



CURTIS E. LEMAY CENTER

FOR DOCTRINE DEVELOPMENT AND EDUCATION



[ANNEX 3-50 PERSONNEL RECOVERY](#)

CATALOG OF DOCTRINE TOPICS

Introduction to Personnel Recovery

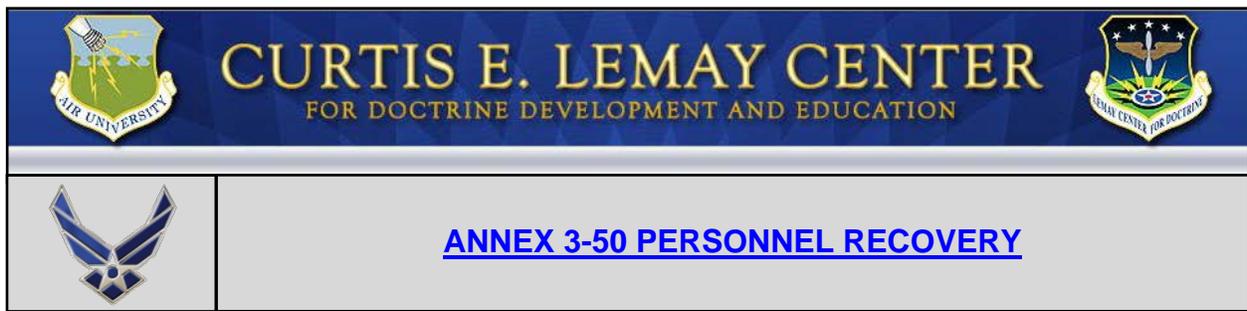
Personnel Recovery Functions

Combat Search and Rescue

Personnel Recovery Command and Control

USAF Combat Search and Rescue Recovery Forces

Isolated Personnel



INTRODUCTION TO PERSONNEL RECOVERY

Last Updated: 4 Dec 2014

OVERVIEW AND DEFINITIONS

Our adversaries clearly understand that there is great intelligence and propaganda value to be leveraged from captured Americans that can influence our national and political will and negatively impact our strategic objectives. For these reasons, the Air Force maintains a robust and well trained force to locate and recover personnel who have become “isolated” from friendly forces. Personnel recovery (PR) is an overarching term that describes this process, and the capability it represents. It is a term that should be clearly defined before understanding Air Force doctrine on Personnel Recovery.

“Personnel recovery is defined as “the sum of military, diplomatic, and civil efforts to effect the recovery and return of US Military, Department of Defense (DOD) civilians, and DOD contractor personnel who are isolated or missing while participating in a US government-sanctioned military activity or missions in an uncertain or hostile environment, or as determined by the Secretary of Defense.” Joint Publication (JP) 3-50, *Personnel Recovery*, 20 December 2011, updates the PR definition as “the sum of military, diplomatic, and civil efforts to prepare for and execute the recovery and reintegration of isolated personnel (IP)” (Chairman of the Joint Chiefs of Staff Instruction [CJCSI] 3270.01A, *Personnel Recovery within the Department of Defense*). Additionally, National Security Presidential Directive (NSPD)-12, *US Citizens Taken Hostage Abroad*, and its Annex 1, *US Policy on Personnel Recovery and the Prevention of Hostage-Taking and Other Isolating Events*, expands PR responsibilities to: prevent, plan for, and coordinate a response to isolating events to include all United States Government departments and agencies. JP 3-50 defines isolated personnel (IP) as “those US military, DOD civilians and DOD contract employees and those designated by the President (of the United States) (POTUS) or Secretary of Defense (SecDef) who are separated from their unit, as an individual or a group, while participating in a US-sponsored military activity or mission and who are, or may be, in a situation where they must survive, evade, resist, or escape.”

Thus PR is an effort to recover people engaged in DOD activities that have become lost or separated in an environment in which they must take extraordinary action to survive and return to friendly control. The clause allowing for POTUS or SecDef declaration of IP allows for DOD resources to be made available to locate and recover individuals of strategic or political value (who might not fully meet the original criteria) as well as coalition partners and allies during times of conflict. The Air Force conducts global

personnel recovery operations including theater-wide combat and civil search and rescue (SAR), in coordination with the other military Services, United States Special Operations Command (USSOCOM), and DOD Components.

The Air Force conducts PR using the fastest and most effective means to recover IP. Air Force PR forces deploy to recover personnel or equipment with specially outfitted aircraft/vehicles, specially trained aircrews and ground recovery teams with PR support personnel and capabilities in response to geographic combatant commander taskings. Traditionally the AF focused on the recovery of downed aircrews; however, recent experience has proven that Air Force PR forces are responsible for the recovery of many types of isolated personnel.

AF PR capability has three critical components: dedicated PR forces, commanders and staffs trained to manage PR programs/missions, and Airmen who are trained and equipped for potential isolation and recovery. Furthermore, the United States government employs three options for recovery of IP: military, diplomatic, and civil. While the diplomatic and civil options are outside the purview of the Air Force, it can be called upon to support those options. This document focuses on how it plans for and executes the military option. Specifically, it codifies the Air Force's operational level doctrine on PR and how Air Force PR capability complements joint PR concepts.

HISTORICAL PERSPECTIVE

Code of an Air Rescue Man

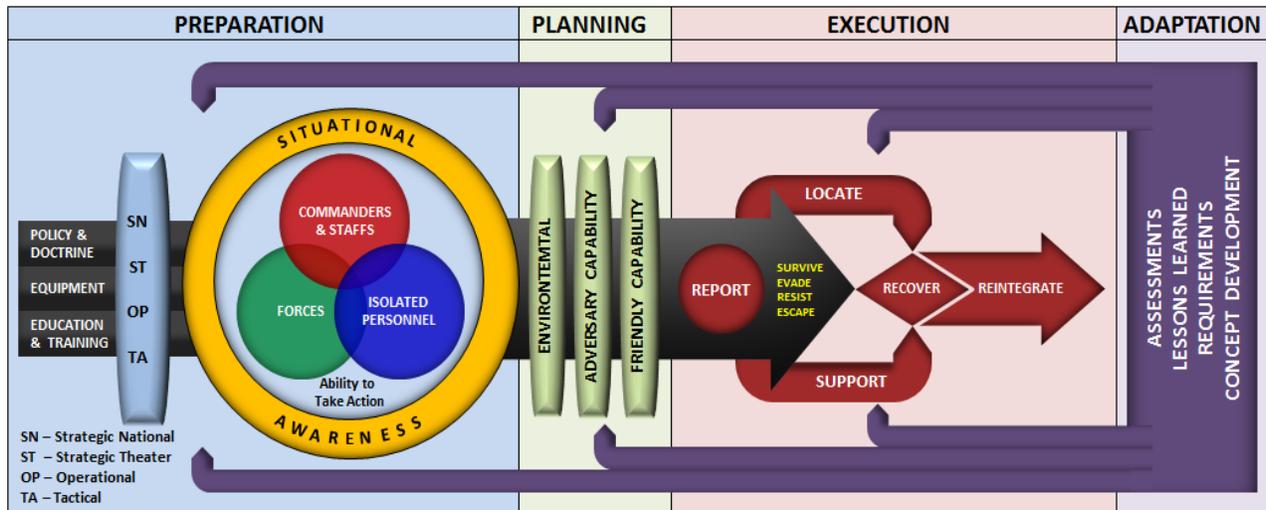
It is my duty, as a member of the Air Rescue Service, to save life and aid the injured.
I will be prepared at all times to perform my assigned duties quickly and efficiently,
placing these duties before personal desires and comforts.
These things I do THAT OTHERS MAY LIVE

**—Brig Gen Richard Kight
Commander Air Rescue Service, 1 Dec 1946 – 8 Jul 1952**

Recent operations and events have proven that IP are not always limited to combatants deep behind enemy lines or even on a battlefield. Non-state actors such as pirates and international terrorists can be embedded in urban areas and behind less well-defined lines of battle. Areas previously thought of as "safe" (e.g. "behind the lines") are becoming more dangerous making it more difficult for successful diplomatic and civil options and exceedingly more complex and risky for the military option.

PERSONNEL RECOVERY PHILOSOPHY

The DOD mandates that each Service plans and conducts PR in support of its own operations. As currently constructed, PR has four functions: Preparation, Planning, Execution and Adaptation (see diagram).



Although Airmen may place natural emphasis on the recovery of fellow Airmen, Air Force PR philosophy is based on the assumption that rescue forces are prepared to recover any IP at any time and any place. The successful recovery of IP is an intangible force multiplier that transcends the tactical to the operational and strategic levels of war. Additionally, rescue is an integral part of US combat operations and should be considered across the range of military operations. It is a key element in sustaining the morale, cohesion, and fighting capability of friendly forces. It preserves critical combat resources and influences the course of national and international politics by denying adversaries the opportunity to exploit the intelligence and propaganda value of captured personnel.

MISSIONS

The Air Force organizes, trains, and equips its rescue forces to provide unique capabilities to combatant commanders. The primary mission of Air Force Rescue is to use a combination of specially trained Airmen and systems to recover isolated personnel. Diverse skill sets allow dedicated PR forces to accomplish many collateral missions. These collateral missions may include: casualty evacuation, civil SAR, counter-drug activities, emergency and/or traditional aeromedical evacuation, homeland security, humanitarian relief, international aid, non-combatant evacuation operations, support for National Aeronautics and Space Administration (NASA) flight operations, mass rescue operations, theater security cooperation, specialized air and ground mobility, PR command and control and the complex reintegration, infiltration and exfiltration of personnel in support of air component commander missions, special operations missions, and rescue of special operations forces.

COMBAT SEARCH AND RESCUE

Combat search and rescue (CSAR) is how the Air Force accomplishes rescue/recovery tasks. It is the Air Force's preferred mechanism for personnel recovery in uncertain or hostile environments and denied areas. CSAR is often the only feasible means the Air

Force has to accomplish the PR execution task in contested environments. While PR is not limited to combat operations, CSAR, by definition, is a combat task and not conducted in humanitarian assistance, Civil SAR or Casualty Evacuation.

PERSONNEL RECOVERY SYSTEM

While Air Force personnel recovery missions can collaterally recover IP from any Service, each Service is primarily responsible for PR for their own operations. Until recently, the Air Forces' focus was to provide for the recovery of Airmen. Currently, each Service is now committed to the recovery of any captured, missing, or IP from uncertain or hostile environments and denied areas.

DOD personnel recovery systems ensure a complete and coordinated effort to recover US military, DOD civilians and DOD contractor personnel, and other personnel directed by the President of the United States or Secretary of Defense. Air Force capabilities, tactics, techniques, and procedures represent an integral part of the joint PR system. This system consists of the preparation, planning, execution and adaptation functions. Although the activities within these functions can happen consecutively, they generally occur concurrently or, at a minimum, they overlap in their execution. There are three primary PR responsibilities: prevent, plan for, and coordinate/respond to isolating events. Previously there were two. However, National Security Presidential Directive (NSPD)-12, Annex 1, expanded PR to include the "prevent" task. Force Protection and focused PR planning, to include evasion plan of action (EPA) during combat operations, development of EPAs, detailed area studies, and review of Department of State EPAs, are essential during operations outside declared theaters of active armed conflict. Finally, the Air Force PR system like the joint PR system, is centered on five essential tasks: report, locate, support, recover and reintegrate.

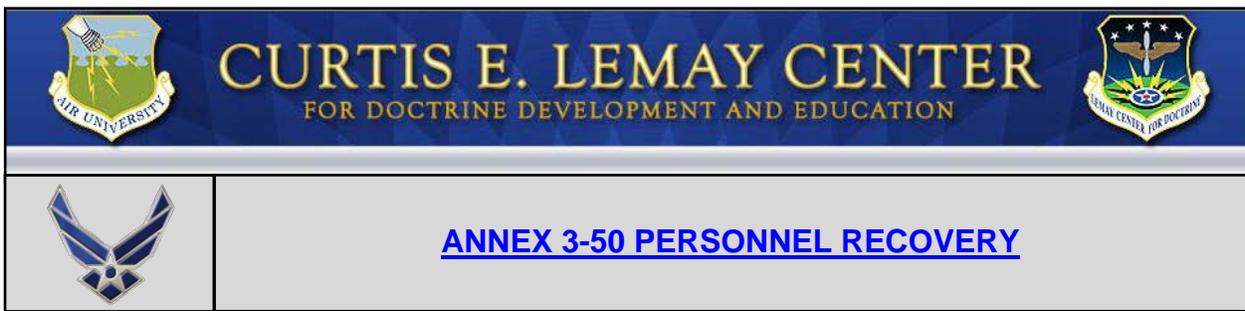
JOINT PERSONNEL RECOVERY CENTER

Geographic combatant commanders (CCDRs) should establish a standing joint personnel recovery center (JPRC) or functional equivalent. Joint force commanders (JFCs), who may be CCDRs, subordinate unified commanders, or joint task force commanders, normally designate the responsibility for the joint personnel recovery mission area to the joint operations directorate (J-3) or to a component commander. The JPRC is integrated into the appropriate operations center.

If the JFC chooses to coordinate joint PR through a component commander, the JFC should also designate them as supported commander for the joint PR mission area. The JFC delegates to the supported commander the necessary authority to successfully accomplish the five execution tasks. This relationship should be evaluated as operations progress through the different campaign phases. For example, while the commander, Air Force Forces (COMAFFOR) may be designated the supported commander for joint PR during major operations (often referred to as "Phase III"), the JFC should reevaluate the support/supporting relationship when the campaign shifts to other missions

At the same time, component commanders have primary authority and responsibility to plan and conduct PR in support of their own operations. In other words, whether the JFC elects to coordinate PR through the J-3 or a component commander, all Service

components should maintain a personnel recovery coordination cell (PRCC) capability in order to execute component PR responsibilities. For example, the commander, Air Force forces (COMAFFOR) should establish a PRCC to coordinate air component PR activities, including coordination with the JPRC and other component PRCCs, as appropriate. The air component PRCC should be collocated with the **air operations center** and manned with personnel specifically trained to effectively coordinate joint PR activities.



PERSONNEL RECOVERY FUNCTIONS

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There are four core Personnel Recovery (PR) functions: preparation, planning, execution and adaptation.

PREPARATION

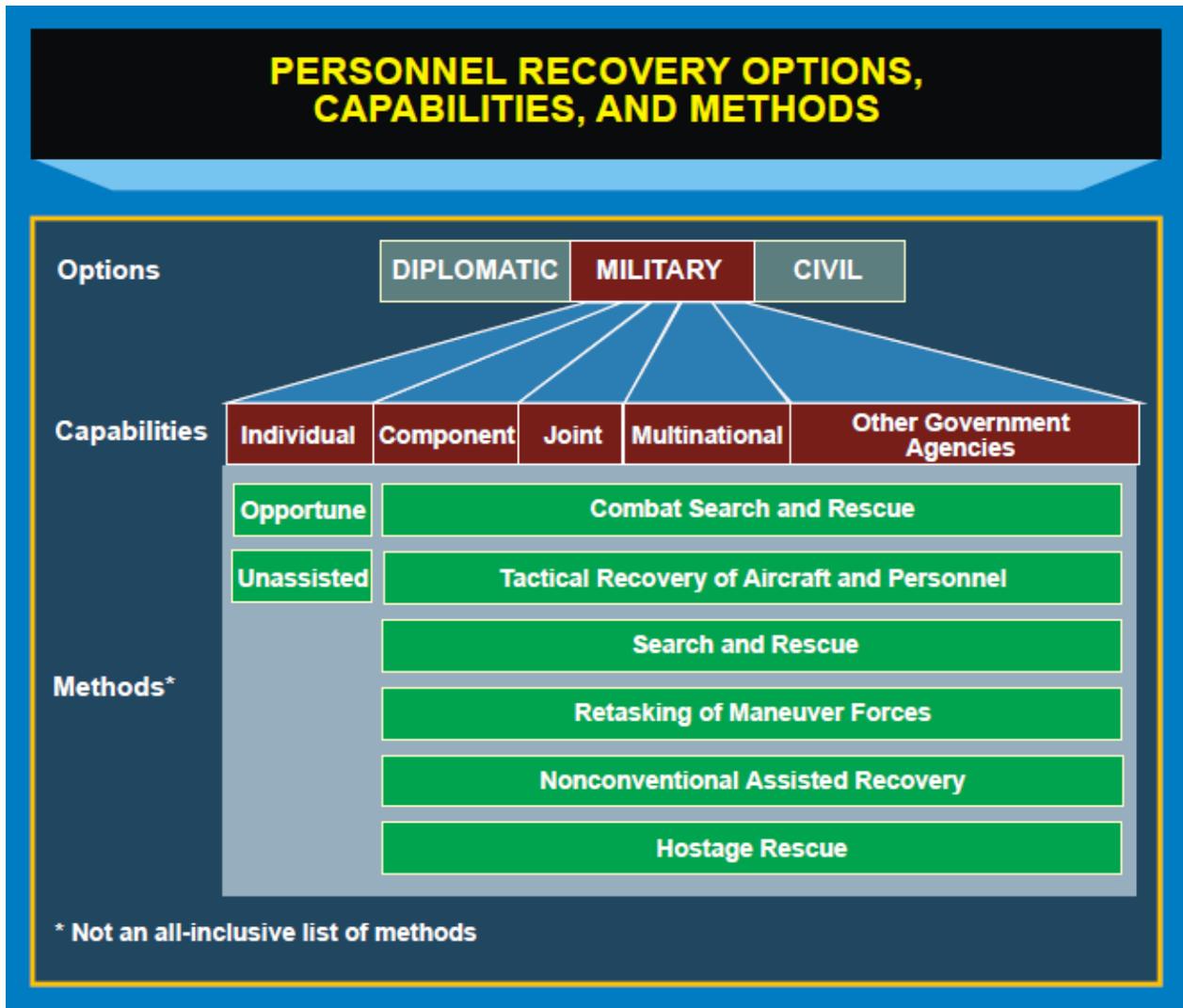
PR is, by nature, a reactionary event fraught with variables and complexities that are difficult to predict prior to their occurrence. It is also one that needs to be executed quickly in order to increase the likelihood of success. Historically, the successful recovery of an individual who has been on the ground behind enemy lines for greater than four hours falls below 20 percent. While PR events don't lend themselves to a great deal of prior planning, there is much we can do long before an event is declared to shorten our decision and execution processes—this is preparation.

Preparation involves the development of policy, doctrine, equipment, education and training in a standardized fashion as seen through the tactical, operational, theater strategic and national strategic lenses. All of this is directed at commanders and staffs, forces that could participate in a PR event, as well as potential isolated personnel (IP) to provide greater situational awareness that enhances their abilities to take expedient, decisive action. This is the doctrinal foundation which should be built long before the first event occurs and be the foundational response for future events. It is not inflexible, but it prescribes terms, capabilities and response options so that when properly employed, a coordinated, planned mission can occur where minimal time is expended between notification and execution. Preparation is an ongoing element of PR in both times of peace or conflict. The publication of this document is part of the preparation process, as is PR exercise participation, Survival, Evasion, Resistance and Escape (SERE) and Code of Conduct training and the proper organizing, training and equipping of both dedicated PR forces (rescue squadrons) and those who may be called upon to participate in a PR mission from actually flying to providing command and control capabilities in an air operations center (AOC). Proper preparation is crucial to rapidly providing an appropriate and tailored response.

PLANNING

Planning occurs during recurring deliberate or contingency planning processes. It is characterized by the Joint Operations Planning Process for Air with specific outcomes based on commander's intent. It entails a detailed PR mission analysis, course of action development and wargaming based on the plan's mission, goals and tasks development of the PR appendix (Appendix 5 to Annex C) of the basic operation plan,

or at the component level the component's supporting plan. A completed PR mission analysis will be the foundation for the PR operational concept and be used in the development of the PR appendix of the basic plan. Planning options available are found in the definition of PR: diplomatic, military and civil. As mentioned before there is little that can be done in preparation for diplomatic and civil, however, PR planners could be called upon to support those two options. Overall, the bulk of military PR planning is focused on the execution of the military option.



PR CAPABILITIES

Individual. The individual capability is exercised when an IP returns themselves to friendly control either through unassisted evasion or through the taking advantage of assistance from friendly or sympathetic persons. While IP are expected to survive, evade, resist and escape and otherwise assist in their own recovery for as long as possible, this capability is not typically a planned event. It can, however, occur to enable other capabilities and occasionally results in a self-recovery.

Component. Component commanders are expected to plan for and execute PR in support of their own operations. This usually results in the development of Service-unique PR capabilities for the environments in which those components normally operate in (air, maritime, and land) and with the specific tools and equipment available to them. It makes sense that the Navy should be best at, and have the appropriate equipment, to conduct maritime PR.

Joint. Although each component has unique capabilities, joint level planners look at all the component capabilities to develop an integrated plan for a [joint operations area](#) that provides broad PR coverage over a wider area.

Multinational. When [working with multinational partners](#) it is important to remember that most countries do not have the same capabilities. However, incorporating them for permissive PR or a civil search and rescue capability in host nations is useful. It also frees up low density, high demand PR assets to focus on the combat PR missions. Care should be taken when using multinational forces with security, communications, equipment interoperability and both language and cultural barriers.

Other Government Agencies. Because of more non-state actors participating in warfare and the wider use of other governmental agencies (OGAs) (such as the Drug Enforcement Agency, the Federal Bureau of Investigations) overseas, PR has become a greater concern for non-combatants. Many of these OGAs will have developed some recovery capability of their own to varying degrees of robustness. These capabilities are available to the air component through the joint personnel recovery center ([JPRC](#)) who has direct liaison authority (DIRLAUTH) through the State Department.

GENERAL PLANNING CONSIDERATIONS

The specific information required for pre-mission planning and for execution/launch authority includes such items as the location of IP, authentication, threat/weather/terrain assessment, and evaluation of safe passage corridors and air refueling capabilities. In order to improve mission planning effectiveness, it is optimal to co-locate all dedicated PR planning activities. Furthermore, direct communication with the AOC, the JPRC, [personnel recovery coordination cell](#) (PRCC), and wing operations centers is essential. This direct communication is most important when the battlefield conditions dictate the formation of a robust combat search and rescue task force (CSARTF).

Additionally, the COMAFFOR should consider the capabilities of the host nation, other Service/functional components, and multinational forces during all phases of PR mission planning. Accordingly, PR should be thoroughly integrated in deliberate mission planning and considered as early as possible in crisis action planning.

The dynamic nature of Combat Search and Rescue (CSAR) creates the need to fully integrate PR considerations in the master air attack plan in order to ensure maximum flexibility and responsiveness for PR forces on the [air tasking order](#). PR should be coordinated throughout the combined air operation center and with other component liaisons, to include: the battlefield coordination detachment, naval liaison element, special operations liaison element, Marine liaison officer, [aeromedical evacuation](#) element, combat operations/plans directorates, airspace, etc.

As part of the planning process, Air Force personnel conducting and supporting PRs should be thoroughly familiar with the laws of armed conflict (LOAC) and applicable rules of engagement (ROE). This is particularly important when addressing issues of the use of force during CSAR operations (to include self-defense considerations), as well as treatment and release of persons captured or detained. LOAC application during low-intensity operations may be complicated by organizational structures, responsibilities, and status of potential adversaries. Only extensive LOAC training can provide PR forces the proper foundation that enables sound judgment in ambiguous situations.

Another key concept that enables successful recovery operations, while properly adhering to LOAC, is clear and consistent rules of engagement. PR forces should attempt to influence the ROE development process as early as possible, in order to gain maximum flexibility in recovering isolated personnel.

Personnel Recovery Coordination Cell. As part of planning and preparing for executing PR in support of their own operations, component commanders stand up PRCCs or a functional equivalent. Component commanders execute operational control over their own PR Forces through PRCCs which should be embedded in the Component operations centers where they have the greatest situational awareness and the ability to provide a direct response with the appropriate resources. The PRCC is the focal point for all Component PR activities. Joint Forces Commanders (JFC) may designate the commander, Air Force forces (COMAFFOR) as the supported commander for PR. In doing so the AFFOR PRCC chief will become the JPRC director and the whole PRCC will become dual-hatted as the JPRC as well as the AFFOR PRCC. At this point the other components should provide joint level PR expertise to the JPRC to work their component's joint PR equities.

Joint Personnel Recovery Center. When employed under a [joint task force](#), joint force commanders will stand up a Joint Personnel Recovery Center (JPRC) within their own joint operations center. The JPRC coordinates PR resources between component PRCCs whose capabilities may be exceeded by a PR mission. Having DIRLAUTH between outside agencies (State Department, national intelligence organizations, etc.), the JPRC is a valuable resource for additional resources and information that the component PRCCs may require to execute their mission. JPRCs are coordination nodes only. They do not exercise formal control over any resources (resources belong to the component commanders who execute that authority through the PRCCs).

Joint Personnel Recovery Agency. The Joint Personnel Recovery Agency within the Joint Staff provides operational support teams and exercises support to assist Combatant Commanders' CCDR planning and deployed/deploying forces executing PR to meet a commander's force protection requirement.

Communications. Rapid, reliable, and secure flow of information is a key factor that contributes to PR planning success. The JPRC and the Air Force's three CSAR components (PRCC, the recovery forces, and IP) should be able to communicate over long distances, with minimum interference or intrusion, and with low probability of detection or interception. JPRCs and PRCCs should have access to dedicated communication systems that provide redundant capabilities for secure inter- and intra-

theater data and voice transmission. Proper planning, coordination, and brevity optimize the use of communications systems.

Communication planning requires integrating theater, component, and unit operating instructions and execution checklists. The importance of good communications between isolated personnel and rescue forces cannot be overstressed.

Communications-out procedures, or procedures for handling situations when communications are disrupted, or personnel/units are unexpectedly out of contact, are often warranted but should be commensurate with the enemy's signal intelligence capabilities. Brevity words and terminology can be found in Air Force Tactics, Techniques, and Procedures (AFTTP) 3-2.5, [Multi-Service Brevity Codes](#), theater directives and tasking orders. The PR plan should provide adequate redundancy to compensate in the event of equipment or communications failure during any phase of mission execution.

Intelligence. Successful PR requires timely and accurate [intelligence](#) support. Intelligence support is always an integral part of PR. As such, intelligence specialists should be assigned to, and deploy with, PRCCs and operational rescue units.

A thorough understanding of the geography, enemy [order of battle](#), the local population's social and political attitudes, enemy tactics, techniques, and procedures, as well as friendly order of battle is imperative in all combat operations. But considering the dynamic nature of PR, these factors make intelligence products especially significant for rescue operations. Based on this information, JFC, JPRC, COMAFFOR, PRCC, and PR units decide whether or not to commit PR assets, consider tactics and recovery force composition, and coordinate support requirements.

Threat analysis, targeting, collection management, and order-of-battle data should be thoroughly integrated in PR mission planning. Due to PRs' rapid-response requirements during the recovery phase, however, the CSARTF may have to launch with incomplete threat information. Under these circumstances, intelligence specialists make the full use of intelligence assessments, automated data processing, and mission-planning systems that interface with intelligence databases, in order to provide the most up-to-date threat information to PR forces.

Security. Information security and [operations security \(OPSEC\)](#) are also critical to PR. Security of information is vital to PR forces from initial planning stages through execution and even after mission completion. OPSEC denies the enemy information about friendly capabilities and intentions, including advance notice of mission unique training, joint preparations, deployment, and employment. PR forces can maintain OPSEC by carefully identifying, controlling, and protecting indicators and actions associated with the operation. Failure to implement an effective OPSEC Program could result in mission compromise and loss of personnel and resources.

Information Operations. Traditionally, [information operations](#) (IO) serves to amplify the effects of traditional military operations. PR can influence IO planning in four primary ways. First, PR operations return isolated personnel to friendly control, allowing them to fight again. Second, PR operations often influence the course of national and international politics by denying adversaries the opportunity to exploit the [intelligence](#) and [propaganda](#) value of captured personnel. Third, the presence of a robust and viable CSAR force increases morale, with a resultant increase in operational

performance. Finally, PR contributes to the IO campaign by countering the adversary's [deception](#) efforts.

For example, if enemy forces have already captured IP, they may try to deceive PR forces in order to lure them into an ambush. Even if IP have not been captured, the enemy may try to provide false data to PR forces and, at the same time, move additional air defense assets into the area in an attempt to ambush the recovery force.

While friendly force communications discipline and adherence to PR standard operating procedures may counter enemy deception operations, PR operations' success or failure can impact the JFC's IO campaign significantly. PR planners should appreciate the influence of PR operations well beyond the actual recovery of the isolated person. Similarly, IO planners should keep in mind the intrinsic value of PR operations to an IO campaign. PR and IO planners should work together to maximize the influence of successful PR and minimize the impact of mission failure.

Medical. Due to the variety of injuries to IP, [medical](#) personnel should be integrated into planning, deployment, and support of PR. The PRCC is the focal point for PR coordination with military medical facilities in order to provide medical advice beyond the expertise of the recovery team.

Space Requirements. Air Force PR forces require timely, accurate, and current space products and support during all phases of PR, from initial planning through deployment and execution. PR forces should work closely with integrated [space support](#) to determine the most appropriate space products necessary to complete the mission, and forward requirements through established channels to space-derived information and services suppliers. Product requirements can be obtained via the director of Space Forces in the AOC's combat operations division.

Weather, Illumination, and Topological Considerations. Air Force PR forces require timely and accurate [weather support](#) during all phases of planning, deployment, employment, and redeployment. This allows PR forces to use weather conditions to their advantage. Temperature, barometric pressure, precipitation, humidity, ground and low-level flight visibility, predicted winds, fog, cloud cover, radio frequency propagation, sensor detection ranges, and other hazards to recovery forces and the IP greatly impact PR planning and execution. PR forces are capable of conducting operations in a wide range of topographical environments. Terrain features often determine the type of capabilities required to conduct recovery operations. Additionally, sunrise, sunset, moonrise, moon phase, predicted ambient light, and hydrographic data affect PR significantly. These conditions play an important role in the timing and tempo and should be considered critical planning factors for PRs.

Host Nation and Multinational Considerations. Military planners should work with interagency and [international partners](#) to develop a PR umbrella across the [range of military operations](#), regardless of titles of authority. Gaining knowledge of partner PR capabilities and command and control (C2) infrastructure through building partnership capacity is essential to the AF recovery capability. Similarly, a COMAFFOR should consider the capabilities of other service/functional components, [multinational and host nation \(HN\) forces](#) during all phases of PR mission planning. Where possible, detailed PR planning should include coordination and the implementation of legal agreements to affect a multinational PR effort and recognize constraints. HN security force and

emergency response personnel may not always possess the capabilities required to respond effectively to an isolating incident involving US personnel. The US may need to partner with a HN to build upon or supplement their capabilities for a given mission. A PR relationship with multinational forces may be the deliberate intent of the JFC or it may be directed from higher authority. In most cases, the JFC will have to consider the PR coordination between US forces and the host nation military. The JFC's PR concept of operations should address the multinational PR architecture to promote detailed planning, coordination, and the implementation of legal agreements to affect a multinational PR effort and recognize constraints. Achieving balance and unity of effort among multinational forces is a major challenge that can be mitigated by planning, training, and rehearsing.

MOBILITY PLANNING CONSIDERATIONS

Early identification of requirements, inclusion in the force enhancement/flexible deterrent option (FE/FDO), appropriate PR priority in the flow of [time phased force deployment data](#) (TPFDD), and frequent reevaluation are keys to sustaining PR support. Historically, during [contingencies](#), PR requirements are often an afterthought rather than a preplanned consideration of the joint operation planning and execution system. Similar to Air Tasking Order (ATO) planners, PR action officers on a JFC's staff and PR officers at the COMAFFOR level should consider PR requirements in conjunction with other operational requirements when developing [operation plans](#) (OPLAN), [operations orders](#), FE/FDO and/or TPFDD, etc. For additional information on combat support requirements see [Annex 4-0, Combat Support](#). For TPFDD information, consult [Air Force Policy Directive 10-4, Operations Planning: Air & Space Expeditionary Force](#), Capabilities Allocation Annex, and the Air Force Wartime Unit Type Code Summary statements.

Deployment. Air Force PR forces should have the ability to execute time-sensitive deployments and to deploy as deliberately planned elements of an [air expeditionary task force](#) (AETF). PR forces should consider the following deployment factors: PR forces should deploy in theater prior to the start of hostilities and be prepared to provide immediate PR mission capability with minimal support airlift. Tailored rapid-response deployment packages support the intent of the AETF concept and follow-on in-theater contingency operations.

The initial deployment of PR forces in support of Operation ENDURING FREEDOM (OEF) represents a perfect example of the significant emphasis that CCDRs and Service chiefs put on PR. Military commanders delayed decisive operations until the JFC established an adequate PR capability. Another way to look at this, OEF demonstrated the need to have PR forces in place prior to commencement of combat operations. Based on OEF and other historical data, the PR forces should be listed high on the combatant commander's time phased force deployment list.

Operating Locations. Air Force planners should determine beddown locations for rescue forces based on factors including response time, operations tempo, [force protection](#), and other variables. Best practices reflect that support and deployment concepts include the capability to operate from main operating bases, forward operating bases, forward operating locations, and staging bases for rotary wing assets. Planners should tailor logistical support requirements based on the most likely operating location.

To decrease response time and improve the chances of a successful recovery, rescue forces should be positioned as far forward as the situation allows. As an initial planning consideration, the COMAFFOR should have the ability to deploy PR assets to bare bases and austere environments for up to 14 days with minimum base operating support (BOS).

Main Operating Base (MOB). An MOB is a base established in friendly territory to provide sustained command and control, administration, and logistical support to PR activities in designated areas. MOBs Provide significant levels of base operating support , a well-organized and extensive logistical support organization, and a robust communications infrastructure that enables the recovery forces' access to battlefield C2 and Intelligence, Surveillance and Reconnaissance (ISR) information. If the MOB is significantly removed from potential PR objective areas, planners should consider the establishment of airborne alert holding areas, in order to expedite recovery operations.

Forward Operating Base (FOB). An airfield used to support tactical operations without establishing full support facilities. Support from an MOB may be required if PR forces operate out of an FOB for an extended amount of time.

Forward Operating Locations (FOL). Under these conditions, PR forces should be able to maintain alert status at FOLs. Most support for FOLs come from FOB/MOBs. For vertical-lift PR forces, an FOL may or may not be an airfield; it may be a forward arming and refueling point. FOL capability requires, as a minimum, organic communication packages to provide the necessary C2 and ISR for successful mission execution. Again, it is important to understand that for FOL operations, fuel, ammunition, medical supplies, and other mission essential material typically, but not always, come from FOBs or MOBs.

Staging Base Operations. When land-based MOBs, FOBs, or FOLs are unavailable, staging base operations offer a unique alternative. Although staging base operations do not require extensive host nation coordination, environmental conditions and the intricacies of shipboard operations offer unique challenges.

EXECUTION (The PR Essential Tasks)

Report. Awareness and notification initiate the PR process. Rapid and accurate notification is essential for a successful recovery. Threat conditions permitting, IP should attempt to establish contact with friendly forces IAW notification procedures as outlined in the PR special instructions (SPINS) portion of the ATO.

Initial Response. Once an actual or potential PR incident or potential isolating event is reported, the PRCC initially assumes the duties of PR mission coordinator, initiates PR planning, and provides search and rescue incident reports and search and rescue situation reports to inform the JPRC. As the PR mission coordinator, the PRCC tasks and coordinates mission requirements with subordinate PR capable units.

The JPRC coordinates and tasks PR support requirements when those PR missions involve forces from more than one component, to conduct PR missions, other than NAR missions. When the JPRC receives a request for PR support, it initiates action to locate the IP (if not already accomplished), makes recommendations for, and coordinates the tasking of forces. This coordination is essential to prevent duplication of PR efforts,

facilitate efficient exchange of PR information, and provide the most efficient use of PR resources. Coordination is particularly important when a PR incident occurs near the boundary between two components' operational areas. When a component independently initiates a PR mission, it is required to notify the JPRC through its PRCC, to help ensure effective coordination and deconfliction. Thereafter, the JPRC will monitor the mission and be prepared to support, as required.

Locate. Methods used to locate IP may include: theater electronic surveillance, reconnaissance, C2 aircraft, global satellites, wingman reports, and visual and electronic search by dedicated PR forces. Even with precise coordinates that can pinpoint the isolated person's location, PR forces still have to authenticate the isolated person's identity prior to facilitating successful support and recovery operations.

An effective authentication system is essential to prevent the compromise of vital information and minimize risk to IP and the recovery force. This holds true because rescue assets are extremely vulnerable during the execution phase and need exact and reliable authentication information. Accordingly, IP and rescue forces should take extreme care not to compromise authentication information and allow its use over an extended period. Some of the ways that rescue forces authenticate IP include CSAR code words, letters, numbers, and visual signals, as well as Isolated Personnel report (ISOPREP) data. Ordinarily, theater or [area of responsibility](#) (AOR)-specific additional procedures are published in appropriate directives, OPLANs, and/or PR SPINS.

Support. Support is the planned effort necessary to ensure the physical and psychological sustainment of IP. The five objectives in supporting an IP are: situational awareness, protection, establishing two-way communications, providing morale-building support and aerial resupply (including aerial escort to a supply cache or more secure area). Protection may also encompass the suppression of enemy threats to the IP. This may preclude capture for the isolated person and disruption of the adversary's response to rescue efforts. When possible, combat rescue officers/pararescuemen and/or equipment may be pre-positioned to support the IP until the recovery phase. Besides support to the IP, this task also includes physical and psychological assistance to the IP's family.

Recover. This task reflects activities by commanders, staff, recovery force, and IP to physically recover the IP. CSAR is the Air Force's preferred recovery mechanism. As information of a potential PR incident becomes available, the PRCC should assess the situation quickly, determine mission feasibility, and disseminate data to units that may participate in the rescue mission. Once mission execution appears feasible, units may be tasked to initiate/continue planning or launch from alert. If they launch, the recovery force should include all the necessary supporting forces required to execute a recovery operation. The JFC or the designated PR supported commander can issue the "execution order." Theater PR concept of operations, or SPINS, will direct specific launch and execution authority as determined by the JFC.

Alert. Immediate response missions commence from a dedicated ground or airborne alert posture. In order to decrease flight time to the anticipated recovery area and reduce air refueling requirements, rescue forces may be located on the ground at a forward location or loitering in anticipation of an execution order. Additionally, these forces may be embedded in existing airborne missions to further reduce response time.

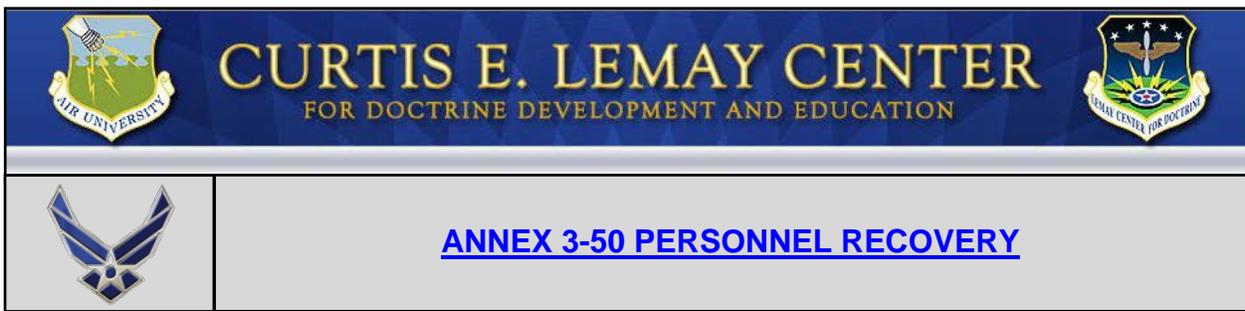
Deliberate. Commanders choose this method when an immediate response may not be possible due to environmental, political, or threat considerations. Deliberately planned missions give planners the flexibility to utilize all necessary assets to complete the recovery.

Hold. A PR mission is never closed because of risk or inability to locate the IP; however, a mission may be placed on hold for these reasons. Generally a “hold” status on a mission means that the information required to execute does not meet the commander’s execute criteria (i.e., location, intelligence, etc.).

Reintegrate. The reintegration task begins when the recovery force relinquishes physical control of IP to a designated team member or organization in the theater reintegration process. Reintegration occurs in three phases and is designed to collect perishable essential intelligence and SERE information, while at the same time tending to the physical and psychological welfare of recovered IP. The welfare portion of the reintegration process may be a long-term (Phase III) endeavor with no specific end date and may become a service responsibility. Ultimately, theater reintegration procedures are supported by the COMAFFOR in two phases in accordance with Ccdr guidance. Phase III reintegration may be conducted by the Service if warranted.

ADAPTATION

Adaptation is dependent on the collection of PR information and data from after action reports, PR mission logs, debriefings, and oral interviews. This information enables a process that includes continuous analysis of everything that is going on in PR as it happens, the recognition of what is working correctly and what is not, and implementing change when and where needed. Adaptation can re-enter the PR functional chart where needed, through updated policy, doctrine, equipment or training in the Preparation Function to different tactics used in the recovery task in the Execution Function. The purpose of adaptation is to make changes that promote more effective and safer PR and achieve higher rates of success.



Combat Search and Rescue

Last Updated: 4 Dec 2014

INTRODUCTION

There are several options to recover IP but combat search and rescue (CSAR) is the Air Force's preferred method. The Air Force organizes, trains, and equips unique forces that focus specifically on PR. When PR assets cannot avoid the threat on their own, other assets can be employed to protect the recovery forces thereby permitting PR to proceed with the best chance of success. CSAR represents the Air Force's tactic of choice for PR in both denied or hostile environments.

COMPONENTS OF CSAR

There are three CSAR components: command and control, recovery forces and isolated personnel (IP). As an element assigned to the Commander, Air Force forces, the personnel recovery coordination cell (PRCC) provides command/control and coordinates PR force activities with the joint personnel recovery center (JPRC) and other components.

The second component represents the dedicated Air Force assets that organize, train, and perform personnel recovery operations (PR) and are the most likely assets that often augment PR forces. The Air Force normally employs recovery forces under the CSAR task force (CSARTF) concept, explained later in this chapter. Although the CSARTF is not limited to the Air Force assets only, this publication's scope is authoritative only to Air Force personnel. The final component of CSAR is the most vital element of the PR system: IP.

In short, the following sections describe CSAR capabilities, the Air Force's preferred mechanism for PR. CSAR is the primary recovery mechanism employed by the Air Force to accomplish the "recover" task of the joint execution tasks. Combining the proper mix of air and ground PR elements, the Air Force is well postured to recover any IP in a variety of environments.



ANNEX 3-50 PERSONNEL RECOVERY

Personnel Recovery Command and Control

Last Updated: 4 Dec 2014

PERSONNEL RECOVERY COORDINATION CELL (PRCC)

The Air Force component's PRCC is the hub of Personnel Recovery (PR) command and control (C2) activities and is typically located in the air operations center. Air Force units will report all isolating incidents to the PRCC. Even if the commander, Air Force Forces (COMAFFOR) is designated the supported commander for PR, the COMAFFOR should maintain a PRCC capability in order to tend to air component PR responsibilities. PRCC responsibilities include:

- ✦ PR mission coordinator duties.
- ✦ PR planning.
- ✦ Task and coordinate mission requirements with subordinate PR capable units.
- ✦ Coordinate, establish, publish PR communications plans in Theater Air Tasking Orders.
- ✦ Document PR events.
- ✦ Operate PR checklists.
- ✦ Maintain real time intelligence information on systems posing threats to PRs.
- ✦ Designate Isolated Personnel report (ISOPREP) control points.
- ✦ Obtain ISOPREP data and evasion plans of action from units.
- ✦ Coordinate tasking among PR-capable forces.
- ✦ Inform the joint personnel recovery center (JPRC) if rescue forces are capable of executing the mission.
- ✦ Request additional recovery forces through the JPRC if rescue forces are unable to execute the PR mission unilaterally.
- ✦ Coordinate PR activities with the JPRC, supporting agencies, medical representatives, a variety of other government and non-government agencies, and the requesting unit.

- ✦ Distribute PR special instructions (SPINS) to the COMAFFOR's subordinate units. Note that the PRCC is still responsible for coordination of PR SPINS with other component commands and the JPRC.
- ✦ Maintain a database of known crash locations within their Area of Responsibility (AOR)
- ✦ Review PR appendices to Annex C (Operations) for air component supporting operation plans, concept plans, and operational orders.

PRCC DUTY POSITIONS

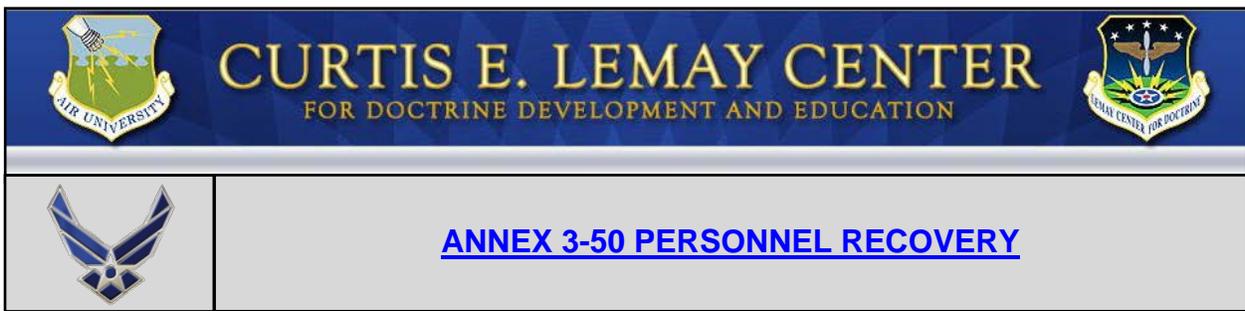
Director, Personnel Recovery Coordination Cell. The COMAFFOR directs Air Force PR operations through the PRCC director. The PRCC director is responsible for the day-to-day operations of the PRCC and is responsible to the combat operations division chief. If the COMAFFOR is responsible for joint PR operations, the PRCC director will normally be designated the JPRC director. Additionally, that person will still be responsible for Air Force PRCC operations.

Personnel Recovery Plans Officer. This PR plans officer is responsible to the PRCC director and the Chief of Combat Plans with duties in the Combat Plans Division and typically works in the Master Air Attack Plan cell while providing expertise to all other elements of the Combat Plans Division. The PR Plans Officer applies operational art to develop detailed execution plans for PR operations.

Personnel Recovery Duty Officer. The PR duty officer (PRDO) is responsible to the PRCC director, Chief of Combat Operations, and Senior Operations duty officer, as appropriate, for the management of all PR assets assigned or made available. The PRDO monitors Combat Search and Rescue (CSAR) packages from departure through recovery. The PRDO should know the details of each package in which CSAR forces participate, such as ordnance, primary target, secondary target, assigned pre-strike and post-strike tanker, orbit, off-load, and mission results.

Survival, Evasion, Resistance and Escape (SERE) Program Manager. The SERE Program Manager (PM) is responsible to the PR plans officer. He/she is also responsible to the CSAR watch officer when providing subject matter expert support during active missions. The SERE PM develops joint SERE tactics, techniques and procedures and supports operational taskings for theater and JFCs. He/she also functions as the in-theater SERE and PR subject matter expert developing and coordinating SERE and PR operational support programs. These programs may include SERE reintegration debriefing, isolated personnel reports, evasion plans of action, blood chits, evasion charts, and PR aids.

Theater PR Controller. The Theater PR controller is responsible to the PR watch officer. He/she ensures that various functions of PR operations are performed and accountability functions are properly executed and sustained for COMAFFOR-assigned forces that become isolated. He/she maintains execution checklists for isolated PR, operates communications equipment, prepares required PR support requests and situation reports, and obtains and forwards isolated personnel data to other component organizations and the joint force supporting PR organization.



USAF Combat Search and Rescue Recovery Forces

Last Updated: 4 Dec 2014

Air Force personnel recovery (PR) efforts are often combined into a tailored combat search and rescue task force (CSARTF)—a proven mechanism that has significantly enhanced combat search and rescue (CSAR) operations. The size and complexity of the CSARTF depends on the mission requirements and the threat. The CSARTF typically has two elements: PR assets and augmenting assets. Included among both are dedicated aircraft, specially trained personnel and specific positions crucial to the PR mission.

A CSARTF is a mutually supporting package designed to protect the survivor on the ground before and during recovery, and the recovery force package from small arms, surface to air, air to air and air to ground threats. The assets will be tailored to meet specific CSAR requirements. The exact composition of the CSARTF varies with threats en route to, from, and in vicinity of the Isolated Personnel (IP). With proper planning, the CSARTF will be able to defeat or degrade the threat to an acceptable level of risk and enable the successful recovery of IP.

Due to changing threat conditions and/or IP status en route to the objective, the CSARTF may require numerous adjustments and further augmentation during recovery operations. As such, all of the Commander, Air Force Forces' aircraft should be prepared to be re-tasked to assist recovery operations. Additionally, the Personnel Recovery Coordination Cell (PRCC) should be prepared to request augmentation and support from the other functional/service components through the joint personnel recovery center.

DEDICATED PR FORCES

Vertical-lift Aircraft. Rescue helicopters are utilized for long range, low level, day/night marginal weather operations into hostile environments to recover distressed or IP. Missions are usually flown as multi-ship formations to provide mutual support, but may be executed with a single ship based on threat and other supporting assets available. Similarly, they may be employed as part of a larger composite force (e.g., embedded in a large strike air package) or launched in response to a PR event. Note, however, that vertical-lift assets would include both helicopters and tilt-rotor aircraft. Air Force Special Operations Forces (AFSOF) is occasionally tasked to employ tilt-rotor aircraft in support of Special Operations Command (SOCOM) PR, under the requirements of their component PRCC.

Fixed-Wing Rescue Aircraft. Fixed-wing rescue assets are another key element of PR. Their primary role is to extend the PR umbrella coverage and employ/extract Guardian Angel Recovery Teams. The depth of the battlespace and IP's location may require that helicopter refueling be conducted in a non-permissive environment. Besides aerial refueling, these assets are capable of airdropping or airlanding recovery teams and/or equipment to assist and/or recover IP. Additionally, fixed-wing rescue aircraft have an expanded communications capability, making them a natural communication relay platform, and their extended range allows movement of recovered IP over longer distances. AFSOF fixed-wing aircraft maintain comparable PR capabilities.

Guardian Angel (GA). GA is the only major weapon system that conducts all five execution tasks. GA provides recovery teams and operational support capabilities for combatant commanders. Air Force recovery teams (RT) are part of the GA weapon system. GA is an Air Force human/equipment based weapon system that provides the ground element of the PR forces and is designed to assist all five PR Execution tasks (Report, Locate, Support, Recover and Reintegrate). RT may have to deploy into uncertain or hostile environments and denied areas prior to, during, and after combat operations in support of the JFC's comprehensive PR plan. GA is a non-aircraft, equipment-based weapon system organized, equipped and trained to conduct all five PR execution tasks. GA is organized into two functional areas: Tactical Recovery Teams (TRT) and operational support.

TRT capabilities are employed by specially trained personnel to recover IP and/or sensitive equipment. TRT operators directly assist, control, enable, and/or execute operational air and space power functions in the forward battle space (AFPD 10-35). TRT operators include Combat Rescue Officers (CRO) and Pararescuemen (PJ), but may also include other specialists as required (e.g. explosive ordnance disposal). These operators employ by multiple means as either a stand-alone capability or as part of a task force to penetrate hostile or uncertain environments and denied areas. CRO/PJ operators function across the full spectrum of warfare supporting all phases of an operational plan during conventional and unconventional activities.

Rescue Mission Commander (RMC). The RMC is a distinct qualification for Airmen specifically trained in CSAR tactics, techniques, and procedures. The RMCs vested tactical control authority and responsibility include planning, locating, supporting, recovering, and reintegrating of IP; to include direct control and maneuver of supporting air, ground and maritime assets in the operational area. The RMC reports to the commander Air Force forces (COMAFFOR), or delegated authority, and communicates and coordinates the recovery effort. Combat Air Force rescue officers monitor this training qualification and exercise integration with capable assets.

Rescue Escort (RESCORT). Based on threats to the IP and the recovery force, RESCORT is an integral part of CSARTF. RESCORT aircraft provide navigation assistance, route sanitization, and armed escort for the recovery vehicle(s). In increased threat environments, this assistance significantly improves the chances of a successful recovery. Ideally, RESCORT aircraft should be tactical aircraft capable of operating in the same environment as recovery vehicles. RESCORT formations should be proficient in rendezvous procedures, escort tactics at medium and low altitudes, and defense of the rescue vehicles during mission execution.

Airborne Mission Coordinator (AMC). An AMC coordinates the flying mission for forces designated to support a specific CSAR operation. The AMC may be designated by component PRCCs or higher authority to coordinate the efforts of several assets. The AMC serves as an airborne communications and data relay between rescue forces and command elements. The E-3 Airborne Warning and Control System, though heavily tasked, is the most capable AMC platform due to its extensive communications capability and ability to oversee the air picture. Other multi-crewed assets such as the HC-130 (rescue aircraft), Navy E-2 Hawkeye, and the E-8 joint surveillance, target attack radar system are also acceptable AMC platforms. The AMC coordinates refueling of air recovery assets. He/she also keeps the recovery force elements and PRTF commander/RMC informed of all pertinent information such as threats, aborts, and EW information. The AMC advises the PRTF commander, RMC, and COMAFFOR of mission support requirements, and coordinates the designation and use of appropriate fire support coordinating measures.

On-scene Commander (OSC). The OSC is the individual who initiates rescue efforts in the objective area until rescue forces arrive. Initially, the OSC may be the pilot of any aircraft in the vicinity, including the wingman of a downed aircraft. The OSC's initial actions are to attempt to establish communication, locate and authenticate the IP, and pass essential elements of information to the AMC. The OSC role will be transferred to the RMC or as directed by the RMC or AMC as required. After transferring OSC duties to the RMC, the original OSC may remain on station in a supporting role.

AUGMENTING PR FORCES

Forward Air Controller (Airborne) (FAC [A]). The FAC (A) controls air strikes in close proximity to the IP. A FAC (A) may be able to locate and authenticate the IP before the arrival of other elements of the CSARTF and may be able to function as the OSC until the rescue forces arrive. The FAC (A) may perform OSC duties until the RMC arrives on station. The FAC (A) may also provide a current and accurate assessment of enemy activity in and around the objective area.

Air Refueling Aircraft. Multiple aircraft refuelings may be required during prolonged CSAR operations. Sequencing of assets between refueling and marshalling points should be carefully managed in order to have all rescue elements available at mission execution time. For real-time CSAR execution, refueling support requirements are relayed through the AMC to the PRCC. The PRCC will orchestrate air refueling support with the tanker coordination cell.

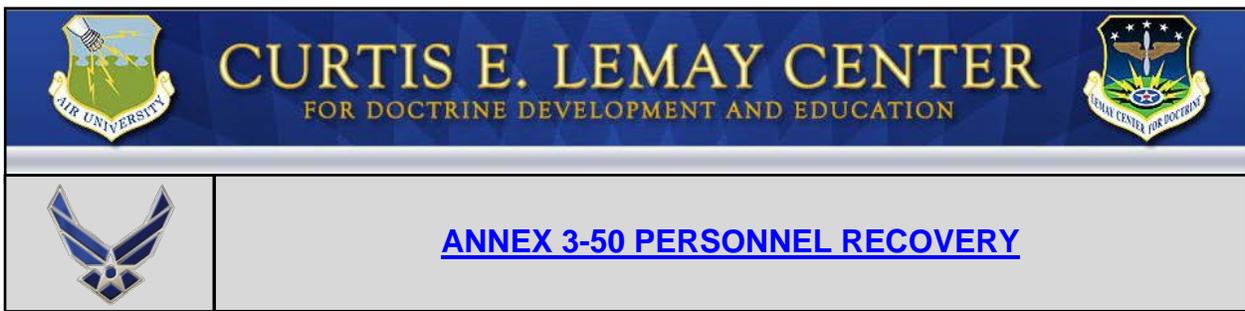
Intelligence, Surveillance, and Reconnaissance (ISR) Platforms. ISR platforms, whether aircraft- or space-based, possess a tremendous capability for supporting CSAR efforts, especially for detecting and locating IP, as well as monitoring threat systems in the objective area. These assets are also suited to maintaining a listening overwatch on IP and monitoring IP frequencies when an immediate recovery is not possible. Ultimately, these platforms provide commanders and CSAR forces with the situational awareness to make the necessary decisions for the successful recovery of the IP.

Space Systems. In addition to space ISR assets briefly mentioned above, other space systems provide vital communications between the CSARTF, PR forces, and IP.

Additionally, space systems enable precise navigation signals during search and recovery operations.

Suppression of Enemy Air Defenses (SEAD). SEAD forces minimize the surface-to-air threat to friendly forces executing a PR mission. Integrated and interoperable communications between SEAD forces, rescue forces, and ISR platforms are critical. When assigning SEAD platforms the threat environment should be defined for all rescue forces.

Joint and/or Coalition PR Forces. Other components and/or coalition partners may assist in the PR of isolated Airmen just as Air Force PR forces assist in the recovery of the joint or coalition personnel. Joint, Service, allied, and foreign publications govern how these forces are integrated within the PR architecture. Nonetheless, it is important, to keep in mind that AF PR construct assets are part of a greater PR system and that Airmen need to work closely with joint and coalition partners to recover any IP from hostile or uncertain environments and denied areas.



ISOLATED PERSONNEL

Last Updated: 4 Dec 2014

Capabilities and limitations of Isolated Personnel (IP) significantly influence the recovery effort and can affect the amount of time recovery forces remain exposed in hostile environments. As risk increases, efforts to prepare IP should increase to match the situation. In locations where no dedicated personnel recovery (PR) forces exist, IP preparation measures may be the most proactive measure available. IP preparation includes formalized Survival, Evasion, Resistance and Escape (SERE) training and detailed mission planning through intelligence briefings and area of operations analysis.

Select personnel who are identified as High Risk of Isolation receive specialized training to aid their survival, evasion, resistance and escape. Asymmetric operations and military operations other than war place additional non-trained personnel at risk, resulting in a diverse pool of potential IP. Commanders should evaluate assigned missions to determine risk to their personnel and advocate accordingly for training.

Combatant commanders establish theater entry requirements to ensure all personnel receive preparation measures commensurate with the assessed risk. Entry requirements for Air Force personnel are typically reflected in the foreign clearance guide and Air Force Guardian Angel operational support activities ensure consistent PR management for each combatant command. Combat Rescue Officers (CRO) and SERE specialists actively coordinate with commanders, staff personnel and coordination nodes to ensure an intact PR system during preparation, planning, execution and adaptation. CRO/SERE personnel makes sure education and training is performed, conduct risk assessments, and assess PR processes at each command level while monitoring plans and communicating with recovery forces. Essentially, guardian angel operational support activities provide commanders with PR assessments to mitigate risks of isolation.

Air Force Special Operations Forces (AFSOF) special tactics teams maintain comparable capabilities. Combat Air Forces and AFSOF PR capabilities complement and support each other as required.
