Army Regulation 525–90
AFR 64-3
NWP 19-2

Search and Rescue

COMBAT SEARCH AND RESCUE PROCEDURES

Headquarters
Departments of the Army,
the Air Force, and the Navy
Washington, DC
25 February 1985

Unclassified

SUMMARY of CHANGE

AR 525–90/AFR 64–3/NWP 19–2
COMBAT SEARCH AND RESCUE PROCEDURES

This revision explains new terms:

- Combat Search and Rescue, Evasion Plans of Action, Objective Area, Rescue Coordination Center, and Selected Area for Evasion (para 2);

- deletes outdated or unnecessary terms: Aircrew Recovery, Ditch Post Mission, Ever-ready Missions, Joint Rescue Coordination Center, Removal Area, On Station, Search and Rescue, and Search and Rescue Coordination Center;

- defines responsibilities of Service component commanders (para 3c); clarifies coordination of CSAR operations (para 4);

- defines recovery methods (para 5a); explains new requirement for evasion plans of action (para 5(3));

- explains CSAR procedures including SARTF, unescorted penetration, and unconventional warfare (para 7);

- provides communication frequency source documents (para 8d); expands and clarifies authentication procedures (para 12); and

- provides a revised DD Form 1833, Isolated Personnel Report (ISOPREP).

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Effective 25 February 1985

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By Order of the Secretaries of the Air Force, the Army, and the Navy:

CHARLES A. GABRIEL
General, United States Air Force
Chief of Staff

Official:

JAMES H. DELANEY
Colonel, United States Air Force
Director of Administration

JOHN A. WICKHAM, JR.
General, United States Army
Chief of Staff

Official:

DONALD J. DELANDRO
Brigadier General, United States Army
The Adjutant General

JAMES D. WATKINS
Admiral, United States Navy
Chief of Naval Operations

S. E. BUMP
Commodore, United States Navy
Assistant Vice Chief of Naval Operations
Director of Naval Administration

History.

Summary. This regulation prescribes combat search and rescue procedures approved by the Joint Chiefs of Staff.

Applicability. It applies to all combat elements of the Armed Forces.

Proponent and exception authority. Not applicable

Army management control process. Not applicable

Supplementation. Not applicable

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Contents (Listed by paragraph and page number)

Figure List

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RESERVED

1. Objectives:

a. The objective of Search and Rescue (SAR) as described in the National Search and Rescue Manual is to aid persons and property in distress. This objective reaches the pinnacle of importance in its application to combat SAR (CSAR). The hazards of the wartime environment dictate that CSAR forces must be specifically equipped, trained, and organized for the wartime mission.

b. The objective of CSAR is to effectively employ all available resources to recover distressed personnel in a wartime or contingency environment. Thus, we preserve and return to duty critical manpower resources of the United States, deny the enemy a source of intelligence information, and contribute to the morale and mission motivation of the combat forces.

2. Terms Explained:

a. Airborne Mission Commander (AMC). A designated airborne representative of the controlling Rescue Coordination Center (RCC) who exercises overall control and coordination of CSAR mission activity in a designated area.

b. Combat Search and Rescue (CSAR). A specialized task performed by rescue forces to effect the recovery of distressed personnel during wartime or contingency operations.

c. Component SAR Controller. The designated SAR representative of a component commander of a unified command who is responsible in the name of his or her component commander for the control of component SAR forces committed to joint SAR operations.

d. Evasion Plan of Action (EPA). A course of action, developed prior to executing a combat mission, which is intended to improve a potential evader's chances for successful evasion and recovery by providing an additional source of information for CSAR forces, thereby increasing the predictability of the evader.

e. Life Guard. A submarine or surface ship designated for SAR or precautionary SAR assistance.

f. Objective Area. A defined geographical area in which a military objective lies. This area is defined by component authority for purposes of command and control. For CSAR purposes, the objective area is defined as the area within 1 kilometer radius of a CSAR objective.

g. On Scene Commander (OSC). The person designated to coordinate the rescue efforts in and incident to the objective area.

h. Precautionary SAR. The planning and propositioning of aircraft, ships, or ground facilities prior to an operation to provide SAR assistance if needed.

i. Rescue Combat Air Patrol (RESCAP). An aircraft patrol provided over a CSAR objective area for the purpose of intercepting and destroying hostile aircraft before they reach the area. Its primary mission is to protect the SAR Task Force during recovery operations.

j. Rescue Escort (RESCORT). Aircraft designated to protect rescue vehicles from possible hostile action while en route to and from the CSAR objective area and during the recovery phase.

k. Rescue Coordination Center (RCC). A primary SAR facility suitable staffed by supervisory personnel and equipped for coordinating and controlling SAR operations. The facility may be operated unilaterally by personnel of a single service (RCC), jointly by personnel of two or more services (JRCC), or it may have a combine staff of personnel from two or more allied nations (CRCC).

l. SAR Coordinator. The designated SAR representative of the area commander, with overall responsibility and authority for operation of the JRCC, and for joint SAR operations within the assigned geographical area.

m. SAR Mission Coordinator. A SAR controller selected by the SAR coordinator to direct a specific mission.

n. SAR Task Force (SARTF). All forces committed to a SAR operation to search for, locate and rescue personnel, including those elements assigned to protect the rescue vehicles from enemy interdiction.

o. Selected Area for Evasion (SAFE). A designated area in hostile territory which offers the evader or escapee a reasonable chance of avoiding capture and of surviving until he or she can be evacuated.

p. Submarine Pickup Point. A designated point in enemy controlled waters for planned CSAR surveillance.

3. Responsibilities.

(See JCS Publication 2, Chapter 4, Section 4.)

a. The Area Commander:

(1) Has primary authority and responsibility for CSAR in support of US forces within his or her area.

(2) Will develop and publish supplemental CSAR procedures for his or her area of responsibility.

(3) May delegate SAR authority to subordinate commanders and, by mutual agreement, to military commanders of other commands, including the Coast Guard. The area commander usually designates the Air Force Component Commander (COMAFFOR) as the area SAR coordinator, who in turn delegates the authority to the Commander of Aerospace Rescue and Recovery Forces (COMARRF).

(4) Will establish an RCC to direct and coordinate all CSAR operations within his or her area of responsibility. Provisions will be made for all Services concerned to actively participate in the RCC. Each Service will provide sufficient personnel to ensure adequate staffing of the component SAR Controller position.

(5) Will exercise control, through his or her component commanders, of forces committed to CSAR operations. Component commanders will normally exercise control of CSAR forces through their component SAR controller.

(6) May assign CSAR tasks and missions to forces not assigned but based or operating in his or her area. Control will normally remain with the commanders of such forces, who will keep the area commander advised of the availability of their assigned SAR assets. The area commander may assume temporary operational control of these assets for specific CSAR operations.

b. Adjacent Area Commanders. These commanders will provide mutual support of CSAR matters of common concern. To ensure continuity of CSAR support for operations transcending are boundaries, coordination will be established between adjacent RCCs.

c. Service Component and Specified Commanders Will:

(1) Ensure forces are available to conduct CSAR operations.

(2) Ensure all personnel committed to a hostile environment are familiar with tactics employed by CSAR forces during recovery operations.

(3) Ensure the production and dissemination of intelligence data to support unit and personnel evasion planning and training.

(4) Provide mutual support to CSAR operations of the other Services to the greatest extent possible.

d. Unit Commanders Responsibilities:

(1) *Unit Training.* Commander must ensure that their personnel are familiar with this regulation, evasion and CSAR tactics, and are capable of meeting their individual responsibilities.

(2) *Alerting CSAR Forces:*

(a) Commanders who plan operations requiring precautionary SAR activities, will send their request directly to the appropriate RCC.

(b) Commanders who requires active CSAR operations will send their requests directly to the appropriate RCC.

(3) *Information.* Commanders who request active CSAR operations will furnish as much of the following information as possible to aid the CSAR operation:

(a) Type, number, tactical call sign, and radio frequency of aircraft, ships or ground forces in distress.

(b) Location, if known, or course and speed, last known position, and intended track.

(c) Names and Isolated Personnel Report (ISOPREP), DD Form 1833, information of the individuals concerned.

(d) Type and amount of survival equipment.

(e) Evasion plans of action of the individuals concerned.

(f) Additional information that may assist CSAR forces.

4. Coordination of CSAR Operations:

a. CSAR operations will be coordinated between RCCs and unconventional warfare (UW) forces, as appropriate, to prevent duplication of CSAR efforts and to facilitate the efficient exchange of information. Each RCC will direct and coordinate conventional CSAR operation withing its designated area of responsibility. Unconventional recovery of personnel from enemy–controlled or politically sensitive territory will be the responsibility of the Special Operations Command (SOC), but will be coordinated with the appropriate RCC.

b. The RCC will:

(1) When activated, promulgate supplemental CSAR procedures within its designated area of responsibility, taking into consideration the politico–military situation, environment, geography, climate, operation areas, support required, and other applicable information.

(2) Establish lines of communication with the Tactical Air Control Center (TACC), carrier battle group, or theater equivalent, and develop procedures to ensure the free flow of CSAR related information.

(3) Compile and maintain a current list of SAFEs and submarine pickup points where CSAR forces can best effect recover.

(4) Notify the appropriate Tactical Command and Control organization (TACC or theater equivalent) of requirements for RESCORT or RESCAP support for applicable CSAR operations.

c. Special Operations Command (SOC):

(1) The SOC coordinates and directs operations of US Army Special Forces, Navy Sea–Air–Land (SEAL) teams, and Air Force Special Operations Forces during assigned operations. Individual Service elements are responsible for maintaining proficiency in tactics and procedures required to support personnel recovery operations.

(2) UW forces have been successfully employed in personnel recovery efforts in past conflicts. As part of their primary mission, they have responsibility to assist evasion and escape (E&E) efforts in enemy, enemy–controlled, or politically sensitive territory. These operations may be conducted predominantly by indigenous personnel supported and directed in varying degrees by external sources.

5. General Concepts:

a. Recovery Methods. CSAR forces may employ an one of a variety of procedures to recover distressed personnel. The specific method of recovery employed will be dictated by the situation. Personnel in nontactical, uncontested environments can expect to be recovered by convention SAR procedures. Recovery methods employed in hostile environments could range from use of a SARTF to unconventional recovery through an E&E net. Regardless of the situation, personnel must be knowledgeable of recovery procedures and prepared to assist in their recovery to the greatest extent practicable.

b. Mission Preparation:

(1) *Survival ad Evasion Training.* The probability of successful recovery is greatly improved if personnel are trained and completely familiar with:

(a) Bailout, ditching, crash landing, and other emergency procedures.

(b) Survival equipment, technical and procedures as they apply to climate, terrain, and chemical and nuclear contamination.

(c) E&E aids, technical and procedures including effective use of camouflage, concealment, and cover; noise and light discipline.

(d) Communications technical and procedures including radio discipline, use of aircrew alpha subcall signs, signaling devices, and other actions necessary to effect a successful recovery.

(e) Rescue equipment, recovery subsystems, and operational technical. The survivor, when possible, must function as the ground–based extension of the SAR vehicle to assist in his or her location, report objective area intelligence, and assist as required in the actual recovery operations.

(f) Theater procedures for establishing contact with UW forces and E&E nets.

(g) Functions and use of ISOPREP information.

(2) *Current Intelligence.* Personnel should study the most current intelligence data available prior to beginning operations in or over hostile territory. They should be thoroughly familiar with:

(a) Disposition of friendly and enemy forces.

(b) Internal political situations and specific areas of disaffection in countries to be penetrated.

(c) Ethnology.

(d) Geography and climate conditions.

(e) Locations of SAFEs, Life Guard stations, and submarine pickup points.

(3) *Evasion Plan of Action (EPA).* All aircrew members flying in hostile environments will develop an EPA or review an existing EPA each time a designated target area changes. The EPA will include, as a minimum, the following information:

(a) Planned route of flight to and from the target area.

(b) Planned bailout, forced landing, or ditching sites for each leg of the mission.

(c) Immediate crew actions upon aircraft egress or parachute landing. (For example: link–up procedures, treatment of wounded, return of ground fire, etc.)

(d) Initial evasion movement goals and techniques.

(e) Extended evasion goals and technical including general direction of evasion and intended SAFEs for each leg of the mission.

c. In–Flight Procedures:

(1) *Alerting Rescue Force.* (See paragraph 9.)

(2) *Bailout.* When possible, ejection or bailout should be attempted over or near a SAFE, Life Guard stations, or submarine pickup point, and in such a way as to facilitate regrouping crew members and to minimize threat involvement for potential CSAR forces. On reaching the ground, crew members should protect themselves from detection and chemical and nuclear contamination. After the immediate danger of detection or contamination has passed, they should move toward the nearest SAFE, Life Guard station, or submarine pickup point.

(3) *Crash Landing or Ditching.* When terrain or water make a crash landing or ditching practicable, the following immediate actions are necessary:

(a) Classified equipment and documents on the aircraft should be destroyed.

(b) If recovery is impractical, the aircraft should be destroyed, if possible.

6. CSAR Concept of Operations.

CSAR requires specialized equipment, personnel and procedures to effect successful rescues in hostile territory. The specific method of recovery will be driven by the threat, survivor condition, and types of CSAR forces available to execute the mission.

a. Search and Rescue Task Force (SARTF). This method of recovery was used extensively in SEA and may be usable in some theaters today if resources and the threat allow. SARTF elements can help the recovery helicopter by locating and authenticating the survivor, protecting the helicopter against the threat, and providing navigation assistance. The SARTF is coordinated through permission planning and briefings with all participating elements. Except for immediate response situations, the SARTF should plan for communication out or limited communication missions involving a time–on–target (TOT) at an initial point or the objective area. Typical SARTF elements include:

(1) *Recovery helicopters.* Usually a primary and secondary helicopter are flown to the objective area. The secondary helicopter must be prepared to assume the lead and accomplish the recovery should be primary helicopter abort the mission.

(2) *Airborne Mission Commander (AMC).* The AMC serves as an airborne extension of RCC; appoints, as necessary, the OSC; coordinates the CSAR radio nets; manages the flow of aircraft to and from the objective area; arranges air refueling for recovering helicopters; advises the RCC of mission support requirements; and advises SARTF participants and the RCC of mission progress.

(3) *Rescue Escort (RESCORT).* Tactical aircraft capable of operating within the same altitude, speed, and endurance regimes of the

recovery helicopters and capable of protecting them when ground threats, RESCORT aircraft will:

(a) Protect the helicopter from ground threats en route to and returning from the objective area.

(b) Assist the helicopter in locating and authenticating the survivor.

(c) Determine the level of hostility in the objective area and suppress ground threats to the SARTF.

(d) Function as the OSC, when designated by the AMC or RCC, and coordinate and control the activity of all SARTF elements in the objective area.

(4) *Rescue Combat Air Patrol (RESCAP).* Air superiority tactical aircraft capable of protecting the SARTF from airborne threats. RESCAP aircraft will:

(a) Maintain patrol over and protect the survivor until the SARTF arrives int he objective area.

(b) Assist the SARTF in locating the survivor.

(c) Assist RESCORT aircraft in suppressing ground threats.

(d) Maintain protection against and ensure suppression of airborne threats to the SARTF.

(e) Functions as OSC until other elements of the SARTF arrive.

b. Unescorted Penetration. In this method of recovery, a single helicopter penetrates hostile or denied territory without the support of a SARTF. The helicopter's defense is accomplished by remaining undetected through the use of terrain, darkness, or adverse weather, rather than by firepower. The mission should be flown communication out. Thorough preparation including exhaustive navigation planning and threat analysis are the keys to success.

c. Unconventional Warfare (UW) Forces. The general concept of employing UW forces in personnel recovery operations is to place the survivor in company with a highly trained unit as soon as possible, and to move the individual to an area of friendly control. UW forces may use helicopters, landing craft, watercraft, or other specialized equipment to assist in the recovery effort. In some cases, the survivor may be passed to established E&E nets staffed predominantly by indigenous personnel.

d. Precautionary SAR in Support of Tactical Operations:

(1) *Life Guard:*

(a) Submarines and surface vessels may be used for Life Guard purposes when:

1. The air combat mission indicates a need for precautionary SAR assistance along the route of flight; and

2. This function is compatible with the primary assigned mission of the submarine of surface ship.

(b) an aircraft commander who desires to establish communications with an unknown submarine or surface ship in connection with SAR will use the rescue vessel voice call "Life Guard."

(c) A Life Guard vessel commander who desires to establish communications with an unknown SAR aircraft will use the voice call "Rescue."

(d) An aircraft providing cover for a Life Guard vessel will establish radio contact immediately upon arriving on station, then when practical, search an area around the Life Guard's position for enemy vessels.

(2) *Duckbutts.* These aircraft are positioned to provide precautionary SAR assistance and support deployment of single engine jet aircraft or meet other specialized situations. Operating commanders are responsible for planning, with the appropriate SAR agency, duckbutt support for their tactical operations.

(3) *Airborne Orbit.* Suitable fixed wing aircraft, and helicopters when practicable, will be tasked to provide airborne orbit or alert in support of tactical operations. These aircraft will monitor strike frequencies and functions as the AMC to coordinate CSAR operations.

(a) CSAR vehicles will establish radio contact with the AMC immediately upon departure from their home stations.

(b) The AMC will establish and maintain communications with the controlling RCC and functions as the single point of coordination for CSAR forces.

(4) *Strip Alert.* Suitable CSAR aircraft, cocked and positioned for rapid launch, in support of tactical operations. Strip alert can be provided from main operating bases, or with aircraft propositioned at forward operating locations near tactical operations.

e. Strategic HFDF Nets. The services of strategic high frequency direction finder nets may be used for SAR. These nets can track a surface ship or aircraft transmitting a signal, and can furnish bearings or a fix. Surface ships or aircraft will not be able to communicate directly with the net. When an emergency situation exists, the facts should be reported over normal or distress communication channels to the controlling agency.

7. Effective Communications:

a. Communication between rescue forces and the person in distress are essential to successful CSAR operations. Personnel in distress should employ every means available to make known their location and nature of trouble. In hostile territory, the additional requirement for discreet communication and authentication places increased responsibility on all concerned.

b. Radio communication is the best means of sending and receiving information and instructions. However, the possibility of enemy monitoring, jamming, or direction finding makes it less attractive as the primary means of communication. Personnel must be prepared to use discreet ground–to–air signals to make known their position and initiate the authentication process.

c. Unless mission accomplishment dictates otherwise, all aircraft will maintain a listening watch on emergency frequencies. A call from personnel in distress will be recorded verbatim and acknowledged, if possible.

d. Frequencies, call signs, and communication procedures for SAR operations are contained in Joint Army, Navy, Air Force Publications (JANAP) 119 and Allied Communication Publication (ACP) 135 series.

8. In–Flight Emergency Communication.

When aircrews detect significant aircraft problems, or when bailout, crash landing, or ditching appears imminent, the pilot will:

a. Attempt to establish radio contact by first, calling on the frequency of last contact; second, on an established common frequency; and third, on the international emergency frequencies. When communication is established, transmit the following information: tactical call sign, type of aircraft, position, course, speed, altitude, nature of difficulties, and pilot intentions. If communication cannot be established, transmit this information "in the blind."

b. Transmit a distress call on the appropriate emergency frequencies, endeavoring to maintain the transmission long enough to permit a direction finder (DF) plot of the aircraft position.

c. Turn Identification Friend or Foe (IFF) set to emergency position.

9. Communication Relay Support by Friendly Forces:

a. An aircraft, ship, submarine, or other friendly force receiving information about distressed aircraft or personnel will forward the details by secure means or, if necessary, by insecure means when conditions permit, to the nearest friendly monitoring agency. Extreme care will be taken to ensure the distressed person's situation is not compromised and that relay transmissions do not interfere with distress calls.

b. If a bailout, crash, or ditching is observed by another aircraft, the pilot will (if practicable):

(1) Relay distress communication.

(2) Transmit the following information if known:

(a) Call sign of downed aircraft.

(b) Exact location of downed aircraft and bearing and distance from a well–known landmark.

(c) Whether downed airmen are alive and under surveillance or in radio contact.

(d) Physical condition of downed airmen.

(e) Initial authentication (unit authentication numbers, colors, letters) if possible.

(f) Air and ground activity, flak, and surface–to–air missile (SAM) condition.

(3) Remain in the area as long as fuel permits or until relieved by other forces.

10. Distress Signals:

a. Personnel isolated in enemy territory will first concentrate on evading, surviving, and locating a suitable recovery site or area.

b. Personnel in distress should not display international distress signals or transmit distress calls "in the blind" unless prebriefed to do so, or when known friendly forces are in the immediate vicinity.

(1) Initial emergency distress calls are accomplished by initiating a precontact transmission sequence followed by a listening period. First, the locator beacon on the survivor's radio should be turned on for 5 to 10 seconds, then turned off. Next, emergency distress calls are made by repeating "MAYDAY" three times followed by the individual's tactical call sign. Finally, the survivor listens for radio contact. (For example: beacon, beacon, beacon; "MAYDAY, MAYDAY, MAYDAY, this is DERBY 24;" listen for contact). Personnel isolated in hostile territory should not divulge their exact location, condition, or number of persons unless certain of the authenticity of friendly forces, and even then, only when requested to do so.

(2) After the precontact transmission sequence, distressed personnel will remain alert for friendly aircraft. CSAR aircraft will attempt to establish communication and require survivors to identify themselves, authenticate, and provide other information pertinent to the recovery. To make initial contact with CSAR forces, distressed personnel will use the call sign "RESCUE" followed by their tactical call sign. (For example: "RESCUE, this is DERBY 24.") The CSAR aircraft will then respond with its tactical call sign.

(3) Since radio communications may be denied or hampered by the enemy, distressed personnel must be prepared to use other signaling devices, such as mirrors, flares, colored panels, or lights as appropriate, to attract the attention of CSAR forces. Distressed personnel may also be required to use theater approved communication–out methods to authenticate themselves.

11. Authentication of Isolated Personnel.

In wartime, the recovery of isolated personnel may depend on early authentication. Normally, isolated personnel will not receive assistance until their identity has been authenticated. An effective authentication system is essential to protect CSAR forces from enemy entrapment. To achieve this objective, authentication information must be used in a manner that maintains security and viability.

a. Security. Authentication information must not be given to enemy forces. If enemy forces are able to determine the authentication numbers or other identifying information concerning and isolated person, they must be able to deceive CSAR forces or deprive them of the ability to properly authenticate an isolated person.

b. Viability. Authentication information should be used in a manner that will allow CSAR forces to continue to authenticate isolated personnel over a long period of time. The technical discussed in paragraph 13 concerning the use of authentication information will allow CSAR forces to authenticate an isolated person many times, if necessary.

12. Authentication System.

Authentication of isolated personnel may be accomplished in several ways, depending on the situation. The principal method of authentication will likely be by radio using the unit authentication numbers, data from the survivor's ISOPREP, or locally developed authentication codes. Authentication can also be accomplished using visual signals or Time on Target (TOT) requirements. For personnel controlled or escorted in an E&E net, authentication may also include fingerprints or physical characteristics.

a. Unit Authentication. Tactical ground and flying forces will be provided a unit authentication number consisting of four numbers. These numbers will be assigned to units down to and including company or squadron level. Personnel assigned or attached to these units will use these numbers for authentication purposes.

b. Personal Authentication. The aircrew authentication data will consist of DD Form 1833, Isolated Personnel Report (ISOPREP), It will be completed by each person subject to action over hostile territory. It contains personal information which may be used by CSAR forces to ensure positive identification of survivors. After the aircrew member has completed the card, it will be classified "CONFIDENTIAL" and will be maintained by the appropriate unit intelligence or operations personnel. Aircrew members will review their ISOPREP at least semiannually. Area commanders will establish procedures to ensure DD Forms 1833, or data contained on them, can be made immediately available to the appropriate RCC. Cards have been designed to be folded to fit the files currently used to store the superseded 5–by 8–inch form.

c. Local Authentication Codes. The development of local SAR letters and colors is recommended. These additional authentication systems should be published in the Special Instructions (SPIN) portion of the daily air tasking order and briefed to aircrew members. The use of daily or frequently changed SAR letters and colors can provide immediate authentication of isolated personnel and increase the scope of the authentication systems.

13. Use of the ISOPREP:

a. Upon notification that a members of the unit is missing or isolated in hostile territory, the unit will forward the individual's ISOPREP data to the appropriate RCC by the fastest secure means available. Information passed telephonically will be followed up by message. The RCC or operations center will disseminate data contained on DD Form 1833 to other authorized agencies, including allied forces if practicable, to assist in the recovery effort.

b. Upon notification that recovery operations have been unsuccessful or terminated, appropriate entries will be made on DD Form 1833 and the information filed. Copies of the ISOPREP and other pertinent information will be disseminated to other agencies (for example, SOC, Joint Personnel Recovery Center (JPRC)) according to theater directive.

14. Completing the ISOPREP.

Personnel will complete the card (DD Form 1833) in ink, except for items 3, 13, 14, 20–23, and 26 which will be completed in pencil.

a. Items 1 through 13, self–explanatory.

b. Item 14, enter a four–digit number that can be easily remembered. This number should not be in the individual's military records or be public information.

c. Item 15, self–explanatory.

d. Item 16 through 19, to be completed by RCC personnel.

e. Items 20 through 23, require declarative statements, not questions and answers. They should involve personal details which are easily remembered and not subject to change. Details of friends, relatives (other than immediate family), pets, vehicles, vacations, etc., would be appropriate. Avoid references to dates, ages, or other information from the individual's military records or public information. (For Example: "My first car was a green, 4 door, 1941 Packard.") CSAR forces will then be able to derive several questions from each statement to authenticate the individual.

f. Item 24, Additional Data is for local use.

g. Fingerprints and appropriate codes will be recorded in blocks 1 through 10 on the reverse of DD Form 1833. Fingerprinting will only be accomplished by qualified personnel, such as service law enforcement agencies, OSI, CID, or other trained personnel. When the theater JPRC assumes responsibility for the recovery of an individual by unconventional means, the JPRC will code the individual's fingerprints on his or her ISOPREP, according to attachment 1. Fingerprints need not be coded before forwarding ISOPREP to JPRCs. Theater commanders will establish procedures to ensure fingerprints are properly taken to facilitate subsequent coding.

h. Provide current front and profile view photographs of the individual in normal flight clothing (for the Air Force: as prescribed in applicable MAJCOM supplement to AFR 35–10), without headgear.

15. Authentication Procedures.

Authentication procedures must take into account the limited amount of information available on the ISOPREP. To increase the

value of the information on the card, the following techniques are recommended:

a. A survivor or isolated person should not provide or be asked to provide their full authentication number in the clear. CSAR forces in contact with a possible survivor, but unsure of the authenticity of the person, will ask the person to administration, subtract, or multiply specific digits of his or her authentication number to provide the resulting number to the CSAR force. (For example: "DERBY 24, this is JOLLY 21, Give me the sum of your first two numbers (or digits)." "JOLLY 21, this is DERBY 24, answer is 12.") This technique will protect the person's authentication number and allow it to be used again at a later time without compromise.

(1) CSAR forces should consider providing authentication to the survivor during initial contact prior to requesting information from him or her. (For example: "DERBY 24, this is JOLLY 21. The sum of your first and third number is 9. Give me the sum of your first and fourth numbers.")

(2) Isolated personnel unsure of the authenticity of CSAR forces may reverse authenticate if time and conditions permit. (For example: "JOLLY 21, this is DERBY 24. What is the sum of MY third and fourth numbers?"

(3) Additionally, authentication information can be used to validate instructions to the survivor. For example, if enemy forces are attempting to deceive the survivor with false radio calls, the CSAR force can instruct the survivor to follow only instructions accompanied by valid combinations of the survivor's authentication number (For example: "DERBY 24, this is JOLLY 21, move 100 yards to the south. The sum of your second and fourth numbers is 8.")

b. When using survivor authentication statements from the ISOPREP, the RCC should consider releasing only one statement per mission to CSAR forces. This method will ensure the other statements remain uncompromised and available for use during future missions.

16. Supply of Forms.

Air Force activities will obtain their supply of forms through publications distribution channels. Army activities will locally reproduce DD Forms 1833 on 8– by 10–inch card stock, printed head to foot (see attachment 2). Naval activities should requisition forms (SN 0102–LF–030–1000) from Naval Publications and Forms Center, 5801 Tabor Ave, Philadelphia PA 19120.

Appendix 1
Attachment 1

CONVERSION OF PRINTS TO SYMBOLS

A1–1. Taking Prints.

Care should be taken to obtain clear and definite prints when the ISOPREP is completed. In the field, improvisation may be necessary, but every effort should be made to obtain good quality prints. In the absence of printers ink, cheap lipstick, soot, or stamp pads should provide acceptable results. In emergencies, felt tip pens, talc, shoe polish, or any fine grained substance could be used.

A1–2. Types of Prints.

The ridges that produce the characteristic design of a print occur in three main patters: arches, loops, and whorls. These are further subdivided for classification purposes into arches, tented arches, finger loops, thumb loops, and whorls.

a. Arches. Arches are the simplest and rarest type of pattern. They occur in only about 5 percent of all fingerprints, and fall into two categories:

(1) *Arch.* The ridges enter and depart on the opposite side of the print, flowing relatively smoothly, with no ridges that recurve back to the side on which they entered (figure A1–1).

(2) *Tented Arch.* The ridges enter and depart on opposite sides of the print as in the arch, but have a distinct upthrust in the ridges under the arch (figure A1–2).

b. Loops. Loops are the most common type of fingerprint pattern and occur in approximately 65 percent of all cases. Loops have only one core and one delta and are divided into the following two categories:

(1) *Finger Loop.* The ridges enter on the side of the print toward the little finger, form a loop, then depart on the side from which they entered (figure A1–3).

(2) *Thumb Loop.* The ridges enter on the side of the print toward the thumb side of the head, form a loop, the depart on the side from which they entered (figure A1–4).

Figure A1-1. Arch

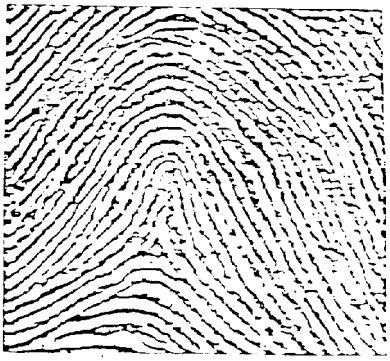

Figure A1-2. Tented Arch

Figure A1-3. Finger Loop–Left Hand

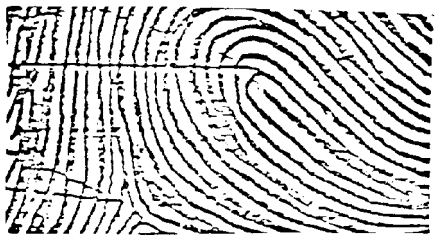

Figure A1-4. Thumb Loop–Left Hand

c. Whorls. Any print that is not an arch, tented arch, finger loop, or thumb loop is classified as a whorl (figures A1–5 through A1–7). Whorls always have more then one delta and often more than one core. In some prints, the delta may be located on the extreme edge of the print.

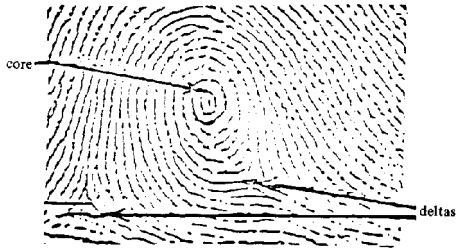

Figure A1-5. Whorl

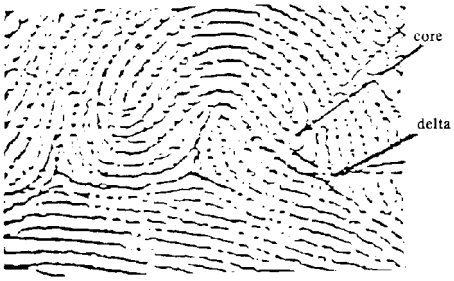

Figure A1-6. Whorl

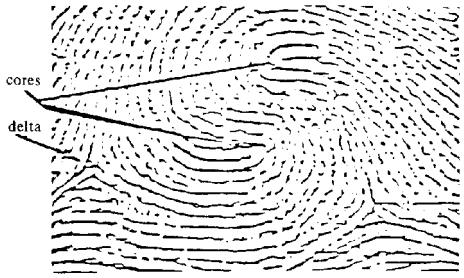

Figure A1-7. Whorl

A1–3. Symbols.
They types of prints are put into corrective sequence starting with the little finger of the left hand and classified according to the brevity code shown on the reverse of DD Form 1833.

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ISOLATED PERSONNEL REPORT *(ISOPREP)* *(See Privacy Act Statement on reverse before completing this form)*	1. NAME *(Last, First, Middle Initial)*	2. SSN
CLASSIFIED BY: AFR 64-3, AR 525-90 NWP 19-2 *DECLASSIFY ON: OADR*	INSTRUCTIONS Items 1 through 15 and 20 through 23 are to be completed by Applicant. Items 16 through 19 and Item 24 are to be completed by RCC Personnel. All items are to be filled in INK; however, use a PENCIL for items 3, 13, 14, and 20 through 24.	3. RANK/GRADE

4. BRANCH OF SERVICE	5. NATIONALITY	6. DATE OF BIRTH *(YYMMDD)*	7. OBVIOUS MARKS *(Scar, Birthmark, Mole)*

8. BLOOD GROUP	9. HEIGHT	10. COLOR OF EYES	11. COLOR OF HAIR

12. DATE PREPARED *(YYMMDD)*	13. DATE REVIEWED *(YYMMDD)* AND CURRENT ASSIGNMENT	14. AUTHENTICATOR NO.
		15. SIGNATURE

16. DATE MISSING *(YYMMDD)*	17. LOSS POSITION	18. PRIORITY *(Holds vital information requiring priority rescue)* ☐ YES ☐ NO	19. SPARE

Fold here

PERSONAL AUTHENTICATION STATEMENTS

20.	21.

22.	23.

24. ADDITIONAL DATA

DD FORM 84 FEB 1833 PREVIOUS EDITION IS OBSOLETE

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AUTHORITY: 10 U.S.C. Sections 133, 3012, 5031 and 8012; EO 9397.
PRINCIPAL PURPOSE(S): It is essential to the combat search and rescue effort for the protection of search and rescue forces from enemy entrapment. The social security number is used to ensure positive identifcation.
ROUTINE USE(S): It will be completed by each aircrew member who may be subject to action in or over hostile territory. It contains personal information that may be used to ensure positive identification. After the aircrew member has completed the form it will be classified "CONFIDENTIAL."
DISCLOSURE IS VOLUNTARY: The information is necessary since it affects the entire search and rescue mission and effect on individual of not providing information could be loss of crew status.

LEFT HAND	CODE	PRINT CODE		CODE	RIGHT HAND
1. LITTLE FINGER		Arch	KK		10. LITTLE FINGER
		Tented Arch	LL		
		Finger Loop	MM		
		Thumb Loop	NN		
		Whorl	OO		
2. RING		Finger Missing	PP		9. RING
		Finger Mutilated	QQ		
		Question/Uncertain	YY		

Fold here

3. MIDDLE		PHOTOGRAPH *(Front View)*			8.MIDDLE
4. INDEX					7. INDEX
		PHOTOGRAPH *(Profile View)*			
5. THUMB					6. THUMB

DD FORM 1833, 84 FEB (REVERSE)

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