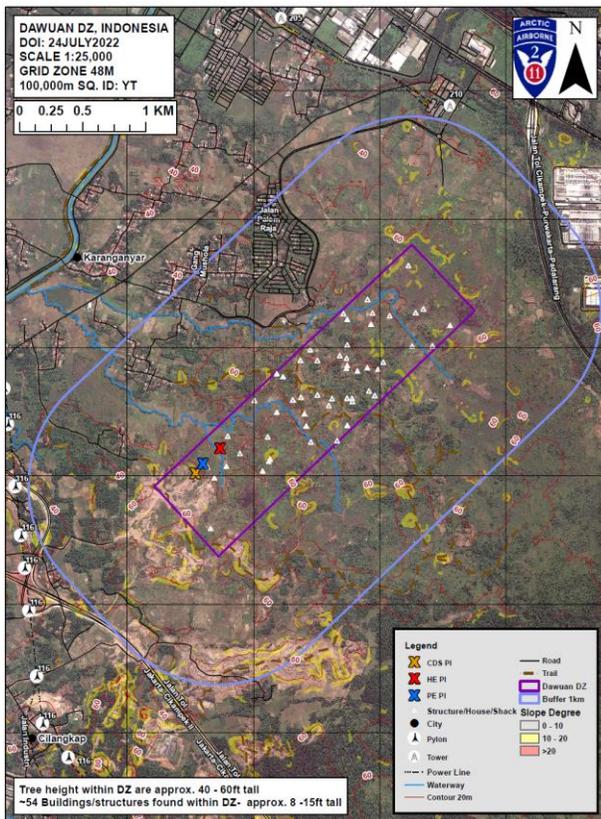
4. SEQUENCE OF EVENTS

a. Event Tasking and Pre-Mission Planning

The 11ABN Headquarters (HQ), JBER, AK was tasked to execute a survey of a proposed DZ designated as “Dawaun DZ” in support of exercise “Super Garuda Shield 24” scheduled for 26 August – 6 September 2024 (Tab K-7 and V-3.4). The drop zone survey results would inform 11ABN execution options at the exercise’s final planning conference in Indonesia for Super Garuda Shield 24 (Tab R-111, R-128, V-3.3 to V-3.5). The overall US Army exercise participation tasking assignment was routed from US Army Pacific (USARPAC) to I Corps to 11ABN HQ, which then assigned the 140th Cavalry Squadron, 2nd Brigade Combat Team, located at JBER, AK, to lead the Army’s unit-level planning and execution (Tab V-3.2 to V-3.4). 2nd Brigade tasked ST2 as the exercise lead participant planner (Tab V-3.4, V-3.11). The brigade planner assigned a team, including MA, to review initial planning conference materials, including the proposed DZ for survey supplied by the 11ABN planning division (Tab R-128 to R-129).

MA was an US Air Force (USAF) AMLO whose official duties included conducting DZ surveys in support of 11ABN mission activities involving USAF assets (Tab R-134). MA was not formally tasked by written order to the exercise planning and survey team for Dawuan DZ but was one of four surveyors attached to the 11ABN who may be informally tasked depending on operations tempo and competing requirements (Tab DD-16). MA was to review the viability of a current TNI DZ by documenting obstacles and hazards for US static-line parachute jump operations supported by USAF fixed wing assets (Tab DD-17, DD-21). ST4 was paired with MA in site survey planning as the Army-oriented jump operations expert to augment MA’s review (Tab R-133).

The Dawuan area DZ offered by the TNI was still in use by their military, however TNI parachute operations over the DZ are executed with freefall steerable parachutes not the T11 non-steerable static-line parachutes the participating US units would be required to use for exercise execution (Tab V-3.5). The TNI indicated the DZ was sufficient for US static-line operations since the 82nd ABN had utilized the same area for static-line drops in 2013 (Tab V-3.5). The survey used for the 82nd ABN’s 2013 operation exists in the Department of Defense’s (DoD) official “Talon Point” DZ survey database, but it expired in 2018 without update (Tab EE-3). The DZ that the 82nd ABN used in 2013 was known as “Baggy Pants”, which is what MA and ST4 utilized as a starting point to survey the area for an updated DZ for exercise Super Garuda Shield 24 (Tab V-4.4). Based on current imagery analysis and over ten years of non-use in US military operations, MA and ST4 were concerned about uncontrolled vegetation growth and an increased number of man-made structures that could be hazardous to present day jump operations (Tab V-4.4). Additionally, MA and ST4 received feedback from a participant of the 82nd ABN drops in 2013 who indicated the drops resulted in a significant number of injuries and challenging medical evacuations due to the terrain and hazards (Tab V-3.8, V-4.7). During planning, ST4 asked the TNI representatives if another DZ existed but the DZs they indicated available were invalid alternatives for static-line operations due to size or more hazardous site conditions (Tab V-4.5).



(Tab Z-33)



(Tab Z-4)



(Tab Z-5)



(Tab Z-7)

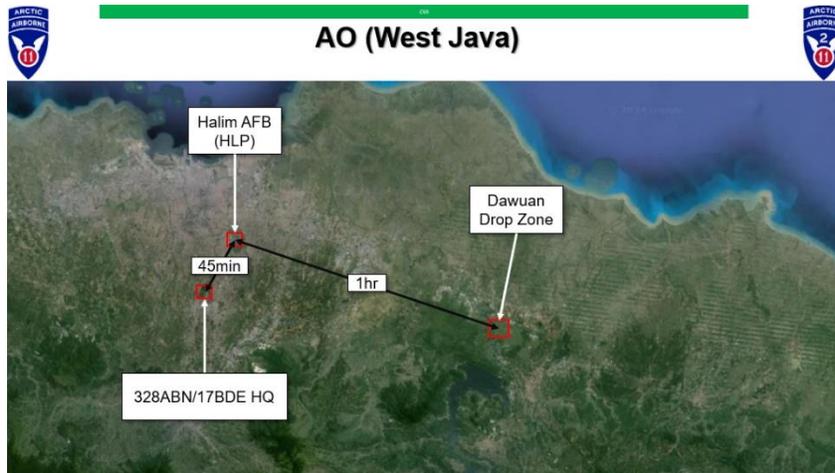
Via imagery analysis, MA and ST4 individually scoped out prospective areas that might be usable within the expired survey confines of “Baggy Pants” DZ, but from obstacle and hazard analysis their initial assessment concluded it was unusable due to unmitigable risk (Tab V-4.4, V-4.7, and V-4.8). To definitively assess the usability of the DZ and support the go-no-go decision for the final planning conference, the 11ABN planning team decided to send a qualified surveyor to the proposed DZ site for a formal survey (Tab V-4.6). MA was the assigned surveyor to support and was accompanied by ST1 as the Army surveyor (Tab V-1.3, V-4.2 to V-4.3). ST2 would travel with MA and ST1 as the overall 11ABN exercise project officer with a separate agenda and would have overlapping itineraries with MA and ST1 for arrival and DZ survey execution (Tab V-3.2 and V-3.11). The DZ survey team allotted two days to complete the survey (one primary and a backup day) and MA and ST1 would accompany ST2 to a TNI-proposed exercise support area known as “Camp 328” the morning of the DZ survey enroute to the survey site from their Jakarta-based hotel (Tab V-1.9, Tab R-41, and R-111). Up until the scheduled travel day, MA and ST2 had only met briefly at a planning event two weeks prior and ST1 had never met MA (Tab V-1.3 and 3.4). MA, ST1, and ST2 traveled uneventfully via the same flight itinerary, departing from Anchorage, AK on 18 April 2024 at 1000 hours L, laying over in Seattle, Washington, Doha, Qatar and arriving in Jakarta, Indonesia on Saturday, 20 April 2024 at approximately 0715 hours L (Tab R-111 and R-123). Because the DZ survey team arrived in country on Saturday, they assumed the Camp 328 visit and DV survey would be executed on Sunday, 21 Apr 2024, but were unable to accomplish the Camp 328 visit and DZ survey until Monday, 22 Apr 2024. (Tab R-16 to R-17, and R-149).

b. Pre-Drop Zone Survey Activities in Indonesia

After arriving at the airport in Jakarta, Indonesia, on the morning of Saturday, 20 April 2024, MA, ST1, and ST2 traveled by cab to the hotel in Jakarta (Tab R-15, R-111). After checking into the hotel, MA and ST1 had lunch at a restaurant inside the hotel named Fairmont at 1945, which serves local Indonesian food (Tab R-15 to R-16). The afternoon of 20 April 2024, MA, ST1, and ST2 learned they would not be able to conduct the DZ survey until the following Monday (Tab R-17). MA, ST1, and ST2 attended a force protection and planning briefing the afternoon of 20 April 2024 and spent the remainder of 20 April 2024 exploring the area near the hotel and having dinner at the on the concierge level of the hotel (Tab V-3.12, R-14 to R-18, R-24 to R-25). On Sunday, 21 April 2024, MA, ST1, and ST2 had breakfast in the hotel restaurant, MA and ST1 worked out at the gym and spent time at the hotel's outdoor pool during the day, then met with ST2 for lunch at a nearby sushi restaurant (Tab R-17 to R-18). After lunch, MA, ST1, and ST2, worried about the effects traveling could potentially have on their stomachs, went to a store and bought large bottles of water and Imodium, then went back to their rooms (Tab R-136). MA, ST1, and ST2 met with some Security Forces Assistance Brigade (SFAB) members for dinner at the hotel restaurant (Tabs R-24 to R-28, R-135). At dinner, MA and ST1 had approximately two beers and a mixed drink each between 1830 hours and 2030 hours L (Tab R-26 to R-31). After dinner, MA and ST1 went to the bar on the 22nd floor of the hotel where MA smoked a cigar and the two had approximately two mixed drinks each over the course of approximately two hours (Tab R-39).

c. Summary of Mishap

The US team, consisting of MA, ST1, ST2, and Survey Team 3 (ST3) a U.S. Marine Gunnery Sergeant, along with an interpreter and driver, departed the hotel on Monday morning at approximately 0700-0715 hours L (Tab R-40 to R-41, R-101, R-136). The day's agenda included a walkthrough of the western living support area, Camp 328, that troops would use for daily support operations and training, followed by a survey of the proposed Dawuan DZ (Tab R-111, V-1.9 to V-1.11). Travel from the hotel to Camp 328 took approximately 45 minutes and was uneventful (Tab R-124). The visit to Camp 328 was noted as non-strenuous and sheltered from the heat (Tab V-1.9). From Camp 328, the team traveled for approximately 1 hour and 45 minutes in an air conditioned, 12 passenger van to Dawuan DZ and arrived at approximately 1130 hours L (Tab R-45, R-55, and R-112). The trip from Camp 328 to Dawuan DZ was uneventful and MA drank from his personal Nalgene water bottle and ate protein snacks enroute (Tab R-55 to R-56).



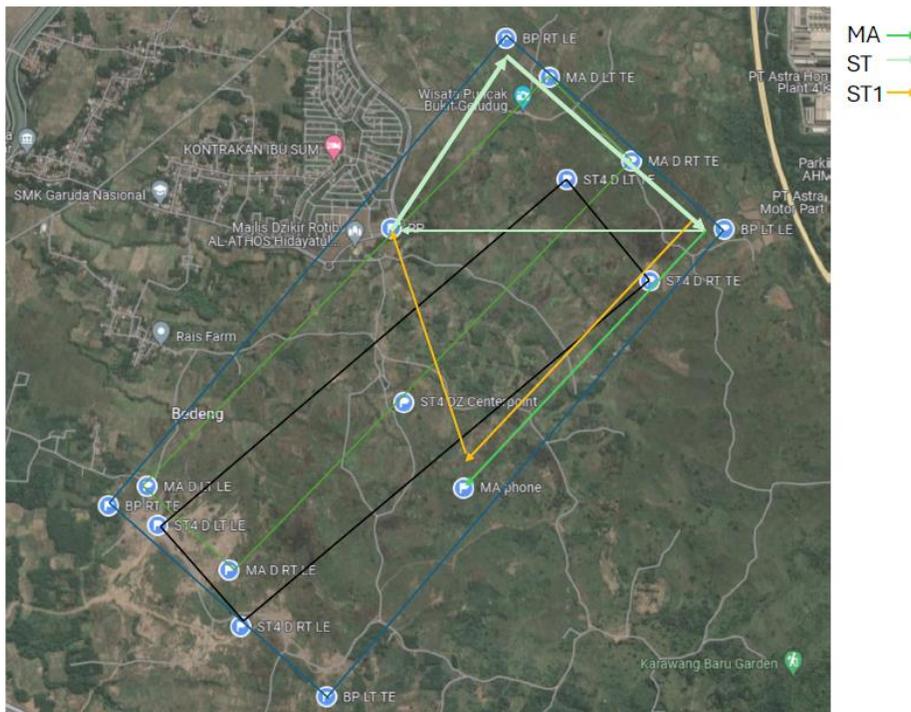
(Tab Z-30)

Upon arrival, MA, ST1, ST2, and ST3 were accompanied by an unknown sized group of TNI individuals and the two Japanese defense force members (hereinafter the survey team (ST)) (Tab V-3.7). The ST first stopped at a large, abandoned structure on the northwest side of the DZ that they intended to use as an easily identifiable feature for rally points and assembly following their jumps (Tab V-1.10, EE-5, Z-19). Next, the ST examined a small field on the same side of the DZ, which the TNI planned to use for the staging of requested medical evacuation rotary wing support for the jump operation (Tab V-1.11, EE-5). Following inspection of the field, the ST began moving on foot to the north end of the proposed DZ (Tab V-1.11, EE-5). Enroute, the team discussed major concerns and risks already identified in pre-mission planning (Tab V-1.14). After identifying the northwest corner, MA led the ST further down a main trail to identify the northeast corner and continued past the northeast corner for evaluation of potential DZ hazard mitigation recommendations (Tab V-1.13 to V-1.15).

The ST had a discussion led by MA to walk the eastern boundary of the proposed DZ, with the intention of walking from the northeast to the southeast corner to support MA and ST1 in identifying additional hazards and risks not seen during pre-survey imagery analysis (Tab V-1.14 to V-1.15). To this point, MA, ST1, and ST2 had reached an initial conclusion that the proposed DZ was unusable due to hazards, but decided to walk the entire DZ to ensure all relevant hazards were logged in support of a definitive decision to not use it for the exercise (Tab V-1.13). The ST identified the large, abandoned building identified earlier as its RP for after completion of the walk (Tab V-1.10).

Before departing to walk the DZ border, MA was seen with a compass, a Garmin Global Positioning System (GPS), and the Android Tactical Assault Kit cell phone application (Tab R-58). MA ensured the contract interpreter had full cell phone service and relevant contact information for WhatsApp and Signal applications to relay data and locations to accompanying TNI members for local support in case of emergency (Tab R-115). MA and ST1 verified they had reliable cell phone service with each other and would use that as their primary means of communication (Tab R-59). At that point, the ST split up into two groups at approximately 1200 hours L (Tab R-55 to R-56 and Tab V-1.12 to V-1.15). ST2, the Japanese officer, and a portion of the TNI members departed to establish the RP at the abandoned buildings (Tab R-57, R-114). MA, ST1, the Japanese non-commissioned officer, and the remaining TNI members began traversing the terrain from north to south, which consisted of undulating 50-ft hills, razor grass, brush, and

rice paddies (Tab R-57 to R-60). At this time, MA was seen with his 32 ounce (oz) Nalgene bottle half full of water and was not showing signs of fatigue or stress (Tab R-58, R-161, and S-13). As the group began walking, MA and ST1 separated by approximately 50 yards to cover more area towards the middle of the drop zone while walking from north to south (Tab R-57 to R-60, R-159, and Z-36). Approximately 150 to 200 meters into the walk, ST1 climbed a hill and saw MA for the last time looking at a tall tree hazard MA had noted before they split up (Tab R-61 and R-63). At this time ST1 was starting to feel the effects of the heat and was considering discontinuing the traverse and communicating to MA that he was going to return to the RP (Tab R-61, R-64 to R-65). ST1 noted that the accompanying TNI members were feeling the adverse effects of the heat; many were leaning against trees and had removed their shirts (Tab R-64).



(Tab Z-36)

At approximately 1315 hours L, ST1 received a message from MA stating that he was “dangerously tired” and would not continue walking the full DZ boundary but instead would return directly to the RP (Tab R-64 to R-65). From approximately 1330 hours to 1400 hours L, a group of TNI began to arrive at the RP, followed shortly by ST1 (Tab R-114 to R-116). ST2 gave ST1 additional water and asked if MA was following, to which ST1 replied, “yeah” (Tab R-115). ST1 and ST2 began asking MA about progress to the RP and disposition via phone text to which MA did not reply (Tab R-116). After no successful communication or indication of receipt, ST1 and ST2 began walking the perimeter of the DZ and calling MA’s name at approximately 1430 hours L (Tab R-116).

d. Search and Rescue (SAR)

Multiple organizations and personnel supported the search and rescue (SAR) effort for MA between approximately 1400 hours L on 22 April 2024 and 0041 hours L on 23 April 2024 (Tab

R-116 and R-150 to R-157). At approximately 1400 hours L, after meeting at the RP following MA's instructions via text, ST1, ST2, several TNI, and two Japanese military members began searching for MA near his last known location (Tab R-116). After receiving the initial notification originating from ST2 of one missing USAF member attached to the 11ABN at 1624 hours L, Defense Attache (DA) obtained MA's duty cell phone number and began calling it with no answer (Tab R-118 and R-150 to R-151). At this point, ST1, ST2, two Japanese military members, and approximately 12 TNI were searching for MA in the Dawuan DZ area (Tab R-116, R-150 to R-151). At 1640 hours L, DA and members of the Defense Attache Office (DAO) and Office of Defense Cooperation (ODC) in Jakarta, Indonesia began searching for MA at local hospitals (Tab R-151).

At 1651 hours L, DA notified the Regional Security Office (RSO) at the US Embassy in Jakarta, Indonesia who immediately convened a personnel recovery working group (PRWG) at the embassy (Tab R-151). At 1725 hours L, Defense Attache Office (DAO) received MA's personal cell phone number and began calling it with no answer (Tab R-152). At 1725 hours L, DAO sent another team from Jakarta to Dawuan DZ, approximately one hour and 30 minutes away, to assist in the search (Tab R-152). By 1730 hours L, 15 TNI and several US military members were at Dawuan DZ searching for MA (Tab R-152). The sun was starting to set at this time and none of the US military members on site had flashlights or other tools to continue the search in the dark (Tab R-118). The PRWG began contacting telecommunications companies in Indonesia and American Telephone and Telegraph (AT&T) in the US to attempt to ping MA's exact cell phone location (Tab R-152). By 1741 hours L, members of the Security Forces Assistance Brigade (SFAB) were on-site assisting in the search and by 1754 hours L, local villagers began searching for MA pursuant to TNI request (Tab R-153).

At 1852 hours L the PRWG was notified the TNI's search was not well organized and the TNI were very tired (Tab R-153). At 1857 hours L, the RSO asked the embassy-assigned PACOM Augmentation Team (PAT) to be ready to deploy to the DZ area since personnel recovery is one of the PAT's core mission sets (Tab R-153). At 1900 hours L, FP, Force Protection Division (FPD) Chief, departed Jakarta for the DZ area to set up a command center closer to the DZ and help organize the search for MA (Tab R-153). At 1906 hours L, the RSO began organizing additional volunteers, equipment, transportation, and logistics to send to the DZ later that night or the following morning to assist (Tab R-154). At 1915 hours L, the PRWG asked Special Operations Command Pacific (SOCPAC) if there were Intelligence, Surveillance, and Reconnaissance (ISR) aircraft available in the area to assist in the search and simultaneously began meeting with the Indonesian Air Force to determine if they had any ISR aircraft or additional forces that could help locate MA (Tab R-154).

At 1944 hours L, the PRWG directed the transportation of the PAT from Jakarta to the DZ area with three vehicles, eight PAT members, a linguist, and two medical personnel (Tab R-104). At 2115 hours L, the PAT arrived at the hotel where FP had set up the command center (Tab R-155). At 2120 hours L, an additional platoon of TNI arrived at the DZ to search for MA, increasing the total number of TNI and local civilians participating in the search to approximately 150-200 (Tab R-104 and R-155). At 2149 hours L, the Federal Bureau of Investigation (FBI) Lead Attache obtained the information needed for both MA's personal and duty cell phones to begin pinging the devices (Tab R-155). At 2237 hours L, the PRWG received find my iPhone screenshots associated

with MA's phone and immediately sent the screenshots to the entire search party, including the PAT (Tab R-155). The PAT received the find my iPhone screenshots while enroute from the command center to the DZ and immediately proceeded toward the identified location upon arrival at the DZ (Tab R-104). At approximately 0040 hours L on 23 April 2024, the PAT found MA's body in the vicinity of the find my iPhone location (Tab R-104 and R-157). MA was found wearing the same clothing ST1 last saw him wearing, and MA's 32 oz Nalgene water bottle was roughly 1/2 full (Tab R-78, R-161, and S-13).

e. Recovery of Remains

Upon locating MA, the PAT immediately assembled its entire team at MA's location, where medical personnel assessed that MA was deceased (Tab R-104). The PAT set up a perimeter to prevent anyone from taking photos and videos and began collecting MA's belongings and covering his body (Tab R-104). The PAT enlisted help from a local civilian to construct a litter from bamboo to aid in transporting MA's body from the DZ (Tab R-104). The PAT carried MA's body on the litter back to the RP, where an ambulance was pre-staged (Tab R-104). The PAT escorted the ambulance to a local hospital to officially declare death (Tab R-73 to R-79, R-156 to R-157).

5. MAINTENANCE

Not applicable.

6. EQUIPMENT, VEHICLES, FACILITIES, AND SYSTEMS

Current AMLO Unit Type Codes (UTCs) enable the individual to tailor their equipment requirements directly to the mission tasked (Tab BB-13). This allows the AMLO to limit the potential for extraneous equipment that would otherwise make inter/intra theater travel difficult (Tab BB-13). The separate UTC system provides flexibility to AMLOs operating alone or in a very small group (Tab BB-13). The minimum equipment list, last updated in 2008, requires AMLOs to carry maps and charts, imagery of the DZ area, regulations/manuals, measuring tape/wheel or laser range finder, compass, military grid plotter, GPS, calculator, camera, survey forms and worksheets, laptop computer, sketch pad with pens and pencils, and a cellular telephone with pertinent numbers preloaded (Tab BB-20 to BB-21). Various other equipment to include line-of-sight radios and satellite communications equipment may also be carried depending on the environment and local conditions in the area to be surveyed (Tab V-2.4 to V-2.5). MA did not carry a radio or satellite communication equipment, but he possessed various survival gear and all required equipment while conducting the Dawuan DZ survey (Tab S-13 to S-16 and S-18 to S-19).

a. Functionality of Equipment

From approximately 1330 hours L until approximately 1900 hours L, text messages to MA's phone were not indicating delivered on the sender's cell phone, and no one received messages from MA's phone during this time (Tab R-67, R-116, and R-120). There is no evidence to indicate any of MA's other equipment malfunctioned at the time of the mishap (Tab S-13 to S-16 and S-18 to S-19).

b. Maintenance History

AMLOs are required to reconstitute their equipment to full operational capacity within 72 hours after return to home station following a tasking and will report any equipment that cannot be brought to full operational capacity or replaced within 72 hours to their Numbered Air Force (NAF) and MAJCOM functional managers (Tab BB-9). There is no evidence to indicate MA failed to inspect and reconstitute his equipment prior to the Dawuan DZ survey tasking (Tab S-13 to S-16 and S-19).

7. ENVIRONMENTAL CONDITIONS

a. Forecast Weather

The DZ survey team was briefed on general weather conditions and climate concerns in Indonesia upon arrival in-country (Tab V-1.7).

b. Observed Weather

The reported weather on 22 April 2024 in Jakarta, Indonesia indicated generally hot and humid conditions with a temperature ranging from 90° Fahrenheit (F) at 1000 hours L to a high temperature of 93° F at 1530 hours L (Tab F-3, F-5, and F-6). The wind speed averaged 12 miles per hour (mph) from the north/northeast and the humidity ranged from 56% – 63% during the same period (Tab F-5 to F-6). The high temperature on 22 April 2024 was about 5° F higher than the historical average (Tab F-3 to F-4). The temperature gradually decreased from a high of 93° F at 1530 hours L to 81° F at 2330 hours L and the wind became calm over the same period (Tab F-6). At approximately 1315 hours L, ST1 began to experience what he considered to be symptoms of a heat injury including swelling of the hands and narrowed field of vision (Tab R-64). TNIs participating in the DZ survey removed their tops and were taking frequent breaks due to the heat (Tab R-64).

c. Other Environmental Conditions

The drop zone area contains undulating terrain, high vegetation, and multiple occupied and unoccupied structures (Tab V-3.8). The elevation in the area is 253 ft Mean Sea Level (MSL) (Tab EE-10). Visibility was three miles and civil twilight occurred at 1811 hours L on the day of the mishap indicating full sunlight at the time the search first began (Tab F-3 to F-5).

d. Restrictions, Warnings, and Procedures

On 20 April 2024, soon after arriving in Indonesia, the DZ survey team received a briefing that warned of the heat and general environmental and threat conditions in the area (Tab V-1.7 and V-3.12). No restrictions were put in place, but MA, ST1, and ST2 talked about the importance of hydrating 24 hours in advance of traversing the DZ and consumed water with electrolyte powder the day prior to conducting the Dawuan DZ survey (Tab R-30 to R-31).

8. PERSONNEL QUALIFICATIONS

a. MA

MA's initial active-duty date of service was 1 June 2005 (Tab T-3). He was 42 years old and a Major (Maj) at the time of the mishap (Tab T-3). MA's AFSC was 11M3U, AMLO/C-12F Pilot, assigned to 3 ASOS, JBER, AK (Tab T-4). MA worked with the 11ABN, an airborne infantry brigade combat team of the United States Army, where he advised and participated in unit planning activities to support actual and anticipated fixed wing objectives and requirements (Tab T-16 to T-21 and V-3.3). In this capacity, he provided assessments of air-ground operations, conditions and risk factors, integration requirements and gaps, support requirements, recommended mitigation measures for ensuring safe and effective employment and integration of mobility forces supporting joint operations objectives and conducted DZ and LZ surveys (Tab BB-7 to BB-8 and V-3.3). His duties often involved travelling to other locations to provide assessments and conduct DZ and LZ surveys in support of joint operations (Tab T-6).

MA became qualified as an AMLO in April 2021 and was assigned to 3 ASOS in April 2021 (Tab T-4). MA's most recent C-12F sortie was flown in September 2022 (T-3). MA was a competent and proficient AMLO who had conducted dozens of DZ surveys in at least five countries (Tab T-6).

b. ST1

ST1's initial active-duty date of service was 26 April 2016 (Tab T-10). He was 30 years old and a Staff Sergeant (SSG) at the time of the mishap (Tab T-10). ST1's MOS is E19D, Calvary Scout, assigned to 1st Squadron, 40th Cavalry Regiment (Tab T-10), JBER, AK, where he assists as a member of scout crews in reconnaissance, security, cordon/search, and other combat operations (Tab T-13). ST1 was assigned as the Air NCOIC in January 2024 (Tab V-1.2). In this capacity, ST1 manages the jumpmasters in the unit, coordinates to procure aircraft for personnel airdrops, and evaluates proposed DZs for feasibility (Tab V-1.2). ST1 completed the Jumpmaster Course in July 2021 and is qualified to conduct DZ surveys (T-10). The Dawuan DZ survey conducted on 22 April 2024 was ST1's first full DZ survey (Tab V-1.2 to 1.3).

9. MEDICAL FACTORS

a. Qualifications

The Mishap Airman (MA) was medically qualified without any restrictions at the time of the mishap. (Tab X-3)

b. Health

Medical and mental health record review of MA's history did not reveal any information relevant to the mishap (Tab X-3). Medical records in MHS Genesis and Joint Legacy Viewer were used to review MA's medical history in military treatment facilities and off-base visits, lab results, radiology studies, and medication history (Tab X-3). The Aeromedical Services Information Management System (ASIMS) was used to review records of military fitness, duty, mobility

restrictions, annual fly PHAs, and status of medical readiness (Tab X-3). As noted above, MA was not on a profile at the time of the mishap (Tab X-3). In addition, MA was not on an aeromedical waiver (Tab X-3).

Non-privileged exhibits, photographs, and non-privileged testimony from the previously conducted Safety Investigation Board were reviewed (Tab X-3). MA's backpack contained a 32 oz water bottle with an estimated 16 oz of water remaining based on a statement from the Office of Special Investigations (OSI) agent who inventoried MA's possessions following the mishap (Tab R-161 and S-13). Medications found in MA's backpack include Loratadine 5 mg/Pseudoephedrine 120 mg blister pack of 10 tablets with three missing tablets and Loperamide HCl (Imodium) 2 mg blister pack of 10 tablets with two missing tablets (Tab S-16 to S-18). No witnesses testified that MA had any symptoms of acute illness during the time of the mishap (Tab R-60 to R-61).

c. Injuries and Pathology

The autopsy was performed by a Defense POW/MIA Accounting Agency (DPAA) medical examiner at Joint Base Pearl Harbor-Hickam (JBPHH), Hawaii on 27 April 2024 (Tab X-3). MA was participating in a land navigation survey over rugged terrain with dense vegetation and hot temperatures (Tab X-3). MA was found unresponsive about 11 hours after the start of the survey, sitting by a tree. The official cause of death was determined to be exertional heat injury with acute renal insufficiency and was determined to be an accident (Tab X-3). MA had an ½ inch abrasion on his nose and two contusions on his right knee that were ½ inch in length, and no internal injuries were noted (Tab X-3). Lab results collected showed elevated creatinine and urea nitrogen supporting acute renal insufficiency (Tab X-3). This acute injury to the kidneys is commonly seen in exertional heat injury or heat stroke (Tab X-3). The presence of cerebral and pulmonary edema at the autopsy also supported the diagnosis of heat injury (Tab X-3).

d. Lifestyle

There is no evidence that lifestyle factors were relevant to this mishap. Non-privileged 72-hour histories, medical and mental health records, and relevant witness testimonies were reviewed.

e. Crew Rest and Crew Duty Time

Not applicable.

10. OPERATIONS AND SUPERVISION

a. Operations

To support official joint exercises and real-world Army operational requirements there are two mechanisms in which a PACAF assigned AMLO can receive orders; the first would originate with the Army submitting a "Request for Forces" request via USARPAC then across to PACAF HQ (Tab DD-11). PACAF/A37 (Plans and Exercises) would validate and send the tasking down to the supporting Wing, e.g., 354th FW, to 1st Air Support Operations Group (ASOG) to the supporting ASOS (Tab DD-11). If centrally funded and logistically managed, those types of exercises are

normally supported via Contingency, Exercise, and Deployment (CED) orders created by PACAF HQ for the USAF personnel involved (Tab DD-11).

The second way of receiving orders is through direct contact with the supporting Army unit (Tab DD-11). Since AMLOs are often attached to a specific Army unit, it is normal for an AMLO to execute individual Army unit taskings such as a DZ survey (Tab DD-11). In that case, the Army would pay for the AMLOs temporary duty assignment and the ASOS would generate USAF administrative orders at the unit level (Tab DD-11). This second means is how MA received orders to plan and execute the mishap DZ survey (Tab DD-16).

In terms of tasking risk assessment, there is not a PACAF-tailored ORM assessment procedure for PACAF-assigned AMLOs to use prior to conducting a survey (Tab DD-20). 3d ASOS members have used a DD form 2977 as a method of risk assessment when required (Tab DD-20). The 11ABN has an Army-specific ORM process for its members, but it does not account for attached AMLOs assigned to the same tasking (Tab DD-20).

b. Supervision

MA successfully completed all prerequisite training in accordance with Air Force Manuals 13-106 and 13-217 to perform duties as an AMLO assigned to the 3 ASOS in support of 11ABN DZ survey requests (Tab G-3).

MA was physically assigned to JBER, resided in Anchorage, and had an office inside of Detachment 1, 3 ASOS on the Elmendorf side of the base (Tab DD-19). MA worked at 11ABN HQ part-time, located on the Richardson side of the base (Tab DD-19).

MA's rater and immediate supervisor was the 3 ASOS Commander (CC) located at Fort Wainwright near Fairbanks, AK, and his higher-level reviewer was the 1 ASOG CC located at Joint Base Lewis-McChord, Washington (Tab DD-19).

AFMAN 13-106 designates PACAF/A3 as the coordinating office to organize, train, and equip PACAF-assigned AMLOs (Tab BB-6). Specifically, it should designate a rated Mobility Air Force (MAF) officer as the MAJCOM functional area manager (FAM) with this responsibility and the member should be a former AMLO (Tab BB-6). Currently this position is filled by a Chief Master Sergeant whose primary duty is the Tactical Air Control Party FAM for the MAJCOM (DD-12).

11. GOVERNING DIRECTIVES AND PUBLICATIONS

a. Publicly Available Directives and Publications Relevant to the Mishap

- (1) AFI 51-307, *Aerospace and Ground Accident Investigations*, 18 March 2019
- (2) AFMAN 13-106, *Air Mobility Liaison Officers (AMLO)*, 7 December 2020
- (3) Air Force Tactics, Techniques, and Procedures 3-4.13V1, 1 March 2019
- (4) DAFI 91-204, *Safety Investigations and Reports*, 10 March 2021

(5) DAFMAN 13-217, *Drop Zone, Landing Zone, and Helicopter Landing Operations*,
22 April 2021

NOTICE: All directives and publications listed above are available digitally on the Air Force Departmental Publishing Office website at: <http://www.e-publishing.af.mil>.

a. Other Directives and Publications Relevant to the Mishap

(1) *DZ Surveying Field Guide*, 18 March 2008

27 August 2025

DD MONTH YEAR

A handwritten signature in black ink, consisting of the initials 'JR' followed by a stylized surname 'Rivers'.

JEFFREY J. RIVERS, Colonel, USAF
President, Ground Accident Investigation Board

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