

RESCUING JOINT PERSONNEL RECOVERY:
USING AIR FORCE CAPABILITY TO ADDRESS JOINT SHORTFALLS

BY

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A THESIS PROVIDED TO THE FACULTY OF
THE SCHOOL OF ADVANCED AIR AND SPACE STUDIES
FOR COMPLETION OF GRADUATION REQUIREMENTS

SCHOOL OF ADVANCED AIR AND SPACE STUDIES

AIR UNIVERSITY

MAXWELL AIR FORCE BASE, ALABAMA

JUNE 2011

APPROVAL

The undersigned certify that this thesis meets master's-level standards of research, argumentation, and expression.

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Disclaimer

The conclusions and opinions expressed in this document are those of the author. They do not reflect the official position of the US Government, Department of Defense, the United States Air Force, or Air University.



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Acknowledgements

I would like to acknowledge several people without whose support and help I would not have completed this study. First, I would like to thank my advisor, Dr. Richard Muller, and my reader, Dr. James Kiras, for the tireless effort and expertise they provided during this project. I would like to thank Colonel Glenn “Hooter” Hecht for the input provided as the Personnel Recovery function’s true visionary. In addition, Mr. Dan Baumgartner at OSD provided the external perspective, effectively addressing the Air Force Rescue organizational issues. These men join my fellow Combat Rescue Officers, USAF Rescue professionals, former commanders, and mentors that were instrumental in my professional development. Finally, I want to thank Kimbra Halter, the driving force behind the completion of this project and the sanity check that pushed me to the finish line.



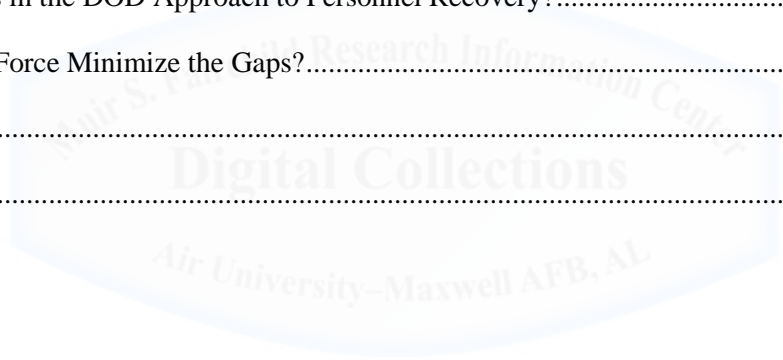
Abstract

This study attempts to address how the Air Force, the only service to have global personnel recovery as one of its core functions, should organize its dedicated forces prior to providing this capability to the joint force. In doing so, it first defines personnel recovery and proceeds with an examination of why this function is critical to national security. Next, the study provides a description of available combat capability and explains how each service approaches its tasked personnel recovery duties and responsibilities. It evaluates whether the Department of Defense is capable of meeting the established requirements. Finally, it focuses on the Air Force's dedicated personnel recovery forces to determine how it can fill identified gaps to improve the capabilities the service presents for joint personnel recovery.



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Introduction

Hurricane Katrina took the lives of 1330 men, women, and children. At 0610 on 29 August 2005, a 27-foot storm surge came ashore, with flooding that eventually extended six miles inland. Within hours, United States Air Force Rescue forces saved the first American en route to a staggering 4,306 total lives saved from impending death over the ensuing eleven day period.¹ Our fellow Americans are alive because combat rescue forces, organized, trained, and equipped for combat rescue operations, are also a highly effective force capable of conducting defense support to civil authorities (DSCA) operations, under Emergency Support Function (ESF)-9. Despite well-documented shortfalls in the Federal Emergency Management Agency (FEMA)-led National Response Plan, the Federal government's plan to coordinate all its departments and agencies and integrate them with State, local, and private sector partners was successful in integrating the DoD response to Katrina. The 347th Expeditionary Rescue Group (ERG) demonstrated the Department of Defense (DOD) plays a critical role in the nation's response to catastrophic events with "real operational capabilities to translate Presidential decisions into prompt, effective action on the ground."² In addition to possessing uniquely trained rescue personnel equipped for their missions, the ERG provided robust communications infrastructure, logistics, and planning capabilities to facilitate immediate 24-hour operations until the last "save" on 10 September.

United States Northern Command (USNORTHCOM) led the military response to Hurricane Katrina, which incorporated the 347th Expeditionary Rescue Group. Five days prior to the hurricane's landfall, USNORTHCOM issued a warning order on 23 August for supporting

¹ US Joint Task Force Katrina. 347th Expeditionary Rescue Group Lessons Learned, 22 September 2005, 3.

² US Joint Task Force Katrina. The Federal Response to Hurricane Katrina Lessons Learned, February 2006, 54.

commands to prepare for requests for DOD assets should the need arise. The USAF Rescue community is no stranger to DSCA operations. The 347th (active duty) and 920th (reserve) Rescue Wings unilaterally placed Rescue forces on alert beginning 26 August. Rescue forces were airborne upon receipt of the deployment order at 1400 on 30 August, saving three Americans on the first flight over the ravaged Gulf Coast. Federal, state, and local search and rescue teams simultaneously converged on New Orleans, placing hundreds of uncontrolled aircraft overhead. The USAF Rescue Coordination Center filled another critical organizational role as the Joint Search and Rescue Center tasked to integrate response operations, methodically focusing the search and rescue efforts of all responding assets while ensuring a safe, mishap-free operation. Over 400 USAF members from the active duty, reserves and guard integrated existing Rescue organizations to conduct the largest civil search and rescue operation in the history of the service.³ The military motto of “fighting like we train” proved its worth when American lives hung in the balance. These same organizations do not exist today, complicating the time-sensitive response to current combat operations. Unfortunately, the next time the USAF Rescue community is told to “send everything” in response to a domestic crisis, it will be even more difficult to comply.⁴

United States (US) policy at both the National and DOD level clearly defines the necessity for, and strategic purpose of, a concerted approach to rescuing people in physical distress, especially where America’s security interests are at risk. The same policy identifies the positive effects that a nation with organic rescue capability creates within the international community.⁵ To fulfill this national policy, United States Air Force (USAF) guidance further

³ US Joint Task Force Katrina. 347th Expeditionary Rescue Group Lessons Learned, 22 September 2005, 3-13.

⁴ US Joint Task Force Katrina. 347th Expeditionary Rescue Group Lessons Learned, 22 September 2005, 9.

⁵ US Department of Defense. Personnel Recovery (DODD 2310.2), 22 December 2000.

identifies that the Rescue mission involves Airmen divided into three categories: isolated personnel (IP), Rescue forces, and commanders and their staffs. Therefore, the USAF must take a holistic approach towards organizing, mobilizing, and conducting rescue responses that can systematically recover and then return all isolated personnel, from DOD personnel (military, civilians, and contractors), to other U.S. Government (USG) personnel, to American citizens (and even foreign nationals when directed) to friendly support and control.⁶

A new strategic emphasis is required due to the advent of today's Overseas Contingency Operations (OCO) and the continuing emphasis on our ability to conduct Major Combat Operations (MCO), in addition to dissuading America's adversaries while stabilizing war-torn populations. This emphasis must reduce the operational and political risks that stem from captivity and hostage situations. The US Government is now taking a more proactive and unified approach to mitigating these risks to individuals conducting official business abroad – which includes Airmen who serve overseas. This new strategic emphasis is present in the evolution of the term “Isolated Personnel” as codified in DOD joint doctrine, which defines it as:

...those U.S. military, DOD civilians, and DOD contractor personnel (and others designated by the President or Secretary of Defense) who are separated (as an individual or group) from their unit while participating in a U.S.-sponsored military activity or mission and who are, or may be, in a situation where they must survive, evade, resist, or escape.⁷

Consequently, the USAF's Rescue force has evolved beyond the traditional images of recovering downed aircrew or rescuing Special Operations Forces (SOF) isolated behind enemy lines. Rescue is now a highly adaptable resource with the ability to mitigate the operational and political costs created when isolated personnel are exploited by an adversary for propaganda purposes, to gain intelligence, or to restrict our physical freedom of action or maneuver. This

⁶ US Air Force. Personnel Recovery Operations (AFDD 3-50), 1 June 2005.

⁷ US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007.

makes USAF Rescue forces a key component of the United States Government's "whole-of-government" approach to recovering isolated personnel. The USAF must address a pressing need for rescue preparation, response, and adaptation before, during, and after such a crisis situation/event – an approach now referred to as "Personnel Recovery" (PR) at the DOD, national, and international levels.

Therefore, the USAF developed a PR Functional Concept to further unify and synchronize the USAF vision, message, and approach to PR as a USAF Core Function, and better prepare and present a Rescue force that far exceeds any other DOD component's ability to conduct PR across the full spectrum of military activities. This document describes how the USAF develops, organizes, and sustains a highly skilled, adaptable, flexible, tailorable, and multi-functional collection of operational capabilities designed and integrated with others to provide a Joint Force Commander with a single dedicated capability to rescue anyone, anywhere, anytime and anyhow.⁸

Simultaneously, the Joint Personnel Recovery Agency (JPRA) created a PR Operating Concept. This joint concept accounts for the peculiar demands of all phases of military operations, to include irregular environments and the vulnerability of expeditionary DOD civilians and DOD contractors. It identifies the essential problem: "DOD PR is not optimized to prevent, prepare for, and respond to isolating events, thereby allowing for a center of gravity that can erode domestic and international support of U.S. security objectives."⁹ JPRA also led a PR capabilities based assessment (CBA) which identified 14 DOD gaps that pertain to performing PR in a joint operating environment. The majority of these gaps require a joint solution while

⁸ US Air Force. Personnel Recovery Operational Concept, 3 September 2009.

⁹ US Joint Personnel Recovery Agency. Operating Concept for Personnel Recovery V.53-100707 (pre-decisional draft).

others are solved by service organizations such as Air Force Survival, Evasion, Resistance, and Escape (SERE) training units and Rescue Wings/Groups.¹⁰

Operation EAGLE CLAW, also known as Desert One, was explained to the world on 25 April 1980 by a somber President Jimmy Carter as a secret attempt to rescue the Iranian hostages that left eight American servicemen dead and several others seriously injured. The Marine Corps and Navy helicopter contingent added Army Rangers and Air Force C-130s to make this a truly joint endeavor, one that will forever be remembered as a disastrous attempt at joint PR.¹¹ Out of this failure grew the United States Special Operations Command, which joined the Army, Navy, and Marines in defining PR as a mission of opportunity for available forces able to suspend primary operations.¹² This left the Air Force as the only service to organize, train, and equip a dedicated force to execute PR as a core function.

Joint guidance states that USAF Rescue assets should be used to the maximum extent possible for dedicated PR, allowing other forces possessing collateral PR capabilities to focus on their primary missions. It recognizes that successful use of joint capabilities requires proper preparation and planning if different forces are to conduct the same PR mission.¹³ PR using a joint force can be a difficult mission under the best of circumstances, and the risk increases when performed by an ad hoc force lacking specific PR preparation, planning, and execution capabilities. Joint operations are complex, not only because of obstacles posed by individual service cultures, but because the mechanics of coordinating joint forces have proven inherently

¹⁰ DiPaolo, Marc C. JPRAs PR Operational Concept and Capabilities Based Assessment Brief, 19 July 2010.

¹¹ Snow, Donald M., and Dennis M. Drew. "Making Twenty-first Century Strategy: an Introduction to Modern National Security Processes and Problems." *Air University Press*, November 2006.

¹² Brown, Bryan D. "Meeting the Challenges of the 21st Century." *Joint Force Quarterly*, no. 40 (1st Quarter 2006).

¹³ US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007.

difficult.¹⁴ For these reasons, the Joint Force Commander (JFC) must state the commander's intent regarding PR and direct the USAF to support the joint team. The Secretary of Defense and operational commanders should be able to call upon a combination of specially trained Airmen and their unique and specialized equipment to prepare personnel, rescue personnel across the full range of military operations, and return those individuals to friendly control. This requires an extensive review of the Air Force's approach to this difficult task.

Research Method

With these things in mind, the central research question is, "How should the Air Force, the only service to have global PR as one of its core functions, use its dedicated forces to fill gaps within joint PR?" This thesis is accessible to the non-specialist, but addresses issues of great interest to rescue professionals. The paper begins by defining PR and proceeds into an examination of why this function is critical to national security. The majority of research material supporting this initial layout consists of national policy and department/joint/service doctrinal documents. The joint/service documents describe available combat capabilities and how each service approaches assigned PR duties and responsibilities. Chapter 4 is an analysis of multiple studies dating back to the 1950s that specifically focused on rescue or PR as we know the function today. The thesis then presents results, findings, recommendations, and shortfalls along the lines of the most recent CBA conducted by JPRA. The author's analysis of this material determines how the Air Force can better fill PR preparation and response gaps as two key areas of the national security presidential directive for PR. Finally, the paper offers

¹⁴ Bracich, Col, Mark E. "A Systematic Approach to Address the Challenges of Personnel Recovery: Modeling the Essential Elements of Success." *Joint Center for Operational Analysis and Lessons Learned Bulletin*. VII, no. 2 (March 2005).

recommendations for how to use dedicated USAF assets to fill gaps to first prepare and then rescue anyone, anywhere, anytime and anyhow when called upon to do so.



Chapter 1

What is Personnel Recovery?

A solid understanding of the Personnel Recovery (PR) function, from basic definitions to the complete PR cycle, is critical to answering the research question. To begin with, PR is the sum of military, diplomatic, and civil efforts to recover and reintegrate isolated personnel. Isolated personnel are defined as US military, Department of Defense (DOD) civilians, and DOD contractor personnel who, while participating in a US sponsored military activity, have become separated, as an individual or as a group, from their unit or organization and are in a situation requiring them to survive, evade, resist, or escape in order to be recovered. The President or Secretary of Defense (SECDEF) may direct that PR capabilities be called upon and used in support of other missions, persons, agencies, or nations.¹⁵ There are several unique activities across the range of military operations that relate to PR including medical evacuation (MEDEVAC), casualty evacuation (CASEVAC), combat search and rescue (CSAR), non-combatant evacuation operations (NEO), non-conventional assisted recovery (NAR), unconventional assisted recovery (UAR), and hostage rescue. Doctrine now seamlessly integrates each of these environments and scenarios into the function of PR (Figure 1). As one of the pioneers of PR noted, “Success in PR depends upon providing the right products and services to the right people to achieve the right objectives to enable them to accomplish the right tasks at all levels of impact in all applicable environments—and learning and adapting as we go.”¹⁶

¹⁵ US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007.

¹⁶ Bracich, Col, Mark E. "A Systematic Approach to Address the Challenges of Personnel Recovery: Modeling the Essential Elements of Success." *Joint Center for Operational Analysis and Lessons Learned Bulletin*. VII, no. 2 (March 2005). Col Mark E. Bracich was the Deputy Commander of the Joint Personnel Recovery Agency, and prior to that assignment, a US Air Force combat rescue helicopter pilot and former rescue squadron commander. He

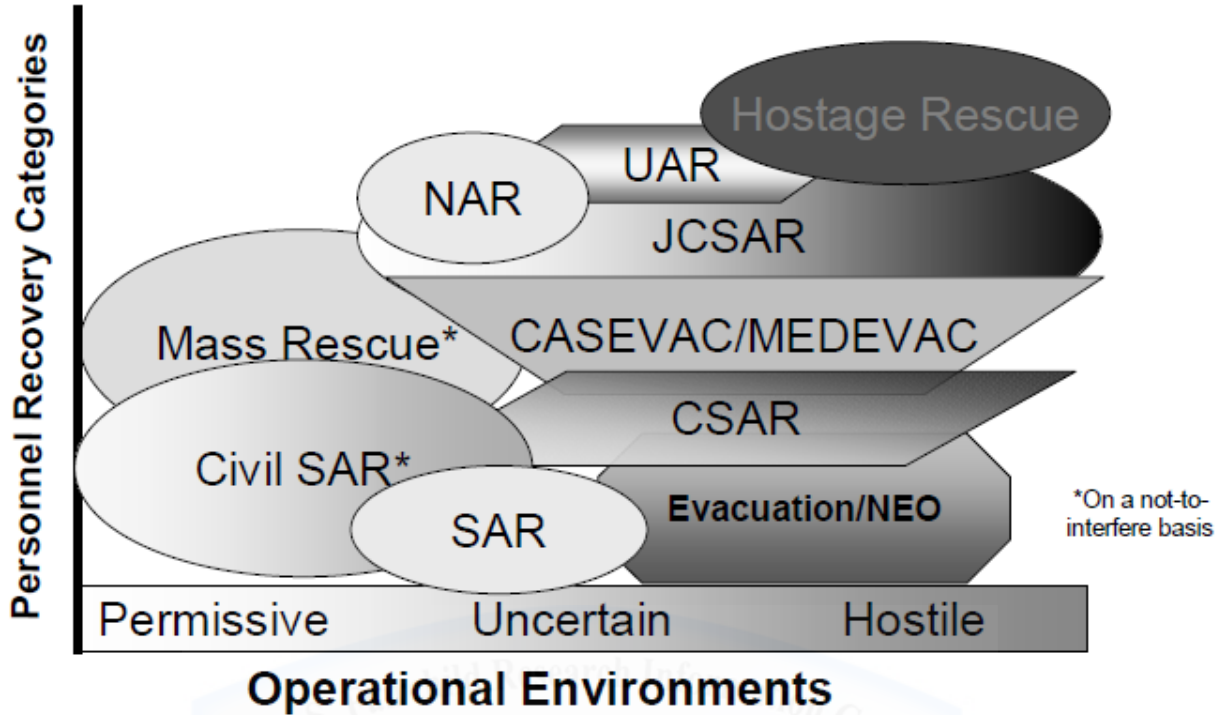


Figure 1: Full Dimensional Personnel Recovery¹⁷

The Personnel Recovery Cycle

With a common definition established, there are specific elements essential to successful PR. This analysis must incorporate these elements to determine how the USAF should organize its dedicated Rescue forces prior to providing them to the joint force. Elements include: products and services; people; enabling objectives; impact levels; planning factors; execution tasks; and adaptation. The DOD has effectively aligned these elements within a cycle (Figure 2) with the four main functions of Preparation, Planning, Execution, and Adaptation. These functions are not necessarily “phases” in a linear process, nor do all organizations perform all the functions of the cycle. For example, a military department will focus on responsibilities to organize, train, and

wrote this article for the Joint Center for Operational Analysis and Lessons Learned Quarterly Bulletin on JPRA. He personally witnessed the revolution of thought with respect to personnel recovery.

¹⁷ Institute for Defense Analysis. Interagency National PR Architecture: Final Report, July 2004, 4.

equip in preparation for operations while a combatant commander focuses on planning and execution with some effort toward preparation for and adaptation of subsequent operations.¹⁸

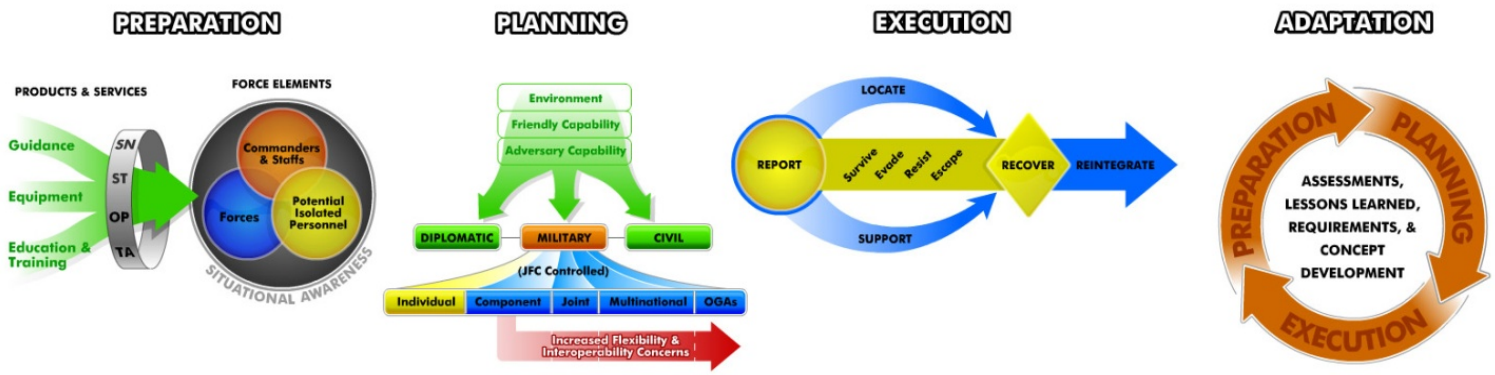


Figure 2: The PR Cycle¹⁹

The PR cycle is the basis for analyzing how the only service responsible for global PR should organize dedicated forces prior to providing its PR capabilities to the joint force. The Air Force must incorporate historical evaluations focused on “execution” into the broader function. A failure to complete the PR cycle directly influences national security when following the recovery of an IP, the IP is not successfully reintegrated or the lessons learned are not incorporated into other operations. Adversaries will benefit from the United States repeating an isolating event that has not completed the PR cycle, including improvements toward education/training as the products of adaptation.

Preparation. Deliberate preparation is a vital element of the PR cycle. It encompasses activities that Rescue and supporting forces, commanders (and by extension, their staffs), and at-

¹⁸ Bracich, Col, Mark E. "A Systematic Approach to Address the Challenges of Personnel Recovery: Modeling the Essential Elements of Success." *Joint Center for Operational Analysis and Lessons Learned Bulletin*. VII, no. 2, March 2005.

¹⁹ Bracich, Col, Mark E. "A Systematic Approach to Address the Challenges of Personnel Recovery: Modeling the Essential Elements of Success." *Joint Center for Operational Analysis and Lessons Learned Bulletin*. VII, no. 2, March 2005.

risk personnel undertake in order to prepare for an isolating event and the follow-on PR response. All personnel should prepare for an isolating event by accomplishing a digital isolated personnel report (ISOPREP) and, at a minimum, complete a basic course of instruction in survival, evasion, resistance, and escape (SERE) tactics, techniques, and procedures (TTPs). Preparation includes organize, train, and equip considerations, as well as designing an architecture for a joint force commander's area of responsibility. At the joint level, the Universal Joint Task List (UJTL) taxonomy subdivides the tasks that form this PR architecture into Strategic National (SN), Strategic Theater (ST), Operational (OP), and Tactical (TA) organizational tasks. More simply, preparation includes all activities required to put things in place to enable proper planning and PR execution when the time comes.²⁰ The foundation for everything the DOD does with regard to preparation must be rooted in sound PR policy, validated doctrine, current TTP, and enhanced by a robust education²¹ and training program.²² For example, USAF efforts toward Survival, Evasion, Resistance, and Escape (SERE) training earned a "best in breed" observation from General James N. Mattis, Commander of United States Joint Forces Command, in April 2010. He observed the Evasion and Conduct After Capture (ECAC) course as a program implemented to train the emerging at-risk populations for conventional and irregular warfare operations identified in national and defense policies.²³ This is a significant recognition by the DOD Executive Agent for PR.

²⁰ US Air Force. Personnel Recovery Operational Concept, 3 September 2009.

²¹ PR education is often overlooked by DOD processes as at-risk personnel receive training and others are educated by memorizing the code of conduct. However, Terrence Russell from JPRA's program development and research division provided the author with information highlighting improvements. The online SERE 100.1 continues to be the most completed CBT course taken on Joint Knowledge Online (JKO). Since its release in September 2010, over 285,800 people have completed the course. This course is now being offered to coalition members as well.

²² US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007, I-3.

²³ Mattis, James N. "Survival., "Survival, Evasion, Resistance, and Escape Training" memo dated 27 April 2010.

Planning. Planning includes all activities necessary to conduct a PR response within a specific theater or operation. Executing a PR response should be a specified task in every operation or activity across the range of military operations where personnel are at risk of isolation. Consequently, PR responses integrate into all air, land, and sea component deliberate, crisis, and mission planning. Failure by commanders to address PR in any plan that places personnel at risk of isolation means: (1) the commander assessed the risk and decided to accept it (an acceptable course of action which should be documented in the plan), (2) the staff failed to address PR or accepted the risk on behalf of the commander (neither of which is acceptable), or (3) the commander failed to follow policy and is negligent in providing full dimensional protection to his forces (also unacceptable).

All PR plans should capture the following basic concerns: environment (operational, political, economic, diplomatic, physical, etc.), operational and strategic risk, adversary capabilities (including their ability to exploit), and friendly capabilities which include military, diplomatic, and civil options. Military options include recovery by close-proximity forces, conventional recovery by a component, joint or coalition force assembled to perform a rescue, or non-conventional assisted recovery (NAR) by indigenous personnel or other non-conventional methods. The US Army was the close-proximity force that recovered civilian Thomas Hamill after he escaped capture in Iraq in 2004. Diplomatic options may include negotiation, armistice, or treaty. Diplomatic efforts of the Department of State, for example, successfully recovered the US Navy EP-3 and crew which performed an emergency landing in China in 2001. Civil response options may include intervention by international organizations, nongovernmental organizations (NGOs), influential persons, or private citizens. Such a civil effort sanctioned by the US and led by the Reverend Jesse Jackson as an influential US citizen led to the 1984 return

of a downed US Navy aviator from Syria.²⁴ The objective of the planning function is to put processes and forces into place, so that when an isolating event occurs, the commander can “pull the trigger” and reasonably expect a successful outcome.²⁵

Execution. Execution includes all activities designed to perform the basic PR tasks (report, locate, support, recover, reintegrate) and achieve the desired effect of returning isolated personnel to friendly control. Everything accomplished under deliberate preparation and planning is oriented toward ensuring the capability to perform the basic PR tasks. All participants must possess the ability to exercise and execute their assigned roles and responsibilities and be ready to respond before an isolating event occurs. Execution begins as soon as someone becomes isolated and concludes with that person’s successful recovery and return to friendly forces.

Most personnel have a myopic view of the PR functional area by simply viewing it as the recover task, the physical action of securing a survivor and returning him to safety. The recovery task is certainly the most complex and demanding task. It is imperative that the entire PR execution process termed the ‘Save Chain’ (Figure 3) be addressed holistically in a manner similar to the entire Find, Fix, Track, Target, Engage, and Assess ‘Kill Chain’ (Figure 4) to effectively engage a threat.



Figure 3: The Save Chain²⁶

²⁴ US Joint Personnel Recovery Agency. Operating Concept for Personnel Recovery, V.53-100707 (pre-decisional draft), 21.

²⁵ US Air Force. Personnel Recovery Operational Concept, 3 September 2009.

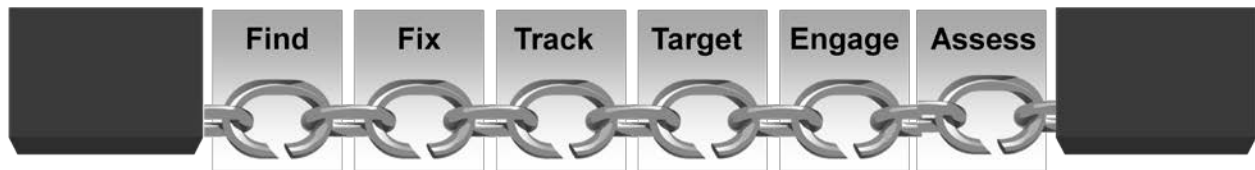


Figure 4: The Kill Chain²⁷

The Five Basic Tasks of Execution²⁸

Report. The “report” task consists of actions required to provide notification of an isolating event. It begins with the recognition of the event and ends when appropriate command and control authorities are informed. Notification of an event may come from first-hand accounts, a missed report time, observation by intelligence collection assets, etc. Reports of isolating events normally flow through the chain of command to the Joint Personnel Recovery Center (JPRC) who acts as a combatant commander’s central coordinating agency for PR operations. Initiation of location procedures relies on report validation and the elevation of reports in a timely nature. The report is the trigger that starts the procedures to validate the isolation event, collect information, and initiate efforts to locate, support, and recover the isolated person.

Locate. The “locate” task is the action taken to precisely find and authenticate the identity of isolated personnel. It starts upon recognition of an isolating event and continues until the recovery of the isolated person. Visual observation, intelligence collection, or sensors can all

²⁶ US Air Force. Personnel Recovery Core Function Functional Concept 2011-2031 V5, 24 February 2011.

²⁷ US Air Force. Personnel Recovery Operational Concept, 3 September 2009.

²⁸ Bracich, Col, Mark E. "A Systematic Approach to Address the Challenges of Personnel Recovery: Modeling the Essential Elements of Success." *Joint Center for Operational Analysis and Lessons Learned Bulletin*. VII, no. 2, March 2005. This summary of the five basic tasks follows Col Bracich’s approach of highlighting key elements in a concise explanation.

assist in locating the individual or group. An accurate location and positive authentication are both normally required prior to committing recovery forces.

Support. The “support” task involves providing mental, physical, and emotional support to isolated personnel and their next of kin. Support to the IP may begin as soon as recognition of the isolating events and continue until the person is recovered. Efforts include establishing two-way communications; building and maintaining the isolated person’s morale; and providing situational awareness, medical advice, and protection from hostile forces. The objective is to enable the isolated person to gain and maintain situational superiority and proactively contribute to a successful recovery. A mindset that all DOD SERE training programs instill the concept of a “Prisoner at War” versus a “Prisoner of War” mentality to further socialize potentially detained personnel that though they may be captured, they still have a proactive mission to combat their captors and defeat their objectives. Next of kin (NOK) support initiates with the determination of an isolated person’s identity and continues until reintegration begins. Support while personnel are being detained focuses on explaining the captivity situation to NOK and providing them with strategies that will shape the media and even the detained personnel’s captivity environment. Success requires the integration of responsibilities with casualty assistance, public affairs, family support networks, and other entities responsible for the care of the detained personnel and the NOK as well. Procedures require that family members and key friends be aware of PR efforts, are actively involved, and that if they desire to engage the media, there are themes they might positively project while following requirements for the protection of certain information.

Recover. The “recover” task includes any employment of forces, or diplomatic or civil processes, to gain custody of the isolated person and return him to friendly control. Recovery begins with the launch or redirection of forces or the engagement of diplomatic or civil

processes, and ends when the isolated person begins reintegration. Diplomatic means, civil actors, or other methods that a combatant commander's PR architecture does not control all often assist with recovery. The architecture must be interoperable with these other recovery mechanisms. Prior to committing to recovery, responding forces should have: communication with the isolated person; an authenticated identity of the isolated person; the location known to an acceptable degree within a margin of error; the IP's intentions and medical conditions known; and an understanding of a clear threat situation.

Reintegrate. The "reintegrate" task consists of debriefing and reintegrating the recovered isolated personnel to their duty and families. Reintegration begins when the recovery force relinquishes control of the IP to a designated member of the reintegration team and ends when the individual returns to duty or requires no further care. Reintegration always necessitates direct support to NOK while the isolated person receives an immediate physical and psychological assessment, designed to give the individual time, space, and support to decompress. The objective is to weave the myriad of processes that occur upon the member's return into a seamless flow designed to meet each process objectively while simultaneously maintaining the isolated person's psychological health. Such processes include intelligence collection, public affairs procedures, medical and dental check-ups, and consideration of the IP's personnel matters such as finance and legal.

The rescue of Bat-21 in 1972 is one of the most noteworthy examples of the PR execution phase. It began with the shoot down of Lt Col Iceal E. "Gene" Hambleton on April 2 during his 63rd mission over Vietnam in the midst of the Spring 1972 Easter Offensive. He was the only one of the six-man EB-66E crew to eject safely. As he parachuted to earth, a forward air controller (FAC) who witnessed his descent initiated the PR task of "report." The same FAC

also initially accomplished “Locate” when he established communication with Hambleton over his survival radio. The eleven-day rescue mission provided multiple opportunities for the “support” task, including Hambleton receiving airdrop resupply and medical advice for his arm and back injuries. Over the course of the biggest and most controversial rescue effort of the Vietnam War, the “recover” task involved personnel from every service to include the Coast Guard. It claimed the lives of eleven soldiers and Airmen, cost five destroyed and nine damaged aircraft, and put hundreds of Airmen, a secret commando unit, and a South Vietnamese infantry division at risk.²⁹ Navy SEALs completed the “recover” task by performing unconventional assisted recovery, finally rescuing Hambleton through unorthodox means. Hambleton’s return to a forward operating base initiated the “reintegrate” task. His reintegration continued until he rejoined his family and returned to his Air Force duties, eventually completing a 30-year career.³⁰ Hambleton would say, “it was the most terrible day I had ever lived, I had to stand by and watch six young men die trying to save my life. Heroes, you bet they were.”³¹

Adaptation. Personnel should network to ensure the timely, accurate, and adequate sharing of any information that bears on deliberate PR preparation, planning, and execution. The procedures for doing so should be dynamic so they can address issues proactively and rapidly adapt within the PR Cycle to meet evolving conditions. Adaptation is no different from adjusting one’s objective to account for weaknesses in the cycle’s construct or changes in the environment.³² For example, today’s adversaries often follow through on the threat of death by cutting off hostages’ heads. This is a significant change from what Americans experienced when

²⁹ Stoffey, Col. Robert E.; Holloway III, Admiral James L. *Fighting to Leave: The Final Years of America’s War in Vietnam, 1972-1973*. Zenith Press, 2008, 69.

³⁰ Whitcomb, Darryl D. *The Rescue of Bat 21*. Dell Publishing, New York, New York, 1998.

³¹ Hambleton, Iceal E. Statement for Memorial of Jolly Green 67 on 19 November 1997, <http://www.arlingtoncemetery.net/aircrew1.htm>.

³² US Air Force. Personnel Recovery Operational Concept, 3 September 2009.

taken prisoner by the Germans during WWII, namely camps run according to Geneva Convention standards. This change in the environment drives the necessity for immediate response, often endangering the lives of captured personnel in order to increase their chance of surviving captivity. Adaption subareas of assessment, lessons learned, requirements, and concept development are all accounted for in the JPRA PR Operational Concept analysis of the Capstone Concepts for Joint Operations (CCJO).

Assessment is a means through which an organization can establish standards for PR and then hold itself accountable to accomplishing those standards. In combat situations, PR provides an “unmistakable message to the joint force [that the] DOD will make every effort to prevent their capture by our enemies and, should that happen, will use comprehensive means to respond effectively.”³³ Assessing the military members’ perspective on this position will adjust the preparation of personnel for these events during future combat operations. The second subarea of lessons learned recognizes the need for timely updates to the PR structure. The United States has recognized the importance of conducting small unit engagements with the local Afghan populace during security operations. Simultaneously, the PR architecture has incorporated the requirement to provide a credible capability for these isolated provisional reconstruction teams in Afghanistan. Requirements, as the third subarea, highlight how programming processes must include PR considerations. The CCJO recognizes the ability to use a joint force for peacetime engagement to prevent escalation to crisis proportions.³⁴ Recognizing the importance of United States humanitarian assistance for dealing with the aftermath of the Indonesian tsunami in 2005, for example, reinforces the need to include the PR capability in future programs. Concept

³³ US Joint Personnel Recovery Agency. Operating Concept for Personnel Recovery, V.53-100707 (pre-decisional draft), 37.

³⁴ US Department of Defense, Capstone Concept for Joint Operations, 15 January 2009, 31.

development is the last subarea of adaptation. Building partnership capacity is a major example of a growing concept. Within this area, PR provides the non-threatening basis for substantive mil-to-mil engagements that grow from the nearly universal priority of saving lives.³⁵ The Colombian rescue of three Americans and other hostages on July 2, 2008 is a direct result of military-to-military engagements that began with the development of PR capabilities. It grew from \$5.4 billion in aid from the United States since 2000.³⁶ Less than a year prior, Secretary of Defense Robert Gates saw the Colombian military's progress first-hand during an October 2007 hostage rescue demonstration. It integrated non-threatening PR capabilities such as parachute insertion, overland movement, and helicopter exfiltration; all products of American instruction.³⁷

In summary, PR encompasses the United States government's activities intended to first shape an environment, then capitalize on the operational situation and strategic advantage to best mount a successful rescue of isolated personnel and return those personnel to friendly control. PR is a highly complex function consisting of four simultaneous phases (preparation, planning, execution, adaptation). Military, diplomatic, and civil efforts work together to achieve success during these phases. The military component of PR involves the DOD's responsibility to plan for, prepare to, and then execute the five tasks across the full spectrum of military conflict. PR enhances the ability to respond globally to protect and rescue people wherever and whenever they are at risk of becoming isolated. However, can the potentially high cost of executing this function, as displayed in the rescue of Bat 21, really deny an adversary the ability to manipulate

³⁵ US Joint Personnel Recovery Agency. Operating Concept for Personnel Recovery, V.53-100707 (pre-decisional draft), 41.

³⁶ Cave Damien and Simon Romero, "Bold Colombia Rescue Built on Rebel Group's Disarray", NY Times, 4 July 2008, <http://www.nytimes.com/2008/07/04/world/americas/04rescue.html>.

³⁷ Baldor, Lolita C., "Gates Applauds Colombian Rescue Demo", USA Today, 4 October 2007, http://www.usatoday.com/news/washington/2007-10-04-2422189467_x.htm

a nation or prevent an adversary from gaining intelligence through interrogation of captured personnel? Is this an acceptable reason for committing blood and treasure to PR?³⁸



³⁸ US Air Force. Personnel Recovery Core Function Master Plan 2010-2030, 4

Chapter 2

Why Conduct Personnel Recovery?

PR professionals effectively climbed bureaucratic walls to get the US Government to place strategic emphasis on PR in today's environment. Historical evidence reinforces this effort, as stories of attempts to preserve American lives are rooted in the lore of the Vietnam and Somalia conflicts. Airpower advocates identify with the tactical rescue mission but they often fail to understand its inherent strategic value. To improve understanding, PR professionals effectively organized the function's complexity into a readily grasped visual cycle and documented its value in national and DOD policy. This enabled a whole-of-government approach that allows the United States to use PR as a cornerstone of building capacity with partner nations. Airpower advocates are now equipped with a strategic rescue capability that joins strategic attack, global reach, persistent ISR, and other airpower competencies to counter our adversaries' efforts to influence our way of life.

On 1 February 2011, headlines in newspapers worldwide proclaimed "Dept of State Issues Worldwide Caution for US Citizens Anywhere."³⁹ Americans have always been at risk in war zones and lawless lands, from Iraq and Afghanistan to Somalia. Has our world evolved into a place where Americans are really at risk "anywhere", from the Olympics to sandy beaches? The international security environment continues to change in unpredictable ways, increasing Americans' risk of encountering terrorist action and violence throughout the world. Adversaries target venues, both official and private, ranging from embassies to sporting events to business offices and places of worship. Public transportation has a high potential for attack—buses,

³⁹ The Emergency Email and Wireless Network, "Dept of State Issues Worldwide Caution for US Citizens Anywhere", 1 Feb 11, <http://www.emergencyemail.org/newsemergency/anmviewer.asp?a=878>.

subways, trains, aircraft, and cruise ships have all been the subject of terrorist attention. Confronted by these shadowy dangers, Americans can either attempt to hide within the United States or refuse to give into these threats. Americans choosing the latter course may do so with greater confidence, interacting with the world as beacons of freedom, if they know their country will be there for them when needed. This is just one reason why the US conducts PR. To an even greater degree than most military missions, PR stems from a complex mix of motivations ranging from realist statecraft to moral obligation. This chapter illuminates some of these motivations, linking them with policy that expects a whole-of-government approach to PR across the range of military operations.

A selective look at the long history of US PR operations is revealing. Search and rescue operations during the Vietnam War were a phenomenon peculiar to American involvement. “Few other nations, faced with similar conditions of warfare, would have developed such an extensive rescue capability. Even fewer nations could have afforded it.”⁴⁰ The value the American military placed on human life by risking the loss of rescue forces to rescue fellow aviators stemmed from western philosophies stressing the cohesive nature of society reflected in American religious and social background.⁴¹ Recent actions and statements by the US’ adversaries today reinforce that they seek to exploit our values and social sensitivities but are aware of our capabilities. Al Qaeda in North Africa is offering enormous sums of money to any terrorist group who brings them Westerners, as long as they are not Americans. The primary reason for this position is Al Qaeda’s recognition that the United States shows a clear

⁴⁰ Tilford, Earl H. Jr. *The United States Air Force Search and Rescue in Southeast Asia*, Washington, D.C.: Office of Air Force History, United States Air Force, 1980, 116.

⁴¹ Galdorisi, George and Tom Phillips, *Leave No Man Behind: The Saga of Combat Search and Rescue*, Zenith Press, Minneapolis, MN, 2008, 431.

commitment to recover its personnel using an armed response if necessary.⁴² This commitment is enshrined in the pervasive and oft stated American combat ethos that warriors will never leave a comrade behind. This ethos was perhaps most dramatically illustrated in Colonel Hal Moore's speech to his men prior to clashing with North Vietnamese regulars in the Ia Drang Valley, immortalized in the classic battle study *We Were Soldiers Once...and Young*:

*"We are moving into the Valley of the Shadow of Death where you will watch the back of the man next to you, as he will watch yours, and you won't care what color he is, or by what name he calls God. We are going into battle against a tough and determined enemy. I can't promise you that I will bring you all home alive. But this I swear... when we go into battle, I will be the first to step on the field and I will be the last to step off. And I will leave no one behind... dead or alive. We will all come home together."*⁴³

Both the Soldier's Creed and Airman's Creed reinforce this ethos, stating a soldier will never leave a fallen comrade, and an airman will never leave another airman behind.

Dr Earl Tilford, a noted historian of CSAR in Vietnam, asked in the wake of the famous yet costly rescue of Bat 21, "Was one man's life worth more than the lives of two OV-10 crewmembers, five crewmen in the HH-53, and the crew of the Army Huey chopper that were lost during the rescue operation?"⁴⁴ The object of that rescue effort, Lt Col Iceal Hambleton, asked himself that very question as the preceding chapter illustrated. However, given the chance to rescue one of our own, there are few Americans who would not risk their lives to save a comrade's.

Team members feel a responsibility to the team as a whole rather than to the individual. General S.L.A. Marshall concluded this based on extensive research on World War II soldiers

⁴² Diallo, Tiemoko. *Al Qaida Holding Europeans Taken in Mali – Military*, 29 Jan 2009, www.reuters.com/article/latestCrisis/idUSLT774538.

⁴³ Moore, Harold G. and Joseph L. Galloway. *We Were Soldiers Once, and Young*. . . New York: Random House. 1992.

⁴⁴ Tilford, Earl H. Jr. *The United States Air Force Search and Rescue in Southeast Asia*, Washington, D.C.: Office of Air Force History, United States Air Force, 1980, 118.

and their battlefield behavior. He argued in *Men Against Fire* that “Americans fought simply to survive at the unit level, at most to protect and save their friends on the left and right, not for higher notions of good versus evil.”⁴⁵ Veterans of the Vietnam War noted that their South Vietnamese allies, on the other hand, “had to depend on their own ingenuity at evasion to get them safely back to friendly territory.”⁴⁶ The South Vietnamese did not have the same philosophy about rescue nor did they have the extensive resources available for a dedicated rescue complex.

Service members in Vietnam and other conflicts often spoke movingly about the American attitude towards rescue. The following is what a rescued American wrote about his nation’s culture:

*“The acts described in these pages appear unique in many ways, but they have been repeated throughout our proud history in the countless displays of courage and sacrifice that are the hallmarks of the American patriot.”*⁴⁷

The author is Chief Warrant Officer Michael Durant who wrote about his experience as a captive in Mogadishu, Somalia in 1993. The value placed on a single American life did not change over the two decades since Vietnam. Eighteen Americans died on a fateful day in October during “The Battle for Mogadishu” in which Durant was captured. The Somalis shot down two Blackhawk helicopters attempting to rescue Americans in need, and two Army snipers, Randy Shughart and Gary Gordon, volunteered to attempt a rescue of the downed aircrew against overwhelming odds and paid the ultimate sacrifice. Somali decisions regarding Durant’s captivity were a direct result of their recognition of American rescue capabilities and

⁴⁵ As quoted in Hanson, Victor Davis. *The Soul of Battle: From Ancient Times to the Present Day, How Three Great Liberators Vanquished Tyranny*, New York, The Free Press, 1999, 456.

⁴⁶ Tilford, Earl H. Jr. *The United States Air Force Search and Rescue in Southeast Asia*, Washington, D.C.: Office of Air Force History, United States Air Force, 1980, 117.

⁴⁷ Durant, Michael J. *In the Company of Heroes*, Penguin Group, New York, NY, vii.

understanding of this American cultural trait. In particular, Somali warlord Mohamed Farrah Aidid recognized that he could manipulate American values for his own ends. He prevented the death of Durant because Aidid was aware that he could get more strategically by negotiating for his life than from taking it.⁴⁸

The value Americans place upon human life makes PR a highly complex operation focused on a time sensitive target airpower must recover rather than destroy. Our perceived costs of failure are high. Success and speed go hand in hand, but the complexity of the PR cycle makes it difficult for a Joint Force Commander to reduce rescue response time across an area of operation. Not only must the recovery force be organized, trained, and equipped to respond, but the command and control element is also required to have an efficient PR architecture established. The architecture must facilitate time critical response, thereby complementing the capability of the isolated personnel to assist with their own recovery. The preparation of commanders and staffs, rescue forces, and isolated personnel is then tied to extensive planning, the execution of the rescue mission, and the adaptation of lessons learned in order to further impact mission success. After the rescue of Bat 21, Brigadier General R. G. Cross, Jr., Deputy Director of Air Operations at Military Assistance Command Vietnam commented, "As Airmen or soldiers or sailors we should expect that there are times when as one person, we must be sacrificed for the overall."⁴⁹ Rescue forces turn to national policy to determine when this sacrifice is appropriate, or better yet, when this sacrifice is not appropriate for overall national security.

National Policy

⁴⁸ Bowden, Mark. *Black Hawk Down* New York. Atlantic Monthly Press. 1999, 309-312.

⁴⁹ Tilford, Earl H. Jr. *The United States Air Force Search and Rescue in Southeast Asia*, Washington, D.C.: Office of Air Force History, United States Air Force, 1980, 119.

The national policy of the United States is unequivocal on the subject of the recovery of its personnel.⁵⁰ The United States has placed a significant emphasis on the PR function by developing an Annex 1 to National Security Presidential Directive (NSPD) 12 (Hostage Policy), to include prevention, preparation, and response to isolating events. It recognizes an adversary's desire to weaken national will and threaten international security with events used to fund insurgencies, criminal groups, and terrorist organizations. The increased presence of Americans abroad and the dynamics of irregular warfare require the United States to develop an effective PR infrastructure and a coordinated response to isolating events. These dynamics are what drove the national policy's three strategic objectives for PR: prevention, preparation, and response.⁵¹ Prevention focuses on decreasing the vulnerability of US personnel abroad by leveraging education and training resources. Preparation focuses on the at-risk individuals who need: an understanding of PR processes; development of plans and procedures including knowledge of the risk environment; education and training for how to survive captivity, minimize exploitation, and enable recovery; and either building or leveraging the infrastructure necessary to mount an effective response. Response is simply execution of the preparation for an isolating event. A requirement of response is the strengthening and further integration of existing PR mechanisms to include the post-incident reintegration process.⁵²

The most important aspect of NSPD-12 is that it provides implementation guidance that vectors the whole-of-government approach to PR. Ambassador Charles Ray, Deputy Assistant Secretary of Defense for POW/Missing Personnel Affairs remarked, "The difficulties our

⁵⁰ National Security Policy Directive (NSPD) 12, United States Citizens Held Hostage Abroad, Annex 1 and Appendix A, 4 December 2008 (classified), unclassified information only, 2.

⁵¹ National Security Policy Directive (NSPD) 12, United States Citizens Held Hostage Abroad, Annex 1 and Appendix A, 4 December 2008 (classified), unclassified information only, 2.

⁵² National Security Policy Directive (NSPD) 12, United States Citizens Held Hostage Abroad, Annex 1 and Appendix A, 4 December 2008 (classified), unclassified information only, 2-4.

government encounters in interagency cooperation usually stem from divergent departmental policies and different institutional cultures...How can we really expect cohesion under those circumstances?”⁵³ Annex 1 to NSPD-12 gives the entire USG a common policy and language, guiding every department toward three strategic PR objectives: prevention of, preparation for, and response to isolating events. It contains 68 implementation tasks of which 29 directly involve the DOD. The annex begins with a simple renaming of the Hostage Working Group to the Hostage and Personnel Recovery Working Group (HPRWG). This action institutionalizes PR as a function, incorporating hostage taking and other isolating events. Implementing “prevention” per NSPD-12 Annex 1 guidance includes an evaluation of current personal security, force protection, and PR education and training. Directions for implementing “preparation” identify the need to establish a baseline for all departments and agencies to include prioritizing at-risk locations for PR education/training, defining the need for this education/training, and assessing interoperability of education/training already available within the United States Government. National policy expects improvements to leverage existing education/training programs.⁵⁴ This expectation ties directly to the third objective of “response.” Specifically, policy requires the strengthening and further integration of existing PR response mechanisms with the goal of integrating capabilities into a unified national PR system. For post-incident response, the DOD is unilaterally required to assist other departments and agencies, and partner nations as appropriate, to develop reintegration policies and programs.⁵⁵

⁵³ Ray, Charles A. Remarks to 2009 SERE Specialist Graduation Ceremony, Spokane WA, 12 June 2009.

⁵⁴ National Security Policy Directive (NSPD) 12, United States Citizens Held Hostage Abroad, Annex 1 and Appendix A, 4 December 2008 (classified), unclassified information only, 6.

⁵⁵ National Security Policy Directive (NSPD) 12, United States Citizens Held Hostage Abroad, Annex 1 and Appendix A, 4 December 2008 (classified), unclassified information only, 8-11.

Evidence of the National PR policy is apparent throughout President Obama's National Security Strategy (NSS). It states that America's interests, such as the value of life, are enduring. It also includes: the security of United States citizens, allies and partners; respect for universal values at home and around the world; and an international order that promotes peace, security, and opportunity through cooperation to meet global challenges.⁵⁶ The universal value of saving lives is at the heart of these interests and the use of the military component of PR supports the effective use and integration of American power. This use takes place during prevention of, preparation for, and response to isolating events as specified in defense PR policy.

Defense Policy

Secretary Gates focuses his National Defense Strategy (NDS) on a unified approach to planning and implementing policy extrapolated from the broader national policy. He recognizes that military success alone is not sufficient for achieving national objectives, stating he does not want the DOD to allow important soft power capabilities, often viewed as preparation for and response to isolating events, to atrophy or disappear.⁵⁷ Admiral Mullen's National Military Strategy (NMS) further articulates this position, recognizing the necessity for applying military power in concert with other instruments of statecraft. "In this multi-nodal world, the military's contribution to American leadership must be about more than power – it must be about our approach to exercising power."⁵⁸ Admiral Mullen envisions a military capable of exercising power in a gradational fashion, breaking things and taking lives only when necessary. History has proven the DOD incapable of consistently meeting this intent with respect to rescue capabilities despite the thousands of lives saved by American rescue forces through the end of

⁵⁶ The White House. National Security Strategy. Washington, D.C. Office of the President of the United States. May 2010, 7.

⁵⁷ US Department of Defense. National Defense Strategy, Washington D.C. June 2008, 17.

⁵⁸ US Joint Chiefs of Staff. National Military Strategy. Washington D.C. 2011, 5.

the Vietnam War. Indeed, the Navy disestablished its HC-7 unit in 1975 as the service's only active duty rescue organization, while the Air Force's Air Rescue and Recovery Service (ARRS) reached a status of non-capable in 1986. When the need arose to rescue personnel as part of Operation Desert Storm in 1991, the United States military did not possess a dedicated rescue capability.⁵⁹ A defense policy highlighting the need for PR capabilities prevents the United States from again learning this lesson the hard way.

The Department of Defense placed appropriate emphasis in its PR policies by publishing DOD Directive 3002.01E in 2009. This document provides the overarching guidance for the Department in building PR capacity and developing capabilities to ensure the DOD can provide the military response component of PR identified in national policy. It is DOD policy that:

“Preserving the lives and well-being of U.S. military, DoD civilians, and DoD contractor personnel authorized to accompany the U.S. Armed Forces who are in danger of becoming, or already are, beleaguered, besieged, captured, detained, interned, or otherwise missing or evading capture (hereafter referred to as “isolated”) while participating in U.S.-sponsored activities or missions, is one of the highest priorities of the Department of Defense.”⁶⁰

The DOD also acknowledges that it has an obligation to train, equip, and protect its personnel, prevent their capture and exploitation by adversaries, and reduce the potential for leveraging isolated personnel against US interests. The DOD expects commanders to maintain situational awareness of all personnel during military operations, linking force protection programs and PR as a means of preserving the force.⁶¹ In line with national policy, the DOD will not support

⁵⁹ Galdorisi, George and Tom Phillips, *Leave No Man Behind: The Saga of Combat Search and Rescue*, Zenith Press, Minneapolis, MN, 2008, 465-486.

⁶⁰ US Department of Defense. *Personnel Recovery within the Department of Defense (DODD 3002.01E)*, 16 April 2009, 2.

⁶¹ US Department of Defense. *Personnel Recovery within the Department of Defense (DODD 3002.01E)*, 16 April 2009, 2.

payment of ransom or grant concessions for the return of any DOD personnel, with the exception of honoring compensation obligations from the use of a blood chit.⁶²

Whole-Of-Government

Developing PR capabilities inside DOD is part of the United States equation to account for the strategic value of PR, but something more is required—specifically, an interagency, “whole-of-government” approach. The NSS highlights that in order to foster coordination across the departments and agencies, more effective alignment of resources and improvements in education and training are required.⁶³ Beyond this, President Obama calls for the military to continue strengthening its capacity to partner with foreign states, train and assist security forces, and pursue military-to-military ties.⁶⁴ At the same time, the US will foster economic and financial transactions for mutual economic benefit while intelligence and law enforcement agencies cooperate with other governments to anticipate events, respond to crises, and provide safety and security.⁶⁵ PR plays a major role linking the military and other US agencies in addressing these last few issues. This ranges from defense support to civil authorities within the homeland to humanitarian assistance and disaster relief operations abroad. US military PR capacity is part of the “soft power”⁶⁶ that strengthens the whole-of-government approach to

⁶² US Department of Defense. Personnel Recovery within the Department of Defense (DODD 3002.01E), 16 April 2009, 2. A blood chit is a sheet of material depicting an American flag and statements in several languages explaining that anyone assisting the bearer of the blood chit to safety will be compensated for their assistance upon the return of the isolated personnel and presentation of their claim to an agent of the U.S. Government. US forces (specifically the American Volunteer Group) first used blood chits in China in late 1941.

⁶³ The White House. National Security Strategy. Washington, D.C. Office of the President of the United States. May 2010, 14.

⁶⁴ The White House. National Security Strategy. Washington, D.C. Office of the President of the United States. May 2010, 11

⁶⁵ The White House. National Security Strategy. Washington, D.C. Office of the President of the United States. May 2010, 11.

⁶⁶ The phrase was coined by Joseph Nye of Harvard in *Bound to Lead: The Changing Nature of American Power*, New York: Basic Books, 1990. He further developed the concept in *Soft Power: The Means to Success in World Politics*, New York: Public Affairs, 2004.

future conflict and crises by enabling the US to gain what it wants through cooperation and attraction as opposed to hard power's coercion and inducement.

PR also supports a whole-of-government approach to deterrence. A robust deterrence policy blends economic, diplomatic, and military tools to influence the behavior of potential adversaries.⁶⁷ Traditional perspectives⁶⁸ recognize how threatening the use of force can be just as effective as applying force in order to deny an adversary the ability to achieve an objective contrary to American desires. Deterrence can be achieved by developing a closer relationship with an adversary to the point that conflict is no longer desirable. Combining PR capability with economic and diplomatic tools in a non-threatening manner will provide another state with lifesaving opportunities they may have never considered. This requires another state to rely on the United States' military power for PR at the onset of disaster relief preparation. In the event of an actual crisis, a state will explicitly call for the United States to assist. The Japanese disaster in March 2011 is a perfect example of using PR to shore up international relations. Since Japan and the United States are democracies and allies, the possibility of going to war remains low. However, friendly states still occasionally pursue conflicting objectives that cause tension that, if not defused through existing linkages, might escalate into counterproductive courses of action. When the earthquake and subsequent tsunami struck Northern Japan, the United States responded with all available rescue forces at the same time the Japanese openly requested American help. Neither of these actions would have occurred without prior effort to integrate both state's lifesaving capabilities and avoid threatening force posturing. Once the populace

⁶⁷ US Joint Chiefs of Staff. National Military Strategy. Washington D.C. 2011, 8.

⁶⁸ Many theorists approach deterrence with a perspective on nuclear weapons and the use of lethal force. Bernard Brodie expounds that maximum deterrence is created by the ability to target enemy society/cities while protecting our own supported by a decision-maker's credibility. Lawrence Freedman sees deterrence as convincing an adversary not to take specific actions based on a legitimate threat of reprisal if they do. Thomas Schelling sees deterrence as a bargaining strategy but you don't have to expend power, that the threat of hurt is better.

recognizes this capability exists, it will expect the same level of coverage from its own government in the future.

Humanitarian assistance also has another key benefit—saving a life can make friends (plural) for life. Saving one life affects that person’s family, friends, acquaintances, and even their local government. The ability to save lives has an inordinately positive impact on “the hearts and minds” of the populace. This can happen even in unlikely places, as with the effect of US rescue aid following the devastating December 2003 earthquake in Iran.⁶⁹ “We started showing them a side of American power that wasn’t perceived as frightening, monolithic, or arrogant. That is what rescue can bring to the table on behalf of the Air Force.”⁷⁰ Further, the increased confidence and dependence on the government to protect and save life instills a mutual respect and reduces the breeding grounds for insurgency and terrorism. This was experienced first-hand by the author during a 2006 rotation in Afghanistan. He launched on a rescue mission responding to a call to help a young Afghan girl injured during an engagement between coalition and insurgents. Rescue forces evacuated the critically injured girl to an American hospital with her father in escort. The rescue force visited the girl and her father a couple days later. The results were two-fold: her life was saved and her father declared, “I love America.”

The DOD is a key actor in the implementation of the President’s guidance. DOD PR policy directs the department to develop and refine its PR capabilities with the development of innovative means, concepts, and organizations.⁷¹ The desire is for flexibility and speed via the use of all government assets in response to isolating events. The capabilities, concepts, and

⁶⁹ The 81-member USAID/DART team arrived in country via C-17 and C-130 aircraft on December 30 and all departed by January 14. While in Bam, the USAID/DART conducted needs and structural assessments and its field hospital treated 727 patients, 30 percent of whom had earthquake-related injuries. <http://www.usaid.gov/iran/>

⁷⁰ Dipaolo, Marc C. *A Rescue Force for the World*, Air and Space Power Journal, Fall 2007, 7.

⁷¹ US Department of Defense. Personnel Recovery within the Department of Defense (DODD 3002.01E), 16 April 2009, 2-11.

organizations will be tailorable to the demands of our complex international environment, which often features asymmetric challenges. The Secretary of Defense therefore requires an expanding understanding of jointness that seamlessly combines civil and military capabilities with those from other agencies. Secretary Gates specifically wants to consider realigning DOD structures, and interagency planning and response efforts, to better address risk and meet needs.⁷² As addressed in the National PR Policy, the rescue and return of isolated Americans is imperative regardless of whether it is accomplished by the diplomatic, military, or civil component of PR.

Building Partnership Capacity

President Obama highlights combating violent extremism, stopping the spread of nuclear weapons, forging cooperative solutions to the threat of climate change, armed conflict, and pandemic disease as major national interests that cross borders.⁷³ A cooperative solution with partner nations in order to save lives is a goodwill gesture that can aid development of lasting partnerships or future alliances. “Each life saved communicates our values instead of the enemy’s values, and strengthens faith in our nation and in those states who partner with us.”⁷⁴ These states will become our closest allies upon whom the United States will depend in addressing global and regional security crises affecting other common interests. As the NSS notes, “Where governments are incapable of meeting their citizens’ basic needs and fulfilling their responsibilities to provide security within their borders, the consequences are often global and may directly threaten the American people.”⁷⁵ Humanitarian crises are a perfect example of events that, left unaddressed, will overwhelm a government and influence the international

⁷² US Department of Defense. National Defense Strategy, Washington D.C. June 2008, 17-18.

⁷³ The White House. National Security Strategy. Washington, D.C. Office of the President of the United States. May 2010, 3.

⁷⁴ Ray, Charles A. Remarks to 2009 SERE Specialist Graduation Ceremony, Spokane WA, 12 June 2009.

⁷⁵ The White House. National Security Strategy. Washington, D.C. Office of the President of the United States. May 2010, 26.

community. The NSS specifies the need to foster long-term recovery from these events. Leaving American agencies deployed in support of a humanitarian crisis without a reasonable expectation of their relief by the state receiving the support does not accomplish this objective. PR can be used as a theater security engagement tool to assist in this process.⁷⁶

The 2011 National Military Strategy describes a multi-nodal world characterized more by interest-driven coalitions based on diplomatic, military, and economic power vice security competition between opposing forces. Much of this transition is the result of a growing global population and the demand it places on Earth's resources. "The uncertain impact of global climate change combined with increased population centers in or near coastal environments may challenge the ability of weak or developing states to respond to natural disasters."⁷⁷ The NMS has dedicated an entire section to strengthening international and regional security through theater security cooperation and humanitarian assistance. The goal is to develop international interoperability before crises occur, maximizing collaboration before lives hang in the balance. The need to save lives regardless of their nationality can drive erstwhile adversaries to build trust and confidence during humanitarian assistance and disaster relief activities. These efforts will gain and maintain access to an otherwise closed nation, developing a relationship to support broader national interests.⁷⁸

The increased probability of Americans becoming isolated around the globe and the worldwide impact of natural and/or man-made disasters is why Secretary Gates expects the DOD to work with allies to improve military capabilities with emphasis on training, education, and the

⁷⁶ The White House. National Security Strategy. Washington, D.C. Office of the President of the United States. May 2010, 41.

⁷⁷ US Joint Chiefs of Staff. National Military Strategy. Washington D.C. 2011, 2.

⁷⁸ US Joint Chiefs of Staff. National Military Strategy. Washington D.C. 2011, 15.

building of partner capacity when appropriate.⁷⁹ Admiral Mullen adds in the NMS the expectation that partnerships can withstand political upheavals or even disruption.⁸⁰ The military component of PR is the avenue to meet these expectations. PR is the perfect example of the US armed forces developing foreign capabilities as a critical component of global engagements with collective security benefits. A global response to saving lives requires investment in regional capabilities. “Regional organizations can be particularly effective at mobilizing and legitimating cooperation among countries closest to the problem.”⁸¹ The military component of PR can partially realize President Obama’s expectation for the United States to enhance regional capabilities by evolving a division of labor among local, national, and global institutions. PR does not exist as a completely military function, but the military does provide a level of expertise the nation can continue calling upon in pursuit of America’s interests.

What Does PR Achieve?

National and defense policies do not stipulate when the value of human life is not worth the cost in resources expended to rescue it. However, these policies do provide for a whole-of-government and partner-nation organized approach to prevent or hinder adversaries from achieving four key objectives:

1. Gaining strategic advantage from a tactical event in order to weaken national will and increase risks to a free/open society.
2. Influencing international partners to withdraw from U.S.-led coalitions and withhold support of U.S. policy.

⁷⁹ US Department of Defense. National Defense Strategy, Washington D.C. June 2008, 16.

⁸⁰ US Joint Chiefs of Staff. National Military Strategy. Washington D.C. 2011, 6.

⁸¹ The White House. National Security Strategy. Washington, D.C. Office of the President of the United States. May 2010, 46.

3. Degrading America's international image by increasing an adversary's strength and operational capability.
4. Impacting operational manpower availability due to loss of life, combat ineffectiveness from injury, removal of the will to fight or refusal to accept tactical risk.⁸²

PR can prevent our adversaries from having a significant impact on national security. The NDS says the military will work with other U.S. Departments and Agencies, state and local governments, partners and allies, and international and multilateral organizations to achieve national objectives. "A whole-of-government approach is only possible when every government department and agency understands the core competencies, roles, missions, and capabilities of its partners and works together to achieve common goals."⁸³ PR is a common goal for the United States and its allies. This is why the DOD has recently paid increased attention to the function of PR by designating a lead agent.

In summary, PR is a DOD function first of all because America values human life, and loyalty to comrades is the bedrock of military culture. It is easy to understand the emphasis military members at the tactical level place on life, apparent in countless Medal of Honor citations and other stories of courage. Colonel Hambleton completed his AF career and enjoyed a long retirement, and CWO Durant is alive today because others gave their lives to save them. They join the long list of survivors who would have given their lives for another team member if placed in the same situation. For those not involved with rescue missions, there are questions about a policy directing a potential loss of life in order to rescue another. Beyond these noble motivations, the United States conducts PR because it has strategic value beyond the tactical

⁸² Hecht, Glen H. Colonel, USAF. Comments taken during the development of the Air Force PR Operational Concept in 2009. Colonel Hecht was Chief, ACC Personnel Recovery Division following assignments to DPMO and JPRA as well as operational and tactical assignments flying the HH-60.

⁸³ US Department of Defense. National Defense Strategy, Washington D.C. June 2008, 17.

level. The United States faces a threat from adversaries who weaken national will and jeopardize international security by exploiting captured Americans and allied personnel. These adversaries run the gamut from insurgents to criminal groups to terrorists. It has become such a security concern that the United States has established policy for the prevention of, preparation for, and response to isolating events. Defense policy recognizes PR as one of the highest priorities for the department. “Any one prisoner, military or civilian, can be that dreaded publicity nightmare, beheaded by hooded fanatics bereft of humanity.”⁸⁴ Through a whole-of-government and building partnership capacity approach, the United States conducts PR to stop or mitigate adversary attempts to gain strategic advantage, influence international partners, degrade America’s international image, and impact operational resources.



⁸⁴ Galdorisi, George and Tom Phillips, *Leave No Man Behind: The Saga of Combat Search and Rescue*, Zenith Press, Minneapolis, MN, 2008, 527.

Chapter 3

How Does the Military Conduct Personnel Recovery?

The preceding chapters have demonstrated that the US defines PR as the sum of military, diplomatic, and civilian efforts to recover and reintegrate isolated personnel. While the Department of State and individual civilians demonstrate a capacity to recover isolated personnel, the Department of Defense makes extensive efforts to conduct the full spectrum of PR: preparation, planning, execution, and adaptation. Military activities around the world require this level of exertion because military members, DOD civilians, DOD contractors, allies, partners, and other personnel designated by the President and Secretary of Defense confront isolating events on a daily basis. The DOD further emphasizes PR in policy designating it as a function common to all services, with global PR specific to the Air Force. PR is a cornerstone for Admiral Mullen's vision in the NMS: "a Joint Force that provides military capability to defend our nation and allies, and to advance broader peace, security, and prosperity."⁸⁵ The US achieves these objectives only with the recovery of isolated personnel and their subsequent return with honor. PR duties and responsibilities begin at the top of the department.

OSD and DOD

The DOD identifies the Under Secretary of Defense for Policy (USD(P)) as the office responsible for PR strategy, policy development, and operational oversight through the Deputy Assistant Secretary of Defense for Prisoner of War/Missing Personnel Affairs (DASD(POW/MPA)). The DASD(POW/MPA) is the DOD lead for the development of national PR policy and strategies to include education and training. In addition, this office defines the

⁸⁵ US Joint Chiefs of Staff. National Military Strategy. Washington D.C. 2011, i.

DOD responsibilities for preparing forces to conduct PR in all operating environments and assesses the DOD's ability to conduct PR operations, recommending actions to enhance PR capabilities.⁸⁶ Guidance tasks all DOD components to ensure PR education and training programs prepare personnel for actions across the range of military operations and in support of civil efforts according to the National Search and Rescue Plan. These components are required to plan and execute PR operations with interagency partners, allies and host nations. This task ensures component personnel organize, train, and equip to support PR requirements as identified by the combatant commanders.⁸⁷

The significance of PR has become more apparent as the function begins to permeate DOD directives outside the PR designated area. For example, DOD Directive 5100.1 defines the functions of the DOD and its major components. The functions of the DOD are to “support and defend the Constitution of the United States against all enemies, foreign and domestic; ensure, by timely and effective military action, the security of the United States, its possessions, and areas vital to its interest; and uphold and advance the national policies and interests of the United States.”⁸⁸ The functions of major DOD components derive from these. They are in support of the core mission areas of the armed forces, broad DOD military operations and activities required to achieve strategic objectives identified in the National Security Strategy and the National Defense Strategy. On 21 December 2010, guidance highlighted PR as a core mission area of the armed forces for the first time.

⁸⁶ US Department of Defense. Personnel Recovery within the Department of Defense (DODD 3002.01E), 16 April 2009, 9.

⁸⁷ US Department of Defense. Personnel Recovery within the Department of Defense (DODD 3002.01E), 16 April 2009, 11.

⁸⁸ US Department of Defense. Functions of the Department of Defense and its Major Components (DODD 5100.1), 21 December 2010, 1.

On this date, Secretary Gates signed DODD 5100.1, tasking the active and reserve components of the Army, Navy, Air Force, Marine Corps and Coast Guard (when transferred to the Department of the Navy) to provide conventional, strategic, and SOF to conduct the range of operations as defined by the President and Secretary of Defense. More specifically, the military services are now required to organize, train, and equip forces to contribute unique service capabilities to the joint force commander (JFC) to conduct PR operations across all domains in coordination with United States Special Operations Command (USSOCOM) and other Combatant Commands, the Military Services, and other DOD Components. The DOD then directs the Air Force to organize, train, and equip for the specific function of global PR.⁸⁹ The coordination aspect of this tasking provides the services with an opportunity for a synergistic approach to PR instead of creating redundant capabilities.

Joint Force Commander

The DOD Directive for PR directs the Commanders of the Combatant Commands to plan and conduct PR within their areas of responsibility across the spectrum of operational activity. Included in this direction is the requirement to establish command PR policies, plans, programs, and procedures for the preparation of all assigned personnel and to build the capabilities necessary for execution of the five basic tasks. This may be accomplished through a theater security cooperation plan to increase the DOD's ability to conduct PR through partner nation relationships.⁹⁰

Joint Publication (JP) 3-50, Personnel Recovery, 5 January 2007, provides further direction in addition to the DOD directive. It is authoritative in nature and therefore followed

⁸⁹ US Department of Defense. Functions of the Department of Defense and its Major Components (DODD 5100.1), 21 December 2010, 28.

⁹⁰ US Department of Defense. Personnel Recovery within the Department of Defense (DODD 3002.01E), 16 April 2009, 16-17.

except when judgment of the commander dictates otherwise. It takes precedence when its contents conflict with service publications. It specifically states it will not restrict the authority of the JFC from organizing the force and executing the PR mission. However, it does not remove the JFC from the responsibility to recover and reintegrate isolated personnel within his designated area of operation. This publication explains in detail how preparation, planning, execution, and adaptation functions comprise the PR system. Therefore, specific service capabilities are required to a certain level while a single service provides an opportunity to organize, train, and equip PR forces specifically for the execution phase. Finally, it notes that if a PR capability does not exist, JFCs must either assume or mitigate the risk, or delay operations until that capability is established.⁹¹

In a January 2009 statement to the Senate, the Secretary of Defense highlighted multiple areas where a Joint Force Commander must focus operations in support of national security interests. Specifically, he stated “more than forty nations, hundreds of NGOs, universities, development banks, the United Nations, the European Union, NATO, and more” are involved in Afghanistan. He goes on to explain how persistent International Security Assistance Force (ISAF) shortfalls levy further burdens upon American forces. The Secretary sums up the status of military forces by stating, “The US military must be able to dissuade, deter, and if necessary, respond to challenges across the spectrum – including the armed forces of other nations.”⁹² This burden strikes deeply within the Rescue community, as the expectation is that Americans will respond to calls for help from any of the organizations listed by Secretary Gates.

The concerns over this mission resonate through DOD from Secretary Gates to Ambassador Ray. In “Defining Lines of Authority,” Ambassador Charles Ray, Deputy Assistant

⁹¹ US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007.

⁹² Gates, Robert M. "Challenges Facing the Department of Defense." 27 January 2009.

Secretary of Defense for POW/Missing Personnel Affairs (DASD(POW/MPA)), references a presidential letter outlining the authority of ambassadors and combatant commanders over US government personnel. This letter designates the ambassador or Chief of Mission as the personal representative of the president with full authority for the direction, coordination and supervision of all US government executive branch employees except those under a combatant commander.⁹³ A combatant commander designates a JFC with these duties and responsibilities for a specific area of operation. Service components present the JFC with multiple capabilities from which to build his PR architecture.

Service Components

Army. According to Joint Publication 3-50, the Army's PR philosophy is one of leadership and accountability, emphasizing not breaking faith with comrades. It comprises primarily the Soldier's Creed, directed responsibilities, and practical considerations. Army component commanders are responsible for PR within their operational area unless directed otherwise by the JFC. The Army uses four principal methods when planning and executing military recoveries: (1) immediate recovery by forces directly observing the isolating event, (2) deliberate recovery conducted by Army forces when an incident is reported and an immediate recovery is not feasible or was not successful, (3) external support recovery or the support provided by other entities to the Army, and (4) unassisted recovery comprised of actions taken by an IP to affect his own recovery without assistance.

Not only Army combat forces possess PR capabilities. Combat support (CS) and combat service support (CSS) forces are located throughout the Army's area of operations and can provide a variety of support including recovery within their local areas, support to recovery

⁹³ Ray, Charles A. "Defining Lines of Authority." *Armed Forces Journal*, February 2009.

forces such as security, medical, or providing command and control (C2) for recovery units/forces. Employment of units/forces is based upon an evaluation of Mission, Enemy, Time, Terrain, Troops and Civilians (METT-TC) factors. The commander designates or dedicates these units and forces to conduct PR functions as required.⁹⁴

Navy. According to Joint Publication 3-50, “Navy units are tasked and trained to execute a full spectrum of PR missions, including over water recovery, underwater recovery, and over land recovery. For isolated personnel located in low or medium anti-air threat areas, recoveries are assigned to units specialized in CSAR. Traditionally, CSAR assets have been trained and equipped to rescue forces most likely to be isolated during combat, including downed aviators and distressed SOF.”⁹⁵ The Navy maintains a variety of helicopters of different sizes and capabilities. Only specific helicopter squadrons train and equip to operate in hostile overland environments. Organic battle group CSAR assets consist of selected CSAR-trained crews within each carrier-based helicopter antisubmarine (HS) squadron or helicopter sea combat (HSC) squadron. The Navy position is that if there are no designated joint CSAR assets, organic assets within the carrier strike group will be used with priority placed on embarked HS/HSC helicopters, then embarked helicopter strike maritime squadron helicopters (over water only), and other helicopter (over water only).

Given this multitude of available assets to execute a PR response, the Navy expects there will be forces able to suppress adversary defenses effectively in small areas for short periods to facilitate recovery. However, “recovery of personnel inland requires extensive planning to circumvent air defense and surface threats, localize and authenticate isolated personnel, and

⁹⁴ US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007.

⁹⁵ US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007.

coordinate support forces such as tactical aircraft, NSFS, shore-based artillery and ground forces, and SOF.”⁹⁶

Marine Corps. The Marine Corps lives by the adage that “Marines Take Care of Their Own.”⁹⁷ The USMC position on the PR mission is that PR is an implicit requirement during all operations. The Marine air-ground task force (MAGTF) possesses the ability to support PR operations. The service expects the MAGTF commander to consider dedicating capabilities (or assets) from the force to perform PR. However, the MAGTF also considers a concept known as tactical recovery of aircraft and personnel (TRAP) as a self-supporting recovery capability embedded within the task force. Aviation, ground, or waterborne assets, or any combination of these, may conduct TRAP. The TRAP mission differs from CSAR in that it usually does not involve extended visual search procedures to locate isolated personnel in higher threat environments. The Marine Corps considers TRAP assets for employment in support of non-PR missions later retasked to perform a recovery as it becomes necessary. “The TRAP concept emphasizes detailed planning and the use of assigned and briefed personnel for the specific purpose of recovering personnel and/or aircraft. The MAGTF commander may utilize the TRAP force when an immediate recovery is impractical, or the tactical situation necessitates the additional capabilities a TRAP force provides. Confirmation of a survivor(s) status and location is typically required prior to committing a force to a recovery.”⁹⁸ It is very important to note that the Marine Corps position on dedicating forces to PR is that it is not required and PR missions should not supersede assigned mission objectives and resource requirements, but should be accorded a priority level of importance when appropriate.

⁹⁶ US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007.

⁹⁷ US Marine Corps. Policy for Personnel Recovery and Repatriation (MCO, 3460.2), 2 December 2002, 2.

⁹⁸ US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007.

Coast Guard. In general, the Coast Guard lists all cutters, aircraft, and boats as potential PR resources. USCG cutters range from high and medium endurance cutters, which operate offshore for extended periods of time, to coastal patrol and utility boats capable of operating in coastal and local waters for shorter durations. USCG aircraft include fixed-wing aircraft capable of extended long-range PR, and rotary-wing assets for medium-range and short-range operations. Rotary-wing assets also possess hoisting capability and a deployable rescue swimmer.⁹⁹ Following a declaration of war, the USCG will provide units for PR as required. Those unit commanders attach to the JFC-designated component commander for the duration of the joint recovery operation. The PR role of the USCG is an extension of its SAR mission.

Special Operations Forces. According to Joint Publication 3-50, SOF forces openly highlight expectations for their involvement as part of the JFC's PR architecture. Special Operations are prepared to provide JFCs with an extremely flexible force for recovery missions the JFC believes they are best suited to perform. However, special operations may not necessarily be best for such missions because SOF embrace PR capability as part of their core tasks rather than organize, train, and equip for PR missions alone. When specifically tasked, SOF may perform PR for other members of the joint force. According to joint doctrine, "it is important for commanders to be aware, however, that unlike some other joint force components, SOF do not maintain dedicated PR forces. Since PR taskings often involve forces placed on alert status awaiting mission execution orders, such taskings would be at the expense of SOF's ability to perform their core tasks. Therefore, the greatest utility of SOF to the conduct of PR is in the conduct of SOF recovery operations and unconventional assisted recovery."¹⁰⁰ Given this position, SOF expects to be called upon to provide the JFC with PR response as part of their

⁹⁹ US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007.

¹⁰⁰ US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007.

three core tasks — direct action, unconventional warfare, and counterterrorism — activities that provide the JFC unique capabilities to accomplish recovery operations that are outside the capability of other forces. This specifically focuses on the recovery task of PR execution.

Air Force. According to Joint Publication 3-50, the USAF organizes, trains, and equips dedicated PR staffs, fixed and vertical lift airborne assets, and ground recovery forces. The unique makeup of USAF rescue squadrons and other units provide JFCs with a small-footprint package of efficient, full-spectrum PR capability across the range of military operations. USAF assets which aid in the execution of PR include robust C2 networks, well-trained JPRC/PRCC personnel, trained on-scene commanders, close air support, dedicated rescue aircraft, dedicated rescue ground teams, and career

Survival, Evasion, Assistance, and Escape (SERE) specialists dedicated to the preparation and reintegration of isolated personnel.

While all services provide capabilities for the PR function, only the Air Force has dedicated forces to conduct PR operations as a primary mission.¹⁰¹ These forces are



HH-60

Function: Personnel Recovery

Task: Recovery Vehicle

Crew: (2)Pilots, Navigator, Flight Engineer, Aerial Gunner

Armament: (2) 7.62mm or .50cal machineguns

Speed: 184 mph

Range: 504 miles

Initial Operating Capability: 1982

¹⁰¹ Line drawing graphics created by the author with data from the AF fact sheets at <http://www.af.mil/information/factsheets> and ACC/A8 Guardian Angel briefing.

often referred to as the Rescue Triad: vertical lift aircraft, fixed wing aircraft and recovery teams. The vertical lift aircraft are utilized for day/night all-weather long-range operations at low levels into hostile environments. Multi-ship formations generally comprise a recovery response but these aircraft may take a single-ship approach based on the situation. In addition, vertical-lift aircraft employ as part of a composite force, embedded in a large strike package often referred to as a CSAR task force. The HH-60G is the premier Air Force vertical-lift aircraft. However, the Air Force does recognize the technological advances of tilt-rotor aircraft, adding this new capability to future options for recovery aircraft in AFDD 3-50.¹⁰²

HC-130



Function: Personnel Recovery
Task: Fixed-Wing Rescue Aircraft
Crew: (2)Pilots, Navigator, Flight Engineer, Airborne Communications Specialist, (2)Loadmasters
Payload: 30,000 pounds
Speed: 289 mph
Range: 4,000+ miles
Initial Operating Capability: 1964

The fixed-wing aircraft perform day/night all-weather long-range PR operations to include air-refueling helicopters and airdropping or airlanding recovery teams and equipment to assist or recover isolated personnel. The HC-130P is the premier Air Force fixed-wing rescue aircraft, offering an expanded

¹⁰² US Air Force. Personnel Recovery Operations (AFDD 3-50.), 1 June 2005, 13.

communications capability that makes it a natural command and control or communications relay platform. This aircraft expedites the return of isolated personnel to friendly control following the IP's transfer from the vertical-lift aircraft.¹⁰³

The Secretary of the Air Force directed the creation of the Combat Rescue Officer (CRO) career field in 2000 to provide officer level leadership and advocacy for Pararescuemen (PJ) and SERE Specialists, as well as provide a source of PR subject matter expertise to combatant commanders and service staffs.¹⁰⁴ In expanding these

expectations, the Air Force created Guardian Angel (GA)

in 2003 as the Air Force's newest weapon system¹⁰⁵

dedicated to providing recovery teams to the PR function. GA is a family of eleven systems, equipment that is employed by CROs, PJs, and SERE Specialists. GA is the ground component

Guardian Angel



Function: Personnel Recovery

Task: Recovery Teams

Crew: (2)Combat Rescue Officers,
(9)Pararescuemen, SERE Specialist

Equipment: Precision Aerial Insertion,
Personal Protection, Medical, Visual
Augmentation, Force Application,
Technical Rescue, Ground Mobility,
Maritime Rescue, Information
Management, SERE Training

Initial Operating Capability: 2003

¹⁰³ US Air Force. Personnel Recovery Operations (AFDD 3-50.), 1 June 2005, 13.

¹⁰⁴ Institute for Defense Analysis. Interagency National PR Architecture: Final Report, July 2004, D-25.

¹⁰⁵ Weapon system status aligned total force capabilities to better meet warfighting commander needs by requiring major commands to program for activation of CRO-led rescue squadrons, identify shortfalls/offsets through the AF corporate process, establish an operations and maintenance funding baseline, and allow for a lead command to perform acquisition tasks and item management.

of the Air Force's dedicated PR capabilities. The Air Force designed this weapon system to assist specifically with the preparation, planning, and execution functions of PR. On one hand, CROs and SERE Specialists provide specific expertise for preparation and the report, locate, support, and reintegrate execution tasks. On the other hand, CROs and PJs provide the critical air to ground link between airborne rescue platforms and isolated personnel.¹⁰⁶

Higher Expectations for the USAF

Department of Defense Directive 2310.2, Personnel Recovery, tasks the Air Force to take an increased PR role. It provides the foundation for building a PR capability within the DOD and strengthens the rationale for answering the research question: "How should the Air Force, the only service to have global PR as one of its core functions, use its dedicated forces to fill gaps within joint PR?" Specifically, DODD 2310.2 assigns the OSD with PR policy, control, and oversight, the Chairman of the Joint Chiefs of Staff (CJCS) with operational implementation, and the Combatant Commands with PR planning and execution. Secretaries of the Military Departments and the USSOCOM Commander are responsible for meeting the requirements of the Geographic Combatant Commands. In addition to the duties and responsibilities associated with every service, the DOD tasks the Air Force to provide the administrative support of the JPRA.¹⁰⁷ However, DODD 2310.2, published in 2000, predates many of the characteristics that define today's security environment much less those of the future. Since then, there have been multiple discussions and additional documents recognizing a higher expectation for the Air Force with respect to PR.

Joint Publication (JP) 3-50, Personnel Recovery, 5 January 2007, builds on DODD 5100.1 and 2310.2 and highlights how the USAF is the only service to have a dedicated PR staff,

¹⁰⁶ US Air Force. Personnel Recovery Operations (AFDD 3-50.), 1 June 2005, 13-14.

¹⁰⁷ US Department of Defense. Personnel Recovery (DODD 2310.2), 22 December 2000.

fixed-wing/vertical lift airborne assets, and ground recovery force.¹⁰⁸ However, rescue visionaries wrote in *Air and Space Power Journal* in 2007, “Air Force rescue has no intellectual underpinning and no common theoretical reference point.”¹⁰⁹ With the USAF decision to include PR as a core function on par with Air Superiority in 2009 came the creation of a Personnel Recovery Functional Concept and Core Function Master Plan. These documents are the reference points to detail how the Air Force develops, organizes, and sustains a highly skilled and multi-functional collection of operational capabilities designed and integrated with others to rescue anyone, anywhere, anytime.¹¹⁰ The Air Force recognizes these increased expectations when it says “Air Force philosophy is based on the assumption that a dedicated force must be prepared to recover any isolated personnel anytime, anyplace.”¹¹¹ The Air Force has adapted its Rescue forces to mitigate operational and political costs associated with the capture of isolated personnel by American adversaries. When coupled with the traditional American regard for human life, these adjustments allow the Air Force to honor the sacred trust bestowed upon a government by its people never to take those who serve for granted. The Core Function Master Plan establishes a USAF PR vision out to 2030. It begins by recognizing multiple organizations with roles and responsibilities associated with this function. They include operational commanders and their staffs, C2 structures, supporting assets, interagency/international networks, and Rescue forces. The Air Force then specifically addresses two major areas the service will make an effort to address: preparation and recovery of isolated personnel. It will leverage new technology with refined training and tactics to locate and identify personnel

¹⁰⁸ US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007.

¹⁰⁹ DiPaolo, Marc C. et al. “A Rescue Force for the World: Adapting Airpower to the Long War.” *Air and Space Power Journal*, Fall 21. No. 3 (Autumn 2007).

¹¹⁰ US Air Force. Personnel Recovery Core Function Functional Concept 2011-2031 V5, 24 February 2011.

¹¹¹ US Air Force. Personnel Recovery Operational Concept, 3 September 2009, i-iii.

quicker. It will equip at-risk personnel with both realistic training and devices to facilitate a quicker location. Finally, every PR weapon system will be included when considering sustainment and modernization efforts.¹¹²

Secretary of Defense Robert Gates highlights the need for a single service to perform a single mission within the military when he states, “While the military’s operations have become very joint – and impressively so – budget and procurement decisions remain overwhelmingly service-centric. To address a given risk, we may have to invest more in the future-oriented programs of one service and less in that of another service – particularly when both programs were conceived with the same threat in mind.” The Secretary lists the challenge we face as how to institutionalize the irregular capabilities that have been, for the most part, ad hoc.¹¹³ In yet another speech by Secretary Gates on 6 April 2009 while providing a budget press briefing, he notes the importance of Rescue and the internal conflict about how the department should organize, train, and equip to provide this capability for the JFC. Secretary Gates recommended the termination of the Air Force Combat Search and Rescue X (CSAR-X) helicopter program stating, “This program has a troubled acquisition history and raises the fundamental question of whether this important mission can only be accomplished by yet another single-service solution with single-purpose aircraft. We will take a fresh look at the requirement behind this program and develop a more sustainable approach.” This sustainable approach speculates the acquisition of more HH-60 helicopters along with the continued acquisition of the HC-130J and growth of the Guardian Angel weapon system as the dedicated single-service solution as the answer to the secretary’s question.¹¹⁴

¹¹² US Air Force. Personnel Recovery Core Function Master Plan, 2010-2030, 10.

¹¹³ Gates, Robert M. "Challenges Facing the Department of Defense." 27 January 2009.

¹¹⁴ Gates, Robert M. "Budget Press Briefing." 6 April 2009.

General Norton Schwartz, Chief of Staff of the USAF (CSAF), sums up the Air Force position when it comes to providing assets to the JFC, “The bottom line is that the USAF is ‘all-in’. Wherever it is, whatever’s needed, and whatever it takes.”¹¹⁵ Providing the only dedicated Rescue force to the JFC and allowing other services to focus assets toward other mission areas is exactly what the CSAF expects. On 27 August 2008, the Air Force Strategic Off-Site approved the inclusion of PR as a core function equivalent to Air Superiority or Rapid Global Mobility as listed in Department of Defense Directive 5100.1, Functions of the Department of Defense and Its Major Components. In addition, global Combat Search and Rescue (CSAR) and Civil Search and Rescue were added to the list of specific Air Force operational capabilities along with air interdiction and global precision attack. Therefore, this document becomes the cornerstone for the Air Force to provide a global PR capability to the joint community.¹¹⁶

Air Force Policy Directive 10-30, Personnel Recovery, sets the Air Force position for the service’s approach to PR, stating, “The Air Force shall establish a global Air Force PR capability.”¹¹⁷ It goes on to say it will have a well-equipped, fully-manned, and dedicated PR force. Its expectation for all Air Force personnel to be trained, prepared and equipped for potential isolation and recovery directly supports NSPD PR policy. Air Force Doctrine Document (AFDD) 3-50, Personnel Recovery Operations, 1 June 2005, provides the evidence to support a JFC’s decision to task the Service’s PR forces with primary PR capability within the area of responsibility (AOR). This document explains the transition of USAF philosophy on PR from the rescue of aircrews to the recovery of any isolated personnel. It explains how the USAF

¹¹⁵ Schwartz, General Norton, interview by Marina Malenic. *Air Force Chief Signals Major Cultural Shift Within The Service*, 12 February 2009.

¹¹⁶ US Department of Defense. Functions of the Department of Defense and its Major Components (DODD 5100.1), 21 December 2010.

¹¹⁷ US Air Force. Personnel Recovery (AFPD, 10-30), 22 December, 2006, 2.

organizes, trains, and equips unique forces that focus specifically on PR operations and emphasizes that dedicated USAF PR forces must be prepared to recover any isolated personnel anytime, anywhere. The result is a dedicated PR force available for a JFC's entire AOR.¹¹⁸

In summary, the military effort for PR is the most robust approach to addressing the President's concerns about prevention of, preparation for, and response to isolating events. The military effort also spans the complete spectrum of PR, from preparation to adaptation with multi-service approaches to the five basic tasks of PR. The Department of Defense has successfully provided guidance for the support of military members, DOD civilians, DOD contractors, allies, partners, and other personnel designated by the President who become isolated. The Joint Force Commander responsible for the area where these personnel are isolated is provided with multiple options from each service, including the Coast Guard. While all these entities perform PR, there is a higher expectation for the Air Force, as the only service tasked to provide Global PR operations. Despite this commendable level of military effort, numerous studies have identified gaps in the DOD approach to PR.

¹¹⁸ US Air Force. Personnel Recovery Operations (AFDD 3-50), 1 June 2005.

Chapter 4

What are the Gaps in the DOD Approach to Personnel Recovery?

The capture of an American is an event historically recognized as unfortunate but not significant to national security. Today's security environment renders that viewpoint obsolete. This is why the United States places a high priority on the PR function. Numerous studies recognize the impact of an isolating event on national will and a military member's motivation to fight for national objectives. While all of these studies identify gaps within the DOD approach to PR, few provide concrete recommendations for fixing the problems. Most solutions approach the situation from a joint perspective, recognizing that PR is a joint function. However, they fail to consider how individual services, specifically the Air Force as the only service tasked with global PR, are able to address the gaps unilaterally. The National Security Presidential Directive outlines the expectation that the DOD to improve the prevention of, preparation for, and response to isolating events. Response time is one of the easiest objectives to consider.

The term "The Golden Hour" refers to the brief window of time after an injury during which the individual has the greatest chance of surviving. This determination is the result of extensive research following military conflicts. During World War I, soldiers injured on the battlefield had a 50 percent chance of surviving.¹¹⁹ The chances increased during World War II to 69.7 percent. The Korean War hit 75.4 percent and Vietnam 76.4 percent.¹²⁰ The more recent wars in Afghanistan and Iraq have proven that medical advances can push this percentage to 98 percent if the response falls within the Golden Hour.¹²¹ Such a response to injured personnel is

¹¹⁹ O'Hara, Bob, Public Record Searches, http://www.searcher-na.co.uk/world_war_one_personal_records.htm.

¹²⁰ Hyer, Richard. "Iraq and Afghanistan Producing New Pattern of Extremity War Injuries", <http://www.medscape.com/viewarticle/528624>.

¹²¹ Medics, A Brief History, http://www.1stcavmedic.com/medic_history.htm.

further complicated when the individuals are isolated beyond the reach of the rescuing forces. Research into historical PR responses highlights another critical time period, that offering the greatest chance of recovery. The conditions within today's environment, including the desire of irregular opponents to exploit captured US personnel, forces the United States to evaluate the impact of not only failing to save an American life but the real possibility that such personnel may be executed in captivity for propaganda purposes. This is why Secretary Gates directed a one-hour response anywhere in Afghanistan, and General Schwartz responded by placing his rescue forces "all in". A dedicated organization to ensure meeting a required response time is critical to national security.

Organizing rescue resources into a formal structure vice the use of opportune forces began in 1946. On March 13 of that year, Air Training Command created the Air Rescue Service (ARS). Colonel Richard Kight took command with marching orders to either build up ARS or scrap it. Colonel Kight set out to build this new service while being compelled to conserve available resources for the most effective employment within budget constraints.¹²² However, the ARS had a low priority, which forced it to use obsolete aircraft beyond their reasonable service life. By 1959, the Air Force had firmly established an acceptable rescue structure: individual compartments strategically deployed around the world to meet specific and specialized purposes. No two rescue groups or squadrons were alike. In 1958, the ARS lost its official wartime mission. Air Force Headquarters deleted the wartime mission statement, and in its place inserted a clause in the National Search and Rescue Plan making combat search and rescue a mere extension of peacetime rescue. This decision led to an early conference about rescue, known today as a subcomponent of PR. In February 1958, the conference on

¹²² Galdorisi, George and Thomas Phillips, *Leave no man behind: the saga of combat search and rescue*, 110.

standardization of USAF search and rescue set out to determine the best means using available resources for providing a recovery program with standardized procedures, training, and communications for the recovery of personnel from all USAF commands in peace and war, friendly or enemy areas. An unorganized meeting between individuals without the authority to effect real change resulted in the members falling short of their objectives. “While the conference was basically a flop, it identified one important initiative: a personal identification program.”¹²³ This is just one of many early gaps in DOD PR that remains unaddressed decades later.

PR finally underwent an extensive evaluation five decades after the creation of ARS. The 1995 Commission on Roles and Missions of the Armed Forces highlighted five options for the future of CSAR (Figure 5). Retaining the status quo was the first option, with each service keeping its extant CSAR capabilities. Status quo is always an option when the decision makers are willing to continue accepting the conditions that led to the call for the study in the first place. The second option appointed an executive agent for CSAR who could take a lead role in improving the situation. The Air Force maintained dedicated CSAR forces, leading to the third option of having it assume all CSAR responsibility for the DOD. However, Desert Storm proved the DOD was incapable of maintaining dedicated CSAR forces in the conventional armed forces. Instead the mission was forced upon SOF to assume the additional responsibility of rescue.¹²⁴ Continuing this approach allowed for the fourth option of special operations taking CSAR as a primary mission. The final option was a modified status quo where every service places CSAR

¹²³ Galdorisi, George and Thomas Phillips, *Leave No Man Behind: The Saga of Combat Search and Rescue*, 214.

¹²⁴ Galdorisi, George and Tom Phillips, *Leave No Man Behind: The Saga of Combat Search and Rescue*, Zenith Press, Minneapolis, MN, 2008, 521. Rescue moved between commands five times in 23 years...AFSOF to MAC to ACC to AFSOC to ACC. The stillborn concept of AFSOC's 23AF concept is studied by Ioannis Koskinas in *Black Hats and White Hats: The Effect of Organizational Culture and Institutional Identity on the Twenty-third Air Force*.

into their active duty components. The commission eventually recommended giving the AF executive agent responsibility for CSAR and requiring the AF to increase availability to meet the needs of ongoing operations.¹²⁵ Executive agent status was meant to address the need to improve continuity of preparing personnel for the possibility of isolation. Availability of rescue forces highlights the need to improve recovery operations.

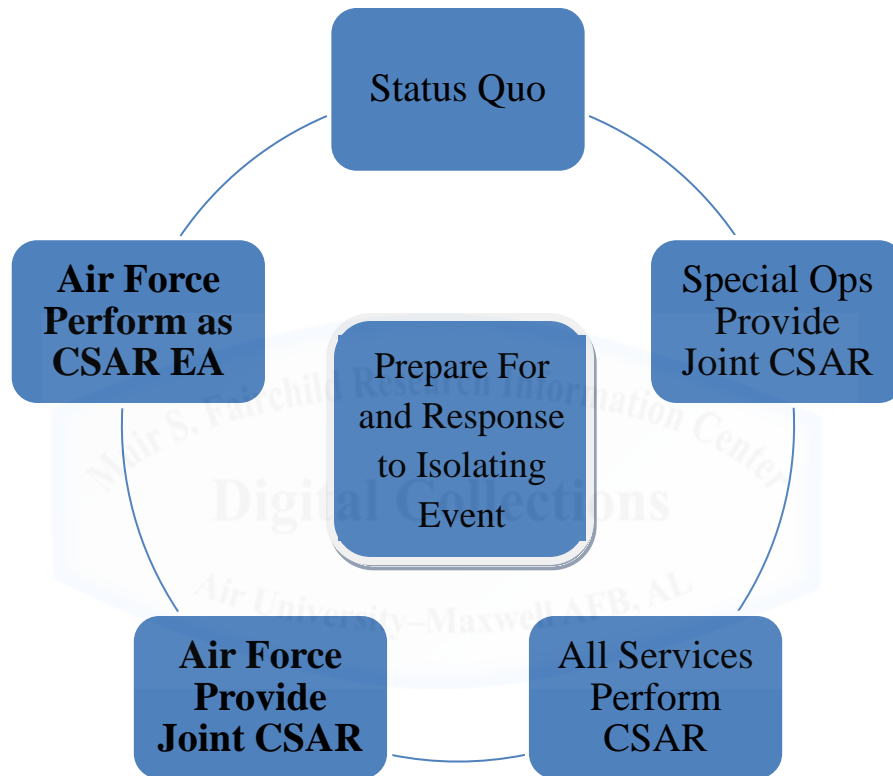


Figure 5: 1995 Commission on Roles and Missions of the US Armed Forces: CSAR Options¹²⁶

Another evaluation of combat rescue surfaced in 2001 with the Combat Rescue Operational Review. While the 1995 Commission highlighted that SOF have a limited mission set, the DOD failed to take action with respect to the recommendations, specifically accepting

¹²⁵ Commission on Roles and Missions of the US Armed Forces, 1995, 2-22.

¹²⁶ Graphic created by the author to demonstrate CSAR options identified by the commission.

that special operations do not perform rescue as a matter of assigned roles and missions. The special operations community in particular needed this study due to the consequences to its state of readiness of the cyclic build-up of rescue capabilities during wartime and subsequent degradation of rescue capability following the conflict. Turning to the broader spectrum of PR, the review concluded that the most significant factors for rescue operations are the accuracy of an isolated person's location and identification, survivor viability, and the friendly response to the isolating incident. The DOD stayed the course in 2001 by supporting the special operations forces' desire not to take on rescue operations as a primary mission. This review also highlighted the need to improve both the preparation of isolated personnel and the response to an isolating event with a force willing and able to do so (Figure 6).¹²⁷

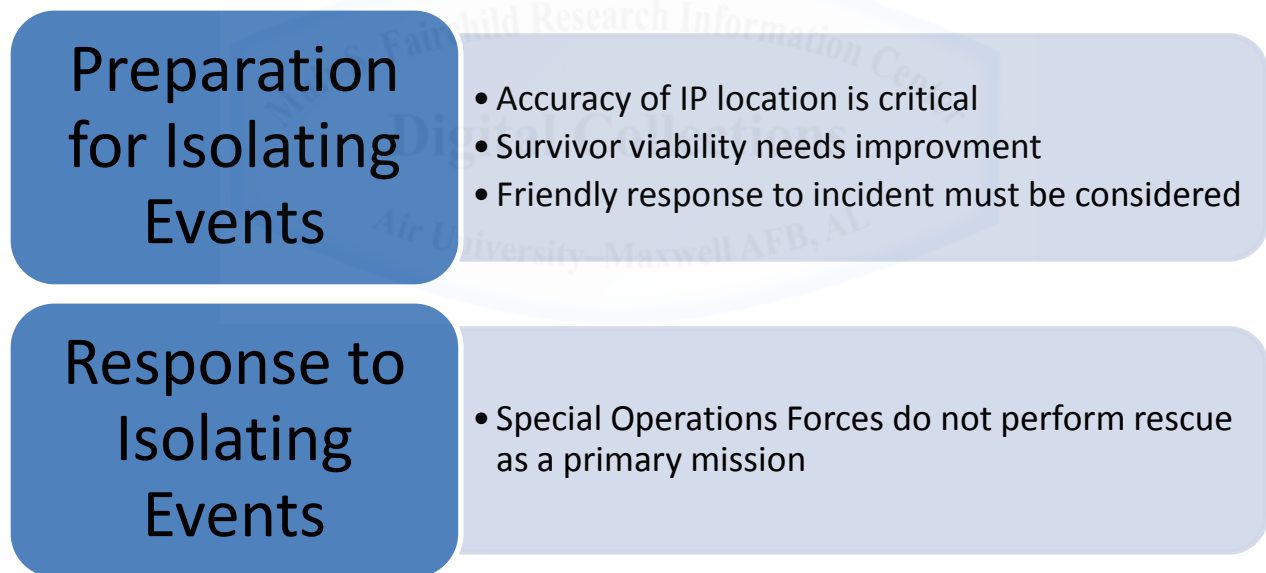


Figure 6: 2001 Combat Rescue Operational Review Results¹²⁸

Two years later, the DOD further addressed ongoing shortfalls within PR by creating a Personnel Recovery Modernization Strategy. This strategy focused on the broader level of PR,

¹²⁷ US Department of Defense. Combat Rescue Operational Review, 2001.

¹²⁸ Graphic created by author to compare review results with NSPD-12 Annex 1 objectives.

escaping the CSAR-focused studies of the past. It consolidated findings into six recommendations with the first stating the need for a mission area functional analysis. The second recommendation strove to elevate the mission profile of PR. The third highlighted the need for a joint PR functional concept, and the fourth further focused on creating a PR transformation roadmap. The study recommended modernization efforts include a review of PR training and education as the fifth conclusion. Finally, the sixth recommendation documents the need to improve PR joint concept development and experimentation. Ultimately, the PR modernization strategy of 2003 consolidated longstanding concerns about PR across the entire DOD into recommendations for further analysis and policy development.¹²⁹ One of the primary realizations was that the term “battlespace” meant everywhere, at all times.¹³⁰ While it does not specifically address preparation of, preparation for, and response to isolating events, it does point to the lack of emphasis on the military function to save isolated personnel and return them with honor.

Full-spectrum PR analysis continued in July 2004 with the Interagency National Personnel Recovery Architecture (NPRA) report by the Institute for Defense Analyses (IDA). The US Congress provided direction and funding to accomplish this study with specific direction to consider all service personnel, government civilians, and government contractors. This 272-page report met objectives to document the current NPRA baseline capability, to develop a strategic vision for PR, to compare the baseline and the vision, to suggest solutions, to cost out the solutions, and to organize the recommendations in order of priority. The study separated PR into three areas: 1) direct and guide, 2) plan and prepare, and 3) execute the mission (Figure 7).

¹²⁹ Hamilton, Booz Allen. “Personnel Recovery Modernization Strategy”, Ft Belvoir, VA: JPRA, 31 December 2003.

¹³⁰ Kiras, James D. Interview with the author as a study contributor for the PRMS.

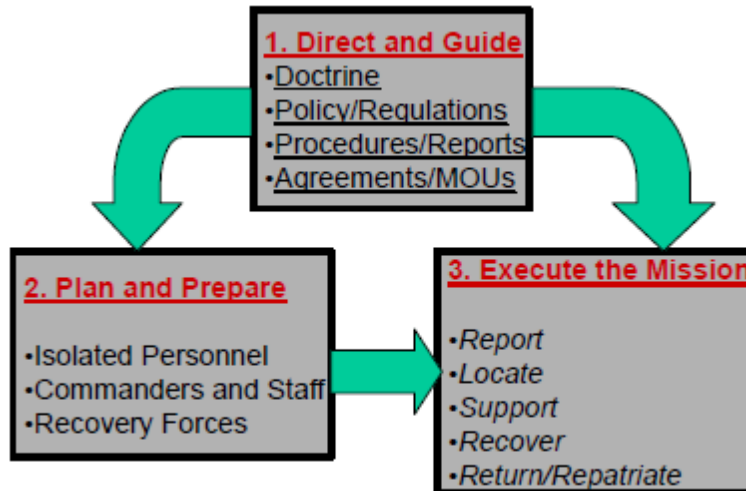


Figure 7: Architecture Components¹³¹

The vision evolved with these three components in mind, summarized as:

- PR policy and doctrine that are coherent and cover all Government departments and agencies and their contractors. Policy and procedures that will support execution by a joint task force commander, by a unified combatant commander, or by a Chief of Mission. PR scope and mission requirements identified to seamlessly integrate all PR methods across the entire spectrum of operations.
- PR force elements adequately programmed, organized, trained, equipped, and resourced. Communications, location, identification, authentication, and signaling capabilities for isolated personnel, which are operationally effective, suitable, and available when/where needed.
- Adequate PR policies, guidance, planning, and preparations such that PR missions are executed successfully, quickly, and seamlessly. Finally, the vision requires a transformation in PR planning and training by leveraging a diversity of capabilities and means throughout the interagency community that includes a more inclusive definition of “jointness” (e.g., all Federal agencies, international coalition partnering nations, and international organizations).¹³²

The NPRA then compared the baseline with this vision to determine what PR gaps existed in 2004. The findings were based on the realization that the world environment had changed, significantly increasing the likelihood and scope of PR operations. Within the DOD, the NPRA found a PR system fragmented across the services with a focus on combat related operations.

¹³¹ Institute for Defense Analysis. Interagency National PR Architecture: Final Report, July 2004, I-3.

¹³² Institute for Defense Analysis. Interagency National PR Architecture: Final Report, July 2004, 7.

There was a need for interagency and multinational approaches to PR preparation and training.¹³³ This fragmentation coupled with a lack of guidance at the national level to compound the problem of reaching simple consensus on the definition and scope of PR. The DOD too narrowly focused existing policy and doctrine. The interagency players had no specific guidance concerning PR at all. The study found planning and preparation for potential PR incidents by US Missions abroad to be inadequate. JPRA was a joint agency in name only. The DOD did not identify and program for joint requirements. Contractors did not receive basic PR training despite an increased level of risk due to the changed environment. To make matters worse, senior leaders were not knowledgeable of PR problems facing their deployed personnel. There were no joint-staff sponsored exercises and specialized SERE training was no longer suited for the 21st century environment. Even within the combatant commands there was a lack of PR personnel providing subject matter expertise to the commanders.¹³⁴ The findings of the 2004 NPRA definitely made the future of PR appear bleak.

The NPRA has become one of the most beneficial and influential PR studies. It went well beyond simply identifying the problems; it conducted cost estimates, created multiple options highlighted as solutions in the study, and provided key recommendations as an overall summation (Figure 8). The first solution was to assign PR policy oversight and interagency policy coordination. Establishing PR offices in the DOS and other non-DOD agencies was second. This followed with transforming DOS training to develop PR related material and establishing PR focal points in US missions based on the travel warning list. The fifth solution was to supplement the Security Assistance Programs to improve host nation PR equipment. Sixth, adding PR personnel to DPMO, the Joint Staff, COCOMs, JPRA and JFCOM will ensure

¹³³ Institute for Defense Analysis. Interagency National PR Architecture: Final Report, July 2004, III-13-III-14.

¹³⁴ Institute for Defense Analysis. Interagency National PR Architecture: Final Report, July 2004, 9-17.

subject matter expertise is available to senior leaders striving to prevent, prepare for, and respond to isolating events within their area of responsibility.¹³⁵ The report summarizes these solutions with key recommendations providing specific ways to simultaneously address multiple issues. First, a national security presidential directive is critical. It was not available in 2004 but with its creation since publishing the NPRA, the whole-of-government approach to PR has converged toward a single goal. The second key recommendation is for the DOS to enhance embassy readiness for PR incidents. The third is to develop contractor training specifically focused on PR. The final key recommendation is a total revision of SERE training.¹³⁶ The NPRA energized the PR function in 2004 and further research followed to address PR as it pertains to the evolving environment.

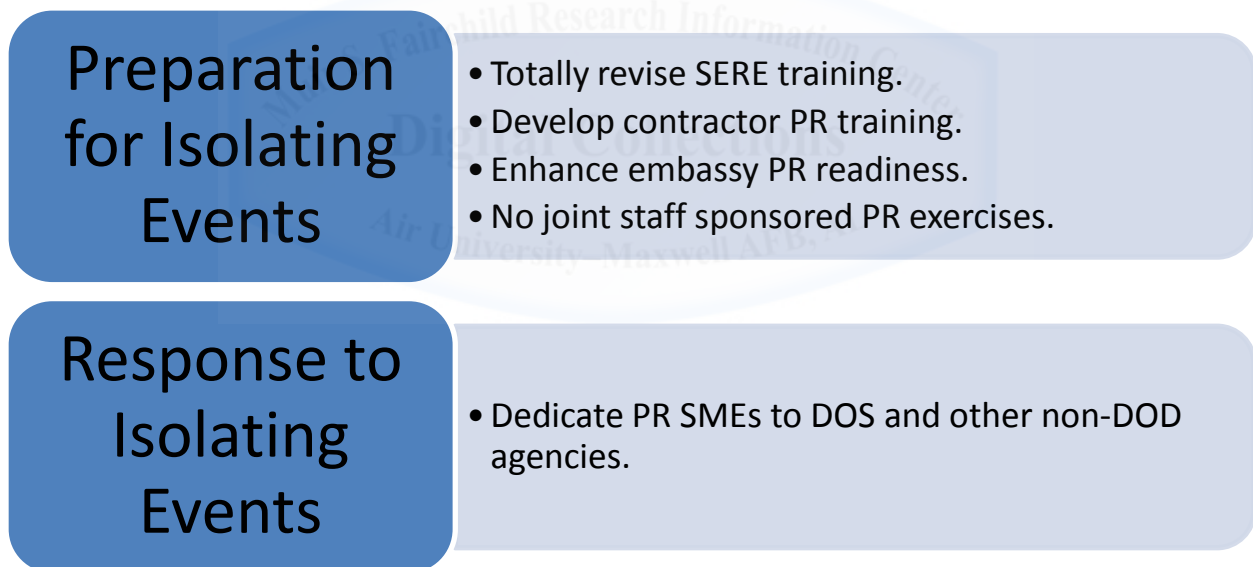


Figure 8: NPRA Key Recommendations¹³⁷

¹³⁵ National Security Policy Directive (NSPD) 12, United States Citizens Held Hostage Abroad, Annex 1 and Appendix A, 4 December 2008 (classified), unclassified information only,, V-32-38.

¹³⁶ National Security Policy Directive (NSPD) 12, United States Citizens Held Hostage Abroad, Annex 1 and Appendix A, 4 December 2008 (classified), unclassified information only,, 19.

¹³⁷ National Security Policy Directive (NSPD) 12, United States Citizens Held Hostage Abroad, Annex 1 and Appendix A, 4 December 2008 (classified), unclassified information only,, 19.

Irregular warfare (IW) is receiving a significant amount of emphasis given the nature of today's security environment and the character of US adversaries. In 2009, the Secretary of the Air Force said the service had a strategic window in which to adjust Air Force structure to address our nation's current and realistic future security challenges. The Air Force Chief of Staff chartered the Irregular Warfare Tiger Team to assess combatant command IW, building partnership capacity (BPC), theater security cooperation (TSC), and air advisor requirements and to offer force structure recommendations. The Team found that while the Air Force's general-purpose forces have the capacity to meet these demands, the service could be more effectively organized, trained, and equipped to accomplish the mission. Specifically, adjustments are required in the following areas: people, platforms, presentation, and planning.¹³⁸

The IW Tiger Team's final report explicitly and repeatedly addresses the function of PR. The first focus is on expanding and resourcing the Air Force's rescue mission to include irregular warfare and building partnership capacity in aviation advising. Aviation advising refers to the training of partner nation military members to perform aviation duties without the involvement of American operators. The second focus highlights that search and rescue capability is essential in all countries, in both developed and developing nations. The IW Tiger Team documented how rescue is required across the range of military operations to include counterinsurgency and building partnership capacity activities. The report recognizes how the Philippines is the model for making progress with search and rescue. The Philippines flies legacy Air Force aircraft such as the OV-10 to conduct the "locate" task. The Philippines then uses legacy aircraft such as the UH-1 to execute the recovery task. Another capability listed is the training of medics to perform

¹³⁸ US Air Force. Irregular Warfare Tiger Team Final Report, 22 May 2009, ii.

quick-response duties from these rotary-wing aircraft.¹³⁹ While these focus areas indicate the importance the Air Force should place on PR with respect to irregular warfare, the real benefit resides in further analysis conducted by the team. The Tiger Team reinforced what the rescue community has been saying for years: the environment has changed. There is an increased presence of American forces performing BPC and TSC activities. This results in the need to approach PR from multiple perspectives. As a responding force, the multi-mission fixed and rotary wing forces carrying uniquely trained rescue specialists must be available should these American forces come under duress. These same forces are expected to provide an existing organizational framework with skill sets applied through an air advisor role. The resulting recommendations (Figure 9) are for the Air Force rescue community to expand its mission to perform aviation advising and engage industry to develop transferable, affordable, modular, interoperable (TAMI) fixed-wing and rotary-wing PR aircraft and support equipment to support IW and BPC missions with partner nations who do not possess economic means and infrastructure to acquire/sustain high-end technology.¹⁴⁰

¹³⁹ US Air Force. Irregular Warfare Tiger Team Final Report, 22 May 2009, 31.

¹⁴⁰ US Air Force. Irregular Warfare Tiger Team Final Report, 22 May 2009, 8.

Preparation for Isolating Events

- Perform aviation advising of personnel recovery capabilities for partner nations.
- Develop TAMI fixed and rotary wing personnel recovery aircraft.

Response to Isolating Events

- Provide PR support to American forces conducting BPC & TSC activities.
- Provide PR support as embedded capability of forces conducting BPC & TSC activities.

Figure 9: Irregular Warfare Tiger Team Recommendations¹⁴¹

In April 2009, the DOD initiated a formal assessment of PR capabilities from an explicitly joint perspective. At this same time, Secretary Gates asked “whether [Combat Search and Rescue] can be accomplished by yet another single-service solution with single-purpose aircraft.”¹⁴² The Secretary of Defense wanted his department to take a fresh look at CSAR requirements and develop a sustainable approach to this mission. JPRA prepared *The Assessment of CSAR Requirements in a Joint Context* dated 13 August 2009 to answer the Secretary’s question with five specific conclusions. The first conclusion is that CSAR is an important mission where success or failure can have—and has had—strategic consequences. The second conclusion determined there is no single-service solution to recovery of isolated personnel. All services provide different capabilities to commanders tasked with these missions, producing effectiveness and efficiency for CSAR and related missions. The third conclusion is that all services perform PR and all must continue to plan to do so. More specifically, the

¹⁴¹ US Air Force. Irregular Warfare Tiger Team Final Report, 22 May 2009, 8.

¹⁴² Gates, Robert M. "Budget Press Briefing." 6 April 2009.

assessment found that each service must continue to organize, train, and equip for the recovery of their personnel. This is due to the limited nature of joint operations to present opportunities for a single service to perform PR for all joint personnel. However, the strengths of one service compensates for the weaknesses of another. An improved joint CONOPS for PR will increase the effectiveness of this integration. The fourth conclusion is that a dedicated force with requirements for advanced capabilities and a timely response conducts effective CSAR and multiple other missions. Therefore, CSAR aircraft are not single-purpose assets. The final conclusion of the assessment was the need for development of an Air Force rescue force with the capacity to support requirements across the range of military operations.¹⁴³

JPra's formal assessment of PR capabilities beyond the CSAR mission is scheduled for completion in 2011. It consists of two distinct documents, the Operational Concept for PR and the PR Capabilities Based Assessment. The PR Operational Concept aligns PR with the Joint Operating Environment and Capstone Concept for Joint Operations by migrating PR into irregular environments and all phases of military operations. The PR Operational Concept assists the DOD in preventing the isolation and capture of personnel and, when necessary, helps ensure the successful return of isolated personnel around the globe.¹⁴⁴ This document reinforces every study conducted since 1958 and summarized the above analysis of DOD PR gaps by defining the essential problem:

“DOD PR is not optimized to prevent, prepare for, and respond to isolating events, thereby allowing for a center of gravity that can erode domestic and international support of U.S. security objectives.”¹⁴⁵

¹⁴³ US Joint Personnel Recovery Agency. Assessment of Combat Search and Rescue Requirements in a Joint Context, 13 August 2009, i-ii.

¹⁴⁴ US Joint Personnel Recovery Agency. Operating Concept for Personnel Recovery, Pre-Decisional Draft.V.53-100707 (pre-decisional draft), ii.

¹⁴⁵ US Joint Personnel Recovery Agency. Operating Concept for Personnel Recovery, Pre-Decisional Draft.V.53-100707 (pre-decisional draft), 4.

The second component of JPRA's 2011 research is the Capabilities Based Assessment (CBA). The assessment is a qualitative and quantitative analysis of the PR function. It includes an extensive document review, including Joint Requirements Oversight Council documents. Interviews were conducted with staff from all geographic combatant commands and lessons learned were compiled for process modeling and construction of an event database. The CBA assessed three vignettes mapped to OSD-directed defense planning scenarios developed to examine a spectrum of PR situations: isolation of a United States DOD contractor, isolation of DOD ground forces, and isolation of a non-DOD civilian. The CBA boasts a decrease in recovery times by up to 96 hours due to the implementation of the PR Operating Concept architecture. It also concludes a response time that decreases by two hours and a recovery time decrease by 5.5 hours due to the same architecture. The CBA lists 14 remaining shortfalls as DOD PR gaps (Figure 10). JPRA identified 39 solution areas to address these gaps from a joint perspective. However, the Air Force may be able to address some of these immediately.

HIGH	<ul style="list-style-type: none"> • Gap 1 (PR-010C) – Locate Isolated Persons • Gap 2 (PR-004C) – Establish, Expand, and Synchronize a PR Network • Gap 3 (PR-008C) – Conduct Collaborative Planning Within the Comprehensive PR Network • Gap 4 (PR-007C) – Quickly and Unambiguously Declare an Actual Isolating Event. • Gap 5 (PR-009C) – Recognize and Report a Possible Isolating Event • Gap 6 (PR-011C) – Investigate Cases to Determine Status and Whereabouts of Missing Personnel.
MEDIUM	<ul style="list-style-type: none"> • Gap 7 (PR-003C) – Anticipate Future Situations That Would Require the PR Network to Act. • Gap 8 (PR-002C) – Diminish Captive-taking and Disrupt Adversary Attempts to Capture U.S. Personnel. • Gap 9 (PR-005C) – Reduce an Individual’s Vulnerability Should They Become Captured • Gap 10 (PR-001C) – Decrease an Individual’s Susceptibility to Captive-taking • Gap 11 (PR-006C) – Adapt and Modernize the PR Network in Response to Assessed Capabilities Shortfalls and Warfighter Needs • Gap 12 (PR-013C) – Safely and Rapidly Secure and Recover Isolated Persons • Gap 13 (PR-014C) – Effectively Reintegrate Personnel and Collect Pertinent Information
LOW	<ul style="list-style-type: none"> • Gap 14 (PR-012C) – Limited Ability to Ensure the Isolated Person's Survival and Availability for Recovery

Figure 10: Capabilities Based Assessment Identified PR Gaps and Risk¹⁴⁶

In summary, concern about the DOD’s capability to save isolated personnel and return them with honor dates back to World War II. Col Kight started building the Air Rescue Service in 1946 in response to these concerns. The ARS became the Air Rescue and Recovery Service (ARRS) in 1966 operating aircraft across Southeast Asia for CSAR and local base rescue. The Navy’s HC-7 squadron joined the ARSS as dedicated CSAR forces.¹⁴⁷ These units set the cornerstone for the DOD PR doctrine of today, which requires every service to perform the PR function. It is another example of the phenomenon Barry Posen describes in *The Sources of Military Doctrine*, “In the absence of civilian intervention, and the exercise of the legitimate

¹⁴⁶ DiPaolo, Marc. Personnel Recovery Operating Concept and CBA Results Briefing, 19 July 2010.

¹⁴⁷ Galdorisi, George and Thomas Phillips, *Leave No Man Behind: The Saga of Combat Search and Rescue*, 325-336.

authority that only the civilians possess, militaries will arrange a negotiated environment...This can easily result in misallocation of the scarce security resources of the state.”¹⁴⁸

The Air Force further exacerbated the effect of this misallocation with a decision to join special operations and the ARRS into the 23rd Air Force in 1983 under Military Airlift Command. When Operation Desert Storm required a search and rescue plan, each service and allied component was responsible for fielding its own forces and establishing its own rescue coordination center. The ARS was finally beginning to make some progress again in 1993 when the organization disbanded on 2 July leaving fragments in Air Combat Command, the Pacific, and Europe. Rescue forces and therefore, the PR function, remained homeless through transfers from ACC to AFSOC in 2003 and back to ACC in 2006.¹⁴⁹ Today the JPRA is the dedicated PR agency without a home due to JFCOM’s demise. Posen’s analysis is not new to PR. This chapter highlights studies back to 1958 that have focused on PR or a component of the function. They repeatedly identify the same gaps within the DOD PR function, specifically to preparation for and response to isolating events. Today’s environment does not permit this to continue without extreme risk to America’s national security.

¹⁴⁸ Posen, Barry. *The Sources of Military Doctrine*, 54.

¹⁴⁹ Galdorisi, George and Thomas Phillips, *Leave no man behind: the saga of combat search and rescue*, 521.

Chapter 5

How Can the Air Force Minimize the Gaps?

As the service assigned with global PR, the Air Force is in the best position to respond to the Presidential direction to fill gaps in US ability to prepare for and respond to isolating events. The NSPD-12 specifically provides implementation guidance for the Air Force. Directions for implementing “preparation” identify the need to establish a baseline for all departments and agencies to include prioritizing at-risk locations for PR education/training, defining the need for this education/training, and assessing interoperability of education/training already available within the United States Government. National policy requires improvements in order to leverage existing education/training programs. This expectation ties directly to the third objective of “response.” Specifically, policy requires the strengthening and further integration of existing PR response mechanisms with the goal of integrating capabilities into a unified national PR system. For post-incident response, the DOD is required to assist other departments and agencies, and partner nations as appropriate, to develop reintegration policies and programs.¹⁵⁰

Existing PR capabilities contain numerous gaps, as identified in chapter four. Strategies must address filling these gaps via a whole-of-government approach to PR. This requires not only top-down guidance but also a bottom-up analysis of possible solutions, while taking into account today’s resource-constrained environment. Upon compilation of the most critical gaps identified in the nine studies, results fall into one of two categories: “preparation for” or “response to” isolating events (Figure 11).

¹⁵⁰ National Security Policy Directive (NSPD) 12, United States Citizens Held Hostage Abroad, Annex 1 and Appendix A, 4 December 2008 (classified), unclassified information only, 6-11.

Preparation For Isolating Events

- 1958 AF SAR Conference
 - Personal ID program
- 2001 Combat Rescue Ops Review
 - Accuracy of IP location is critical
 - Survivor viability needs improvement
 - Friendly response plan considered
- 2004 National PR Architecture Report
 - Totally revise SERE training
 - Develop contractor PR training
 - Enhance embassy PR readiness
 - Joint staff sponsored PR exercises
- 2009 Irregular Warfare Tiger Team
 - Perform PR aviation advising
 - Develop TAMI PR aircraft
- 2011 Capabilities Based Assessment
 - Establish, expand, sync PR network
 - Conduct planning with PR network
 - Anticipate future situations
 - Diminish/disrupt capture attempts
 - Reduce individual vulnerability
 - Decrease susceptibility to capture
 - Modernize network to assessed gaps

Response To Isolating Events

- 1995 Roles of Armed Forces - CSAR
 - Each service keep CSAR capabilities
 - ID executive agent for CSAR
 - AF perform CSAR for DOD
 - SOF perform CSAR for DOD
 - Each service has CSAR organization
- 2001 Combat Rescue Ops Review
 - Rescue not SOF primary mission
- 2004 National PR Architecture Report
 - Dedicatated non-DOD PR SMEs
- 2009 Irregular Warfare Tiger Team
 - Provide PR to BPC/TSC forces
 - Embed PR in BPC/TSC forces
- 2009 Assessment of CSAR Req'ts
 - No single service recovery solution
 - All services OT&E for recovery
 - Dedicated force for CSAR/other msn
- 2011 Capabilities Based Assessment
 - Locate isolated persons
 - Quickly declare isolating events
 - Report possible isolating events
 - Determine status of missing people
 - Safely and rapidly secure/recover IP
 - Effectively reintegrate personnel
 - IP survival/availability for recovery

Figure 11: Study Results Compilation Listed Under Presidential Directive Objectives

Many of these recommendations and findings require a joint approach for successful resolution. However, USAF forces dedicated to the PR function are capable of meeting some of these recommendations and findings, starting with a single-service approach and extending into the joint environment. Such an approach must proceed slowly with low supply/high demand forces. These forces are deploying under a high operations tempo, identified as the greatest risk facing USAF PR, to save lives and return personnel with honor from isolation around the world.¹⁵¹ This study will address those recommendations and findings, highlighted in blue in figure 11, for which the Air Force possesses resources with the capability of addressing gaps today for future joint and interagency solutions.

The Air Force is the only service with an officer career field, Combat Rescue Officers, dedicated to perform as PR subject matter experts, and an enlisted career field, SERE Specialists, dedicated to the preparation of at-risk personnel for isolating events and their reintegration following isolation. The Air Force leans heavily on these career fields to ensure all Airmen recognize the threats today's environment imposes on them, threats across the full spectrum of captivity. This spectrum includes personnel held as prisoners of war, peacetime governmental detainees, and hostages. The USAF made drastic changes to the SERE School in 2007 due to the impact recent isolating event across this spectrum had on national security. General Moseley raised concerns about today's battlefields being non-linear, stating every Airman was in jeopardy of being captured and needs to know how to respond to the situation. His concern peaked following the incident where Iran detained British Sailors near the Shatt al Arab waterway. The Sailors were exploited by Iran for propaganda purposes, thereby turning a tactical incident into a strategic one. CSAF said, "For me, all of this points to a greater need to make sure our Airmen

¹⁵¹ US Air Force. Personnel Recovery Core Function Functional Concept 2011-2031 V5, 24 February 2011, 5.

know how to react in any situation they find themselves.”¹⁵² The result was a SERE Summit where the Air Force charted a SERE training course correction. This initiative addresses the recommendation to totally revise SERE training, improve survivor viability, reduce vulnerability, and decrease susceptibility for the most at-risk personnel.

The Air Force recognized that every Airman has the potential to influence strategic objectives, and therefore began creating the Evasion and Conduct After Capture (ECAC) program in 2007 for Airmen not identified with a high risk of isolation but still serving in assignments placing them in harm’s way. The guidance mandated, “Each individual in the USAF should receive SERE training commensurate with their level of risk.”¹⁵³ ECAC was an Air Force Chief of Staff initiative to improve foundational SERE training to better prepare more Airmen for the challenges of the modern battlefield. The approach includes realistic training on any available devices that will facilitate locating the isolated person, as well as instruction on how personnel should act during their recovery. The ultimate goal is for ECAC to train all officers and selected enlisted personnel. The targeted students are basic combat convoy personnel, coalition air force training teams, coalition air power transition forces, Air Force Office of Special Investigations (OSI), and Security Forces. Focus areas include full-spectrum resistance academics, role playing labs, evasion tactics, techniques, and procedures, and an introduction to defeating personal restraints. Current throughput is over 7,000 students annually and projecting to increase to over 13,000 by fiscal year 2012. ECAC and full spectrum of captivity training meet expectations written in the PR core function functional concept. It

¹⁵² Moseley, General T. Michael, *CSAF's Scope highlights SERE training, AMU reorganization*, 27 Aug 2007, <http://www.af.mil/news/story.asp?id=123066135>.

¹⁵³ US Air Force. *Personnel Recovery Core Function Functional Concept 2011-2031 V5*, 24 February 2011, 10.

expects that personnel at risk of becoming isolated receive guidance, equipment, and training in a deliberate manner, based on the likelihood of their exposure to potentially isolating events.¹⁵⁴

The SERE School and ECAC program only provide the initial training for at-risk personnel. This is perishable training, so per Air Force Instruction it requires a refresher every three years for personnel at a high risk of isolation. For this reason, the Air Force organized SERE Specialists in Operations Groups across the Air Force to provide recurring training to aviators, the majority of the most at-risk personnel. When addressing requirements for the services to have reintegration capabilities, the Air Force turned to each base, expecting assigned SERE Specialists would cover the task. The Air Force has not changed this organizational structure with the changing environment, which has driven Airmen outside the Operations Groups to receive SERE training and require follow-on acceptable reintegration after isolation. Nor has the Air Force established a way ahead for Guardian Angel to address this issue following its creation in 2003. The Air Force has a readily available opportunity to fix this internal shortfall by organizing along the same lines as other specialties responsible for every Airman. OSI provides the perfect organizational structure for Guardian Angel to mirror. This solution requires extensive development, including the necessary program operation memorandum (POM) submissions. It can begin now despite the fiscally-constrained environment because initial steps such as providing recurring training to ECAC graduates is possible at some bases today.

The DOD is on its way to addressing the shortfall in providing PR training to contract personnel who find themselves at risk of isolation on a daily basis around the world. Many now receive instructions on PR basics. This is not enough for Americans such as Nicholas Berg or

¹⁵⁴ US Air Force. Personnel Recovery Core Function Functional Concept 2011-2031 V5, 24 February 2011, 26.

Thomas Hamill. While Hamill successfully facilitated his own escape from insurgent captures in April 2004, Berg was beheaded by Abu Musab al-Zarqawi in May 2004. Leaving the fate of these Americans, contracted to support military efforts, to chance and luck is not acceptable. The DOD cannot provide every contractor with the same training afforded to those with the highest risk, but the DOD can integrate contractors into the ECAC program and provide just-in-time training based on SERE Specialist availability. This includes identifying contractors already deployed who have not received PR training and submitting training requests for the SERE Specialists deployed throughout the theater of operations to provide it on an as-available basis. This short-term fix should be followed by establishing guidance and resources to meet these requirements for those who serve alongside those who wear the uniform and deploy in support of military operations. This guidance has migrated into contracts which stipulate that contractors and other private military companies are required to provide personnel with DOD compatible training and equipment, particularly a means of personal communication.¹⁵⁵

The Air Force can act immediately to minimize joint and interagency gaps in embassy PR readiness. On February 8, 2011, the US Ambassador to Zimbabwe specifically addressed the significance of PR during a conference sponsored by the Department of State. He said, “Personnel Recovery, make no mistake about it, is one of the most important responsibilities of government. As an Ambassador, responsible for the safety of Americans in the country to which I am accredited, it ranks in the top tier of my concerns and responsibilities.”¹⁵⁶ As the Chief of Mission, the US ambassador is responsible for all Americans not covered by the combatant commanders. In accounting for all Americans travelling or residing abroad, the Chief of Mission has more people to account for. Yet the United States does not resource them to effectively

¹⁵⁵ Kiras, James D. Interview with the author discussing role as PR study contributor, 2011.

¹⁵⁶ Ray, Charles A. Remarks to the 2011 CNE-CAN ATTACHE-OSC-ODC Conference, Naples, Italy, 8 Feb 2011.

manage an isolating event from preparation through to the recovery and safe return of American citizens. As Ambassador Ray acknowledged in his speech, the Crisis Management Support Center, the Foreign Emergency Support Team, and embassy Emergency Action Committees are not organized to respond to PR incidents in a timely manner, nor have Americans for which he is responsible received PR training. The Ambassador highlights a need for a whole-of-government approach to develop PR procedures for these personnel and organizations, ultimately assigning responsibility to all stakeholders.¹⁵⁷ This does not indicate a desire for DOS to develop procedures, training programs, and personnel versed in PR. On the contrary, these issues provided the impetus for integrating USAF personnel into key positions and locations to address Chief of Mission concerns. Ambassador Ray not only identifies the shortfalls as a spokesman for the DOS, he provides solutions. Specifically, he recognizes that the Airmen assigned to Guardian Angel are the “only dedicated personnel in the USG that have the training and expertise to go anywhere in our country, even anywhere in our global area of operations...the gold standard of PR across all facets of operations whether we are simply training, rehearsing, or going to war.”¹⁵⁸

Combat Rescue Officers and SERE Specialists are those AF personnel created, trained, and resourced by the DOD for a mission that affects the entire government. Combat Rescue Officers are the dedicated DOD PR SMEs on which the various agencies should lean for expertise. Today’s environment highlights how critical it is for all Americans to have access to their expertise. Ambassador Ray said, “I recognize that there are budgetary implications to having an effective PR program, but this must be evaluated against the cost of a botched response to an incident of isolation. It will require agencies that are unaccustomed to working

¹⁵⁷ Ray, Charles A. Remarks to the 2011 CNE-CAN ATTACHE-OSC-ODC Conference, Naples, Italy, 8 Feb 2011.

¹⁵⁸ Ray, Charles A. Remarks to the 2009 SERE Specialist graduation ceremony, Spokane, WA, June 12 2009.

together to knock holes in their stovepipes and think and work outside the box.”¹⁵⁹ Assigning PR specialists immediately to the most at-risk locations and establishing agreements for their involvement in further PR developments is how the Air Force can minimize these gaps.

The shortfalls in preparing for isolating events highlighted as aviation advisory and the development of different PR aircraft join the shortfalls for response in a BPC/TSC environment. The Air Force rescue triad is an untapped IW capability resulting from the service’s failure to keep pace with the changing environment. “The global environment has driven strategic leadership to direct investment in forces capable of building partnerships and increasing their capacity, but the AF has yet to task and resource its most fitting BPC asset, Rescue.”¹⁶⁰ As noted earlier, PR should be a key enabler of partner engagements and the Air Force is in the position to lead this effort with dedicated rescue forces. The Air Force PR core function functional concept references the IW Tiger Team report analyzed in Chapter Four. It says that demand for air advising instruction exceeds SOF capacity, but at the same time does not require the full spectrum of capability SOF possesses. Appropriately organized, trained and equipped conventional forces can successfully conduct aviation advising, as ongoing efforts in Iraq and Afghanistan demonstrate. “The USAF rescue community provides an existing organizational framework with skill sets that could be applied to an air advisor role using the [TAMI] platforms recommended.”¹⁶¹ Guardian Angel provides the necessary ground training for partners gaining aviation instruction. This includes theater-specific SERE information to increase the survivability of partner aircrews and the tactical training of partner recovery teams.

¹⁵⁹ Ray, Charles A. Remarks to the 2011 CNE-CAN ATTACHE-OSC-ODC Conference, Naples, Italy, 8 Feb 2011.

¹⁶⁰ Hanover, Jason. *AF Rescue 2030: A Multirole Force for a Complex World*, draft, 9.

¹⁶¹ US Air Force. Personnel Recovery Core Function Functional Concept 2011-2031 V5, 24 February 2011, 13.

By combining the efforts of the entire rescue triad, the DOD increases the available aerial capabilities and actually adds the rescue mission to the partner's resume. The IW Tiger Team reinforces this position when referencing both the Pacific Air Forces (PACAF) Vice Commander and Air Forces Africa Commander (AFAFRICA) who discussed their desire for light aircraft. PACAF highlights concern about distance, terrain, and the island environment that demand light Short Take-off and Landing (STOL) fixed-wing and light rotary-wing aircraft. AFAFRICA recognizes the need for fixed and rotary-wing platforms to conquer distance and overcome a lack of infrastructure. Colonel Jason Hanover, current national defense fellow selected to command the 563 Rescue Group, studied this in his *AF Rescue 2030* paper. He identified the solution to these shortfalls "is not to acquire more strategic lift, but to create regional reach with rugged, affordable, light- and medium-fixed wing and rotary-wing aircraft. Apply this air capacity to MEDEVAC and SAR, and you get high payoff capabilities in protecting our personnel, building partnerships, and legitimizing the government."¹⁶² The air components assigned/allocated rescue forces are ineffective as currently equipped, a major impediment to achieving the goal of having global PR capability available.

As noted above, the USAF is the only service with a dedicated rescue force capable of addressing these PR gaps. With an understanding that today's environment places all Americans and coalition partners at risk of isolation at some level, the 1995 recommendation for every service to maintain capability is appropriate. This does require recognition that "CSAR" is no longer a desired operational capability for each service. The CSAR capability represents the high-end approach to recovering personnel and features the most complex conventional response. The Air Force's ability to maintain a CSAR capable force does not obviate the need

¹⁶² Hanover, Jason. *AF Rescue 2030: A Multirole Force for a Complex World*, draft, 9.

for unconventional and nonconventional recoveries.¹⁶³ It does allow conventional forces to lean on a single service for highly capable aircraft and uniquely trained personnel.

The recommendation to designate an executive agent for CSAR does not go far enough. CSAR is a way of executing recovery as a basic task of PR. The DOD should officially designate the Air Force as the service with the role of providing CSAR to the joint force since it happens today on a routine basis. Air Force rescue forces recovered two Army pilots shot down in Kapisa Province, Afghanistan on April 23, 2011. The daring mission to recover both pilots ended in success after one of the helicopter flight engineers was shot in the leg, another had a bullet go through his helmet and miss his head. In the course of the operation, the Pararescuemen evaded capture for over five hours, and the helicopters sustained damage that grounded the aircraft. “We did what we do,” said Sergeant Davis, the injured engineer, “[w]e’ve got a motto for a reason, these things we do that others may live.”¹⁶⁴ There are no limits on what service personnel are rescued and there should not be service restrictions on who benefits from dedicated CSAR forces. “An expeditionary Air Force rescue unit may be the first DOD force to arrive on scene and, by exploiting capabilities inherent in its organic airpower, initiate operations in locations or under conditions that other services may find prohibitive.”¹⁶⁵ Tasking the Air Force to provide joint CSAR can fill up to seven gaps by leveraging existing capability. This decision does require further analysis to ensure the joint force has enough CSAR capability to respond to

¹⁶³ US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007. Nonconventional assisted recovery is conducted by indigenous/surrogate personnel that are trained, supported, and led by organizations specifically trained and directed to establish and operate indigenous or surrogate infrastructures. Unconventional assisted recovery is conducted by special operations forces.

¹⁶⁴ Saks, Erick Capt. Rescue Airmen engage hostile forces to retrieve ‘Fallen Angels’, AF Print News, May 1 2011, <http://www.bagram.afcent.af.mil/news/story.asp?id=123254042>.<http://www.bagram.afcent.af.mil/news/story.asp?id=123254042>.

¹⁶⁵ DiPaolo, Marc C. et al. “A Rescue Force for the World: Adapting Airpower to the Long War.” Air and Space Power Journal 21. No. 3 (Autumn 2007), 6.

isolating events on a global level. This is exactly what the DOD indicates as a desire when it directs the Air Force to organize, train, equip and present forces for global PR.



Conclusion

The United States constantly faces threats from adversaries determined to weaken its national will and jeopardize international security through the exploitation of captured Americans and allied personnel. These adversaries run the gamut from rogue states to insurgents to criminal groups to terrorists. This security concern drove the United States to establish a presidential directive for the prevention of, preparation for, and response to these isolating events. Defense policy recognizes PR as one of the department's highest priorities. The DOD stipulates that PR is a function common to all services, with global PR specifically the responsibility of the Air Force. The Air Force provides global PR capacity in the form of dedicated rescue forces. Joint guidance states that these rescue assets should be used to the maximum extent possible for dedicated PR, allowing other forces possessing collateral PR capabilities to focus on their primary missions. Rescue is a highly adaptable resource with the ability to mitigate the operational and political costs created when isolated personnel are exploited by an adversary for propaganda purposes, to gain intelligence, or to restrict our physical freedom of action or maneuver. Ultimately, the United States recognizes the positive effects that a nation with organic rescue capability creates within the international community. The United States sends a strategic message by maintaining a dedicated rescue force. It is heard by our partners (from NATO to our most reluctant coalition members), it is heard by the rest of the world (the people we want to influence), and it is heard by our enemies.¹⁶⁶ This capability is not limited to the military instrument of power.

PR is the sum of military, diplomatic, and civil efforts to recover and reintegrate isolated personnel. As noted earlier, the United States defines these isolated personnel as US military,

¹⁶⁶ Dipaolo, Marc C, email message to the author, 28 February 2011.

DOD civilians, and DOD contractor personnel separated from their unit or organization while participating in a US sponsored military activity, and who are in a SERE situation. While this definition is specific to DOD personnel and activities, the US expects the military to use its PR capabilities in support of other missions, persons, agencies, or nations as directed by the President.¹⁶⁷ The realities of modern warfare complicate all of these: non-linear operational environments, non-traditional IPs, and non-nation state adversaries, all make the situation more complex. Then add an aspect of American values to top off the situation.

The value placed on human life makes PR a highly complex operation where failure is not an option. Joint Force Commanders find it difficult to reduce response time to an isolating event across an entire area of operation. In order to do so, the recovery force must be organized, trained, and equipped to respond under the direction of a command and control element within the broader PR architecture. The isolated personnel must be prepared to assist with their own recovery. In addition, commanders and staffs must facilitate extensive planning, execution of the rescue mission, and the adaptation of lessons learned in order to ensure future mission success. The United States provides the most robust PR capability to meet these needs. Few other nations faced with the same conditions are prepared to provide an extensive rescue capability. In fact, few nations can afford it. “Target country political goals and objectives, popular sentiments, economic conditions, and other civil conditions all lead to difficulties in how to assess a target country’s strategic course of action, which in turn will influence the manner in which a PR response is conducted.”¹⁶⁸ Considerations for the value of life may not align with USG values and policy. Therefore, all United States departments and agencies must understand the core competencies, roles, missions, and capabilities of partners in order to work together toward

¹⁶⁷ US Air Force. Personnel Recovery Core Function Functional Concept 2011-2031 V5, 24 February 2011, 14.

¹⁶⁸ US Air Force. Personnel Recovery Core Function Functional Concept 2011-2031 V5, 24 February 2011, 19.

common goals. Recognizing the fact that medical evacuation (MEDEVAC) and search and rescue (SAR) are high payoff capabilities in legitimizing a government, the United States is prepared to help partners achieve these capabilities.¹⁶⁹ Air Force rescue should use these capabilities and inherently compassionate mission to gain access to partners, using these nonlethal skills as soft power across the range of military operations.¹⁷⁰ Through a whole-of-government and building partnership capacity approach, the United States conducts PR to stop or mitigate adversary attempts to gain strategic advantage, influence international partners, degrade America's international image, and impact operational resources. "Done right, Air Force rescue could become an entity with an image that transcends the DOD, and one can envision the day when even nations hostile to the United States would welcome the arrival of the guardian angels of the US Air Force into their airspace."¹⁷¹

The essential problem is, "DOD PR is not optimized to prevent, prepare for, and respond to isolating events, thereby allowing for a center of gravity that can erode domestic and international support of U.S. security objectives."¹⁷² There are numerous gaps identified within the DOD approach to PR, reaching from as far back as the 1958 conference on standardization of USAF search and rescue. From the DOD perspective, the Joint Personnel Recovery Agency recently identified 14 gaps within joint PR. While the joint agency remains focused on filling these gaps through a joint effort, the Air Force has the opportunity to assist from a service perspective. The higher expectations placed on the Air Force as reflected in policy and doctrine should require the service to fill the gaps with capabilities already available while fulfilling the

¹⁶⁹ US Air Force. Irregular Warfare Tiger Team Final Report, 22 May 2009, 5.

¹⁷⁰ DiPaolo, Marc C. et al. "A Rescue Force for the World: Adapting Airpower to the Long War." *Air and Space Power Journal*, Fall 21. No. 3 (Autumn 2007), 4.

¹⁷¹ DiPaolo, Marc C. et al. "A Rescue Force for the World: Adapting Airpower to the Long War." *Air and Space Power Journal*, Fall 21. No. 3 (Autumn 2007), 8.

¹⁷² US Joint Personnel Recovery Agency. Operating Concept for Personnel Recovery, Pre-Decisional Draft.V.53-100707 (pre-decisional draft).

2008 National Defense Strategy. “Since 2001, the Department has created new commands (integrating Space and Strategic Commands, establishing Northern and Africa Commands) and new governance structures. DOD is already a complex organization. We must guard against increasing organizational complexity leading to redundancy, gaps, or overly bureaucratic decision-making processes.”¹⁷³ The DOD has identified gaps, while at the same time PR redundancies exist across the joint force. This is because every service has PR as a common function, an artifact of the bureaucratic decision-making process. “Building PR capacity in a fiscally constrained environment is a tall order,” said Ambassador Ray in a speech on June 12, 2009. “One of the best ways to do it is simply to knock down the bureaucratic walls that exist between departments and tap the synergy that can exist if all the current capabilities of USG agencies, not to mention our international partners, are brought to bear on the same problem.”¹⁷⁴ The Berlin Wall did not fall overnight, and nor will the bureaucratic walls Ambassador Ray identifies. Regardless, the Air Force is in a position today to fill joint gaps in preparing for and responding to isolating events as the service assigned with global PR.

¹⁷³ US Department of Defense. National Defense Strategy, Washington D.C. June 2008, 23.

¹⁷⁴ Ray, Charles A. Speech for the 2009 SERE Specialist graduation ceremony, June 12 2009.

Bibliography

- AFSOC Historian. Heritage of the Combat Search and Rescue Professionals. Hurlburt Field, FL, January 2005.
- Anderson, Captain B. Conn. USAF Search and Rescue in Southeast Asia (1961-66). CHECO Report. 24 October 1966, K717.0414-1, in USAF Collection, AFHRA. Document is now declassified.
- ANSER Corporation. "Mission Area Analysis (MAA) and Business Process Reengineering (BPR) for Personnel Accounting and Recovery." Arlington, Virginia: October 2000.
- APPENDIX 6 TO ANNEX C TO USCINCENT OPLAN 1002-90. 18 July 1990, NA-41, in USAF Collection, AFHRA.
- Atkinson, Rick. Crusade: The Untold Story of the Persian Gulf War. Boston: Houghton Mifflin Company, 1993.
- Baldor, Lolita C, "Gates Applauds Colombian Rescue Demo", USA Today, 4 October 2007, http://www.usatoday.com/news/wasMngton/2007-10'04-2422189467_x.htm.
- Bell, Dan Captain, USN. "Do We Still Need Navy CSAR" letter to editor. Proceedings vol 126/9/1, 171 (Sep 2000): 18-20.
- Bell, Kensil. Always Ready. New York: I. Dodd Mead and Company. 1943.
- Beckwith, Charlie A. Delta Force. New York: Harcourt, Brace, and Jovanovich, 1983.
- Berger, Carl, ed. The United States Air Force in Southeast Asia, 1961-1973: An Illustrated Account. Washington D.C.: US Government Printing Office, 1984.
- Bissonnette, Major Stephen H. "Joint CSAR-Does the Current Organization Provide the Joint Task Force with the Most Effective Tools?" Unpublished Research Paper, Navy War College, Newport, Rhode Island: February 2002.
- Blumentritt, Major John W. "Playing Defense and Offense: Employing Rescue Resources as Offensive Weapons." Unpublished Research Paper, School of Advanced Airpower Studies, Maxwell Air Force Base, Alabama: May 1999.
- Bowden, Mark. Black Hawk Down New York. Atlantic Monthly Press. 1999.
- Bracich, Col, Mark E. "A Systematic Approach to Address the Challenges of Personnel Recovery: Modeling the Essential Elements of Success." *Joint Center for Operational Analysis and Lessons Learned Bulletin*. VII, no. 2 (March 2005).
- Breck, Major Jim. "Integrating Special Operations Forces With Combat Air Forces: Enabling Deep Heliborne Special Operations." Unpublished Thesis, School of Advanced Airpower Studies, Maxwell AFB, AL, May 2004.
- Brehm, Jack and Pete Nelson. That Others May Live. New York: Crown Publishers, 2000.
- Brown, Bryan D. "Meeting the Challenges of the 21st Century." *Joint Force Quarterly*, no. 40 (1st Quarter 2006).
- Burlein, Dr Steve. "Improving Personnel Recovery in a Coalition Environment" Alexandria VA, IDS Research, May 2002.
- Cardoso, Captain James L., Vega 31 Mission Flight Lead. Memorandum. To Joint Special Operations Task Force. Subject: After Action Report for CSAR of Vega 31, 5 April 1999, in JPRA Library.
- Carmody, Major Russell D. "Theater Combat and Rescue." Unpublished Research Paper, US Army Command and General Staff College, Fort Leavenworth, Kansas: 1993.

Cave, Damien and Simon Romero, "Bold Colombia Rescue Bulk on Rd)el Group's Disarray", NY Times, 4 July 2008, <http://www.nytimes.com/2008/07/04/world/Americas/04rescue.html>.

Chavez, Captain Robert M. "The Ideal Combat Search and Rescue Task Force (CSARTF) – Sandy One's Perspective" USAF Weapons Review vol 48, no.2 (Summer 2000): 37-44.

Chiarelli, Peter W. "Beyond Goldwater-Nichols." Joint Forces Quarterly (Autumn 1993): 71-81.

Chinnery, Philip D. Any Time, Any Place; A History of USAF Air Commando and Special Operations Force. Annapolis, MD: Naval Institute Press, 1994.

Clancy, Tom and Chuck Horner. Every Man a Tiger. New York: G.P. Putnam's Sons, 1999.

Clausewitz, Carl von. On War. Edited and translated by Michael Howard and Peter Paret. Princeton, NJ: Princeton University Press, 1976.

Coakley, Thomas P. Command and Control for War and Peace. Washington, D.C.: National Defense University Press, 1992.

Commission on Roles and Missions of the US Armed Forces, 1995.

Cordesman, Anthony H. The Lessons and Non-Lessons of the Air and Missile Campaign in Kosovo. Westport, CT: Praeger, 2001.

Coyne, James P. Airpower in the Gulf. Arlington, VA: Air Force Association Book, 1992.

Daso, Dik A. Hap Arnold and the Evolution of American Airpower. Washington, D.C.: Smithsonian Institution Press, 2000.

Day, Clifford. "Critical Analysis on the Defeat of Task Force Ranger." Unpublished Research Paper, Air Command and Staff College, Air University, Maxwell Air Force Base, Alabama. March 1997.

DePalo, Lt Col Lee, "USAF Combat Search and Rescue: Ineffective Utilization in the Global War on Terrorism." Unpublished Air War College Paper, Maxwell AFB, AL, February 2005.

Diallo, Tiemoko. *Al Qaeda Holding Europeans Taken in Mali – Military*, 29 Jan 2009, www.reuters.com/article/latestCrisis/idUSLT774538.

DiPaolo, Marc C. et al. "A Rescue Force for the World: Adapting Airpower to the Long War." *Air & Space Power Journal* 21. No. 3 (Autumn 2007): 78-87.

DiPaolo Marc C. Combat Rescue Operational Review. Nevada: Pioneer Technologies, 2000.

DiPaolo Marc C. Email to the Chadwick Sterr, 28 February 2011.

DiPaolo Marc C. JPRA PR Operational Concept and CBA Brief, 19 July 2010.

Dorr, Robert F. "New Command Needed to Take Over Combat Search, Rescue." *Air Force Times*, vol. 60, issue 20, 20 December 1999, 54-55.

Dorr, Robert F. "Kind Words For Black Knights; Criticism for Search and Rescue." *Air Force Times*, vol. 60, issue 26, 24 January 2000, 46-47.

Doherty, Major Thomas I. "Combat Rescue-How Much is Enough?" Unpublished Research Paper, Air Command and Staff College, Maxwell Air Force Base, Alabama: May 1981.

Dunphy, LCDR Christopher C. "Combat Search and Rescue: An American Way of War" Unpublished Research Paper, Marine Corps Command and Staff College, Quantico, Virginia: May 2001.

Durant, Michael J. *In the Company of Heroes*, Penguin Group, New York, NY, 2003.

Durkee, Richard A. USAF Search and Rescue (July 1966-November 1967). CHECO Report. 19 January 1968, K717.0414-1, in USAF Collection, AFHRA. Document is now declassified.

Ebert, Major Douglas A. "Combat Search and Rescue of Distressed Aircrew in the Year 2010." Unpublished Research Paper, Air Command and Staff College, Maxwell Air Force Base, Alabama: May 1995.

The Emergency Email and Wireless Network, *DOS Issues Worldwide Caution for US Citizens Anywhere*, 1 Feb 11, <http://www.emergencyemail.org/newsemergency/anmviewer.asp?a=878>

England, Gordon, Deputy Secretary of Defense Memorandum: "Implementation of the Personnel Recovery Strategic Communication Guidance", Washington DC, 4 March 2008.

Evans, Andy. *Combat Search and Rescue*. New York: Sterling Publishing Company, 1999.

Every, Martin G. *Navy Combat Search and Rescue*. Office of Naval Research. Washington, D.C.: Naval Air Systems Command, September 1979.

Frabott, Terry L. "Combat Search and Rescue (CSAR)." *Army Aviation*, 44: 31 July 1995.

Francis, David G., and David R. Nelson. *Search and Rescue in Southeast Asia (1 April 1972-30 June 1973)*. CHECO Report. 27 November 1974, K717.0414-1, in USAF Collection, AFHRA. Document is now declassified.

Fuqua, Captain Michael T. "We Can Fix Combat SAR in the Navy." *Proceedings* vol 123/9/1,135 (September 1997): 40-42.

Futrell, Robert Frank. *The United States Air Force in Korea 1950-1953*. Washington D.C.: US Government Printing Office. 1983.

Galdorisi, George and Tom Phillips, *Leave No Man Behind: The Saga of Combat Search and Rescue*, Zenith Press, Minneapolis, MN, 2008.

Gates, Robert M. "Budget Press Briefing." 6 April 2009.

Gates, Robert M. "Challenges Facing the Department of Defense." 27 January 2009.

Government Accountability Office. *Overseas Security*, May 2005.

Government Accountability Office. *Special Operations Forces*, July 2006.

Griffith, Major Thomas C. "Position Paper on Improved Search and Rescue." Unpublished Research Paper, Air Command and Staff College, Maxwell Air Force Base, Alabama: 15 October 1991.

Guardian Angel Consolidated Mission Report, OIF Mission Number 04-028, 25 January 2004.

Guardian Angel Enabling Concept (Draft), Personnel Recovery Division, Headquarters, Air Combat Command.

Guardian Angel Force Structure Study Final Report, Personnel Recovery Division. Headquarters, Air Combat Command. 15 May 2009.

Gulf War Airpower Survey, Volume II. Washington, D.C.: Government Printing Office, 1993.

Gulf War Air Power Survey, Volume IV, (Unclassified Edition). Washington D.C.: Government Printing Office, 1993.

Haas, Colonel Michael E. *Apollo's Warriors; United States Air Force Special Operations during the Cold War*. Maxwell AFB, Ala.: Air University Press, 1997.

Haas, Colonel Michael E. and Tsgt Dale K. Robinson. *Air Commando! 1950-1975; Twenty- five Years at the Tip of the Spear*. Air Force Special Operations Command, 1994.

Hallion, Richard P. *Storm Over Iraq Air Power and the Gulf War*. Washington, D.C.: Smithsonian Institution Press, 1992.

Hambleton, Iceal E. Statement for Memorial of Jolly Green 67 on 19 November 1997, <http://www.arlingtoncemetery.net/mcrev/lhtm>.

Hamilton, Booz Allen. "Personnel Recovery Modernization Strategy", Ft Belvoir, VA: JPRA, 31 December 2003.

Hanover, Jason. *AF Rescue 2030: A Multi-Role Force for a Complex World*, draft.

Hansen, Maj Darren T. *XSAR: Should it be a Joint Requirement?* Newport RI: Naval War College, February 2001.

Hanson, Victor Davis. *The Soul of Battle: From Ancient Times to the Present Day, How Three Great Liberators Vanquished Tyranny*, New York, The Free Press, 1999.

Harris, Lt Col William M. End-of-Tour Report, 19 September 1972, K318.2131, in USAF Collection, AFHRA. Document is now declassified.

Hebert, Adam J. "The Air Commandos" *Air Force Magazine*, 88, (March 2005): 32-37.

Hebert, Adam J. "CSAR under new management." *Air Force Magazine*, 86 (August 2003): 84-86.

Hecht, Glen H. Interview with the author during AF PR Operational Concept development, 2009.

Hewish, Mark and Janssen, Joris "Pinpoint and pick up: Combat search and rescue." *Jane's International Defense Review*, vol 31 (January 1998): 35-39.

History. *Air Rescue Service (Volume 1)*, 1 January-31 December 1990, K318.2, in USAF Collection, AFHRA. (FOUO)

Holloway, James, L. "Time for Joint Task Force-CSAR." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 2001.

Howard, Sir Michael. "Military Science in an Age of Peace." *Journal of the Royal United Services Institute for Defence Studies*, vol 119 (March 1974): 3-11.

Hunt, Lt Col Bob L. "Combat Search and Rescue: A Future Special Operations Mission?" Unpublished Research Paper, Air War College, Maxwell Air Force Base, Alabama: 1 April 1996.

Hyer, Richard. "Iraq and Afghanistan Producing New Pattern of Extremity War Injuries", <http://www.medscape.com/viewarticle/528624>

Institute for Defense Analysis. *Interagency National PR Architecture: Final Report*, July 2004.

The John Young View, *airforce-magazine.com*, Jan 2009, <http://www.airforce-magazine.com/MagazineArchive/Documents/2009/January%202009/0109view.pdf>

Jordan, Bryant. "Easing Search and Rescue's Load Proves an Uphill Battle." *Air Force Times*, vol. 59, issue 34, 29 March 1999: 13.

Jordan, Bryant. "Helo Pilots are 'Poor Relations' of Aviator World." *Air Force Times*, 3 May 1999, 8.

Jordan, Bryant. "Search and Rescue Advocate Promises to Get 'Back on Track'." *Air Force Times*, vol. 59, issue 35, 5 April 1999: 12-13.

Jordan, Bryant. "Worked to Death: How Doing Too Much Caused 12 Crewmembers Their Lives." *Air Force Times*, vol. 59, issue 34, 29 March 1999: 12-15. Joint Personnel Recovery Agency. Mission pamphlet. 2002.

Kelly, Orr. *From a Dark Sky; The Story of U.S. Air Force Special Operations*. Novato, CA: Presidio Press, 1996.

Kiras, James D. Interview with the author as a study contributor for the PRMS, 2011.

Koskinas, Major Ioannis, "Black Hats and White Hats: The effect of Organizational and Institutional Identity on the 23rd Air Force." Unpublished Thesis, School of Advanced Airpower Studies, Maxwell AFB, AL, June 2004.

Kocks, Kathleen. "Search and Rescue's New Direction." *Journal of Electronic Defense*, vol.23, issue 4, April 2000: 45-50.

Kyle, James H. *The Guts to Try: The Untold Story Of The Iran Hostage Rescue Mission By The On-Scene Commander*. Reprint, Phoenix, AZ.: Primer Publishers, 1995.

LaGrone, Sam. "Gates' Defense cuts include F-22, CSAR-X," *Air Force Times*, 8 Apr, 2009.

Laushine, Lt Col Stephan J., Rescue Mission Commander. Memorandum. To Commander, Joint Special Operations Task Force. Subject: After Action Report for Hammer 34 Rescue Mission, 2 May 1999, in JPRA Library.

Leahy, Major Timothy J. "The Future of USAF Combat Search and Rescue." Unpublished Research Paper, School of Advanced Airpower Studies, Air University, Maxwell AFB, Ala.: 1998.

Lippman, Thomas W. "U.S. Rescues Pilot as NATO Widens Attack, Stealth Fighter Down." Washington Post, 28 March 1999, Final Ed.

Little, Donald D. "Aerospace Rescue and Recovery Service, 1946-1981: An Illustrated Chronology." Office of MAC History. Scott AFB, Illinois, 1983.

Lynch, Walter F. USAF Search and Rescue in Southeast Asia (1 Jul 69-31 Dec 70). CHECO Report. 23 April 1971, K717.0414-1, in USAF Collection, AFHRA. Information extracted is now declassified.

Martini, Major Michael J. "Air Rescue in the US Air Force: A Historical Perspective." Unpublished Research Paper, Air Command and Staff College, Maxwell Air Force Base, Alabama: April 1987.

Matteson, US Coast Guard Commander Thomas T. "An Analysis of the Circumstances Surrounding the Rescue and Evacuation of Allied Aircrewmen from Yugoslavia, 1941-1945." Unpublished Research Paper, Air War College, Maxwell Air Force Base, Alabama. April 1977.

Mattis, James N., "Joint Concept Development Vision", Memorandum for the US Joint Forces Command, General, USMC, JFCOM, 28 May 2009.

Mattis, James N., "Survival, Evasion, Resistance, and Escape Training" memo dated 21 Apr 2010.

McKinney, Mike and Mike Ryan. Chariots of the Damned. New York: St. Martin's Press. 2001.

Medics, A Brief History, http://www.1stcavmedic.com/medic_history.htm.

Meggett, 2Lt Dave "Organizing for Search and Rescue: Force Structure in a Joint Environment." Airpower Journal vol 9, no.2 (Summer 1995): 82-88.

Minish, Timothy, R. "The Joint Rescue Task Force: Dedicated CSAR Capability for the Joint Force Commander." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1996.

Moentmann, James, E. "Joint Combat Search and Rescue-Operational Necessity or Afterthought?" Joint Forces Quarterly no.18 (Spring 1998): 44-51.

Moore, Harold G. and Joseph L. Galloway. We Were Soldiers Once, and Young. . . New York: Random House. 1992.

Moschler, Major Raymond F. "Combat Search and Rescue (CSAR) in the Laser Age." USAF Weapons Review (Winter 1996): 22-24.

Moseley, T. Michael, *CSAF's Scope highlights SERE training, AMU reorganization*, 27 Aug 2007, <http://www.af.mil/news/story.asp?id=123066135>.

Moseley, T. Michael. "Operation IRAQI FREEDOM-By the Numbers." Shaw AFB, SC: Ninth Air Force, 30 April 2003.

Nadel, Joel and J.R. Wright. Special Men and Special Missions. Washington, D.C.: Greenhill Books, 1994.

National Security Policy Directive (NSPD) 12, United States Citizens Held Hostage Abroad, Annex 1 and Appendix A, 4 December 2008 (classified).

O'Hara, Bob, Public Record Searches, http://www.searcher-na.co.uk/world_war_one_personal_records.htm.

Packet, LTC Virgil L. and Capt Bobby Brooks "Combat Search and Rescue: Whose Responsibility?" US Army Aviation Digest, vol 1-92-6, (October 1996): 18-21.

Palmer, Gen Bruce Jr., *The 25-Year War America's Military Role in Vietnam*. Lexington, Kentucky: The University Press of Kentucky, 1984.

Pioneer Technologies. "USAF Combat Rescue Analysis of Alternatives: Combat Rescue Operational Review, A Summary of Combat Rescue Operations from Vietnam to Kosovo", Draft for Coordination and Review. Las Vegas, Nevada: 29 September 2000.

Posen, Barry R. *The Sources of Military Doctrine*, Cornell University Press: Ithaca NY, 1984.

Priest, Dana. "A Huge Sigh of Relief' Pentagon Stands Firm After Mission to Save Flier." Washington Post, 28 March 1999, Final Ed., A.

Ray, Charles A. "Defining Lines of Authority." *Armed Forces Journal*, February 2009.

Ray, Charles A. Remarks to 2009 SERE Specialist Graduation Ceremony, Spokane WA, 12 June 2009.

Ray, Charles A. Remarks to 2011 CNE-CAN ATTACHE-OSC-ODC Conference, Naples Italy, 8 February 2011.

Redfern, Matthew D. "The JFC's Dilemma: The USMC TRAP Mission Verses the Combat SAR Mission." Unpublished Research Paper, U.S. Army War College, Carlisle Barracks, PA, 1995

Rife, Major Rickey L. "Combat Search and Rescue, a Lesson We Fail to Learn." Unpublished Research Paper, School of Advanced Military Studies, Fort Leavenworth, Kansas, May 1994

Renuart, Victor, E. "Combat Search and Rescue: A Search For Tomorrow." Unpublished Research Paper, U.S. Army War College, Carlisle Barracks, PA, 1992.

Rolfson, Bruce "What's Next for CSAR? After Gates' Proposal. USAF Leaders Worry About Future of Mission." Defense News, 27 April 2009.

Rucci, Commander Gregory. "Do we still need Navy CSAR ?" U.S. Naval Institute Proceedings, (July 2000): 58-61.

Ryan, Paul B, *The Iranian Rescue Mission: Why It Failed*. Annapolis. Maryland: Naval Institute Press. 1985.

Saks, Erick Capt. Rescue Airmen engage hostile forces to retrieve 'Fallen Angels', Air Force Print News, May 1 2011, <http://www.bagram.afcent.af.mil/news/story.asp?id=123254042>.

Saunders, Major Alan W. Corona Harvest Oral History Interview, 1 July 1964, K239.0512-168, in USAF Collection, AFHRA. Document is now declassified.

Schemmer, Benjamin F. "No USAF Combat Rescue Aircraft in Gulf: It Took 72 Hours to Launch One Rescue." *Armed Forces Journal International*, (July 1991): 37-38. "Search and Rescue." *Air Power History*, vol. 47, issue 2, Summer 2000, 42-43.

Schwartz, General Norton, Remarks to Defense Programs Conference, 2 March 2011.

Schwartz, General Norton, interview by Marina Malenic. *Air Force Chief Signals Major Cultural Shift Within The Service*, 12 February 2009.

Scott, William B. "Combat Search and Rescue: Model for Transformation Aviation Week and Space Technology. (I I March 2002): 60-64.

Shelton, Gen Henry H., ChAirman, Joint Chiefs of Staff. Address. DOD Personnel Recovery Conference, Fort Belvoir, Va., 27 October 1999.

Shershun, Major Carrol S. "It's The Greatest Mission of Them All." *Aerospace Historian*, Autumn 1969.

Snow, Donald M., and Dennis M. Drew. "Making Twenty-first Century Strategy: an Introduction to Modern National Security Processes and Problems." *Air University Press*, November 2006.

Stewart, Lt Col William P. "Air Force Combat Search and Rescue: Past, Present, and Prescription for the Future." Unpublished Research Paper, Air War College, Maxwell Air Force Base, Alabama, 1 April 1996.

Stoffey, Col. Robert E.; Holloway III, Admiral James L. *Fighting to Leave: The Final Years of America's War in Vietnam, 1972-1973*. Zenith Press, 2008.

Taylor Jr., L. B. *That Others May Live*. New York: E. P. Dutton & Co. 1967.

The White House. *National Security Strategy*. Washington, D.C. Office of the President of the United States. May 2010.

Thompson, Major Billy D. "For Valor or Value: An Examination of Personnel Recovery Operations." Unpublished Research Paper, School of Advanced Airpower Studies, Maxwell Air Force Base, Alabama: June 2001.

Thompson, Mark. *To Hanoi and Back*. Washington, D.C.: Smithsonian Institution Press, 2000.

Tilford Jr., Earl H. *The United States Air Force Search and Rescue in Southeast Asia*. Washington D.C.: Office of Air Force History, USAF, 1980.

Tilford Jr., Earl H. "Operation Allied Force and the Role of Air Power." *Parameters* (Winter 1999-2000), 24-38.

Tirpak, John A. "Battlefield Airmen." *Air Force Magazine*, 87, no. 4, (April 2004): 26-32.

US Air Force Audit Agency. *Air Force Management of Air Rescue and Recovery Forces*. Norton Air Force Base, California. 4 May 1989.

US Air Force Historical Division, Air University. *Air-Sea Rescue 1941-1952*. USAF Historical Study No. 95. August 1953.

US Air Force. *Irregular Warfare Strategy*, January 2009.

US Air Force. *Irregular Warfare Tiger Team Final Report*, 22 May 2009.

US Air Force. *Lead Operating Command Weapon Systems Management*. (Air Force Policy Directive 10-9), June 2000.

US Air Force. *National Search and Rescue Manual (Air Force Manual 64-2)* Washington, D.C.: July 1959.

US Air Force. *Personnel Recovery (AFPD 10-30)*, 22 December 2006.

US Air Force. *Personnel Recovery Coordination Cell Operating Procedures (AFI 13-208)*, 10 March 2007.

US Air Force. *Personnel Recovery Core Function Functional Concept 2011-2031 V5*, 24 February 2011.

US Air Force. *Personnel Recovery Core Function Master Plan 2010-2030*.

US Air Force. *Personnel Recovery Operational Concept*, 3 September 2009.

US Air Force. *Personnel Recovery Operations (AFDD 3-50)*, 1 June 2005.

US Air Force. *Reintegration (AFI 10-3001)*, 21 April 2009.

US Air Force. *Search, Rescue, and Recovery Operations (Air Force Manual 2-36)* Washington, D.C.: 3 January 1967.

US Air Force. *SERE Program (AFI 16-1301)*, 6 September 2006.

US Army. *Personnel Recovery (FM 3-50.1)*, August 2005.

US Central Command. "USCENTCOM Personnel Recovery Statistics Summary." Joint Personnel Recovery Agency, 2001-2008.

US Department of Defense. Accounting for Missing Persons (DODI 2310.5), 1 January 2000.

US Department of Defense, Capstone Concept for Joint Operations, 15 January 2009.

US Department of Defense. Code of Conduct Training (DODI 1300.21), 8 January 2001.

US Department of Defense. Conduct of the Persian Gulf Conflict: An Interim Report to Congress. Washington D.C.: July 1991.

US Department of Defense. Combat Rescue Operational Review, 2001.

US Department of Defense. Contract Personnel Authorized to Accompany US Armed Forces (DODI 3020.41), 3 October 2005.

US Department of Defense. Conduct of the Persian Gulf Conflict: Final Report to Congress. Washington D.C.: April 1992.

US Department of Defense. Defense Prisoner of War/Missing Personnel Office (DODD 5110.10), 16 April 2009.

US Department of Defense. DOD Dictionary of Military and Associated Terms, Washington D.C. 8 November 2010 as amended through 31 January 2011.

US Department of Defense. Doctrine for the Armed Forces of the US (JP 1), 14 May 2007.

US Department of Defense. Guidance for Development of the Force, 12 December 2007.

US Department of Defense. Guidance for Employment of the Force, February 2008.

US Department of Defense. Intelligence Support to PR (DODI 3115.10E), 3 October 2005.

US Department of Defense. Interservice and Intergovernmental Support (DODI 4000.19), 9 August 1995.

US Department of Defense. Irregular Warfare Joint Operating Concept vl.0, 11 September 2007.

US Department of Defense. Isolated Personnel Training for DOD Civilians and Contractors (DODI 1300.23), 20 August 2003.

US Department of Defense. National Defense Strategy, Washington D.C. June 2008.

US Department of Defense. National Strategy for Combating Terrorism, September 2006.

US Department of Defense. Nonconventional Assisted Recovery in the DOD (DODI 2310.6), 13 October 2000.

US Department of Defense. Personnel Accounting-Losses Due to Hostile Acts (DODD 2310.07E), 21 August 2007.

US Department of Defense. Personnel Recovery within the Department of Defense (DODD 3002.01E), 16 April 2009.

US Department of Defense. Personnel Recovery (JP 3-50), 5 January 2007.

US Department of Defense. Personnel Recovery (DODD 2310.2), 22 December 2000.

US Department of Defense. Quadrennial Defense Review Report, 6 February 2006.

US Department of Defense. Repatriation of POWs (DODI 2310.4), 21 November 2000.

US Department of Defense. Functions of the Department of Defense and its Major Components (DODD 5100.1), 21 December 2010.

US Department of Defense. Support to Civil Search and Rescue (DODI 3003.01), 20 January 2006.

US Department of Defense. Training and Education to Support the Code of Conduct (DODD 1300.7), 8 December 2000.

US House. Committee on Armed Services. Statement by General John Jumper: Operations in Kosovo: Problems Encountered Lessons Learned and Reconstitution: Hearing before the Subcommittee on Military Readiness. 106th Cong., 1st sess., 26 October 1999.

US Joint Chiefs of Staff. National Military Strategy. Washington D.C. 2011.

US Joint Forces Command, The Joint Operating Environment, Norfolk VA, 18 February 2010.

US Joint Forces Command, Joint Personnel Recovery Agency, Joint Center for Operational Analysis and Lessons Learned Quarterly Bulletin, Volume VII, Issue 2, March 2005.

US Joint Personnel Recovery Agency. Assessment of Combat Search and Rescue Requirements in a Joint Context, 13 August 2009.

US Joint Personnel Recovery Agency. Operating Concept for Personnel Recovery, V.53-100707 (pre-decisional draft).

US Joint Personnel Recovery Agency. "Joint Personnel Recovery Agency Mission Area Analysis Final Report" Prepared by TATE, Inc. Ft Belvoir VA: June 2001.

US Joint Task Force Katrina. 347 Rescue Group Lessons Learned, 22 September 2005.

US Joint Task Force Katrina. The Federal Response to Hurricane Katrina Lessons Learned, February 2006.

US Marine Corps. Personnel Recovery and Repatriation (MCO 3460.2), 2 December 2002.

Veda Incorporated. "Combat Search and Rescue Report to the Joint Chiefs of Staff and the Executive Agent for Combat Search and Rescue", Combat Search and Rescue Requirements Study. Washington, D.C.: 10 February 1997.

Weigley, Russell F. The American Way of War. Bloomington, Indiana: University Press, 1977.

Westermann, Capt Edward B. "Air Rescue Service: A Direction for the Twenty-First Century." Airpower Journal, Fall 1990, 60-71.

Whitcomb, Darrel D. The Rescue of Bat 21. Annapolis, Maryland: Naval Institute Press, 1998.

Whitcomb, Darrel D. "Combat Search and Rescue: A Longer Look." Aerospace Power Journal, Summer 2000, 28-35.

Whitcomb, Darrel D. "Mixed Bag: Combat Search and Rescue in DESERT STORM." Unpublished Manuscript, Joint Personnel Research Agency, Fort Belvoir, VA: Feb 2003.

Whitcomb, Darrel D. "Thanks, I Knew That You Would Come." Air Force Times, vol. 59, issue 19, 14 December 1998, 36.

Woodward, Bob. Bush at War New York: Simon and Schuster, 2002.

Wooley, Michael W. "America's Quiet Professionals Specialized Airpower-Yesterday Today, Tomorrow." Air & Space Power Journal, XIX, (Spring2005): 59-67.

Ziegler, Russell M. "Combat Search and Research (CSAR): Time to Find a Real Fix." Unpublished Research Paper, U.S. Naval War College, Newport, RI: 1993.