

COMBAT SEARCH AND RESCUE:
SEARCHING THE HISTORY; RESCUING THE DOCTRINE

BY

MAJOR MICHAEL A. WORMLEY

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DISCLAIMER

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

About The Author

Major Michael A. Wormley was commissioned through the Reserve Officer Training Corps, Virginia Polytechnic Institute and State University in 1988. Graduating from Specialized Undergraduate Navigator Training in 1989, he went on to fly EC-130Hs as a Mission Crew Commander in the 41st Electronic Combat Squadron. Following this tour, he went on to fly MC-130E and MC-130Hs as an electronic warfare officer (EWO), instructor EWO, and evaluator EWO at the squadron, group, and MAJCOM levels.

Major Wormley is a senior navigator with over 2,000 flying hours. He has completed CSAR tours as a flyer and staff officer in Operation DELIBERATE FORCE, Operation SOUTHERN WATCH, Operation NORTHERN WATCH, and Operation DESERT THUNDER. He has a bachelor's degree in History and Political Science from Virginia Tech and a master's degree in International Relations from Troy State University. In July 2003, Major Wormley was assigned to Headquarters, United States Special Operations Command.

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Last, I have to express my gratitude for my wife, Jody. She instinctively knew when to “disappear” with the kids and allow me to concentrate on this project. Without her strength and support, I don’t think that I could have completed this thesis.

Abstract

This thesis examines the history of command and control for combat search and rescue (CSAR) in a quest for proper doctrine. The thesis question is: Should CSAR command and control be reorganized? The thesis reviews the history of CSAR command and control from Indochina, Operation DESERT SHIELD/STORM, and Operation ALLIED FORCE. The thesis identifies lessons that should have been learned and incorporated in joint doctrine. Finally, the thesis provides recommendations to improve the success of joint CSAR command and control operations.

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Chapter 1

Introduction

One of the most important peacetime functions of the military establishment is the perfection of organization along sound lines....It must never be overlooked in preparations for war. It is the essence of proper national defense.

General Henry Harley “Hap” Arnold

Combat Search and Rescue (CSAR) is a mission area shared by all the U.S. armed services. The requirement to recover their isolated servicemen is contentious but valid in most circumstances. The Joint Personnel Recovery Agency (JPRA) enumerates four guiding principles that validate the requirement to recover isolated personnel.

First, and foremost, America places great value on the sanctity of human life. When America’s Armed Forces are committed, we have the moral obligation to do everything in our power to bring all of our personnel home safely.

Second, by instilling in the minds of our personnel that if they become isolated or missing we will recover them, we will build confidence and a willingness to exert their utmost in times of great stress.

Third, when our nation possesses an effective personnel recovery capability, we deny our enemies a valuable source of intelligence and political leverage against our government.

Finally, our people are our most valuable resource that we cannot afford to lose.¹

The passage of time has led some to question the ability of the services to rescue their people. This paper will explore whether it is possible to improve the ability to recover isolated survivors by amending joint doctrine for CSAR command and control (C2).

Notes

¹ JPRA Mission Pamphlet

This paper will survey the history of CSAR C2 from the Indochina conflict (1962-73), through Operation Desert Shield/Storm (1990-91), and Operation Allied Force (1999). This study will identify lessons learned from each conflict and answer whether they have been captured in the current joint warfare doctrine. It will also suggest new mechanisms for assimilating those un-learned lessons.

CSAR is a subset of personnel recovery (PR). PR includes many mission types such as: CSAR; non-conventional assisted recovery (NAR); survival, evasion, resistance, and escape (SERE); and non-combatant evacuation operations (NEO). This study will consider only pure CSAR missions. It will not analyze PR missions like the evacuation of the U.S. embassy in South Vietnam (April 1975), the Mayaguez incident (May 1975), or Operation Eagle Claw (April 1980). As a result, it is incumbent to define two terms.

Combat Search and Rescue (CSAR) - a specific task performed by rescue forces to effect the recovery of distressed personnel during war or military operations other than war.²

Command and control (C2) – the exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating, and controlling forces and operations in the accomplishment of the mission.³

The recovery of isolated military or civilian personnel in war has always been an issue of US national strategic interest. The level of interest has grown during the U.S. limited war campaigns since Vietnam. Despite the growth of interest, success in recovering isolated personnel has seemingly diminished. In the Vietnam War, the ratio of rescued pilots to those captured as POWs was 2.1:1. During Operation Desert Storm, the ratio dropped dramatically, to 1:5.75. For every one downed pilot rescued, almost six were taken prisoner.⁴

While these statistics are compelling they are also misleading, because the true measure of merit for successful CSAR should be the number of isolated personnel

Notes

² US Joint Chiefs of Staff, *Joint Pub 1-02, Department of Defense Dictionary of Military and Associated Terms*, (Washington D.C.: 12 April 2001), 77.

³ *Ibid.*, 79.

⁴ U.S. Army, *FM 1-113, Utility and Cargo Helicopter Operations*, (Washington, D.C.: 12 Sep 1997), 7-1.

divided by the number that could have been reasonably rescued.⁵ CSAR missions cannot be launched for every isolated person. Sometimes, the risk to rescue forces exceeds the amount that any reasonable commander should assume. Sometimes, isolated personnel are captured too quickly for a CSAR mission. Sometimes, isolated personnel are killed almost immediately. Examining the number of rescued personnel versus the number captured is dramatic but misleading. This paper will adopt a better measure of merit: number rescued divided by number of CSAR airplanes and personnel lost. This paper will also identify C2 improvements that will maximize the rescue of truly “recoverable” personnel.

It is past time to review the recent history of CSAR and identify the role of command and control in failure and success. An improved CSAR organization may reveal itself out of the analysis, which will answer the following thesis question: Should the command and control of Combat Search and Rescue (CSAR) be reorganized?

In the CSAR mission area there are many factors that impact the success rate. The geography of the area in which a rescue is to take place is a prime factor. In the triple canopy jungles of Vietnam and Laos, it was easier for isolated personnel to hide from enemy searchers. However, it was equally hard for friendly rescue forces to locate and recover the isolated personnel. In the 1991 Gulf War, the open deserts of Iraq made it quite difficult for isolated personnel to hide from would-be captors. Theoretically, it was easy for friendly rescue forces to visually identify isolated personnel. However, in Iraq the density of the ground-to-air threat ameliorated the effectiveness of search and rescue forces. In the Indochina conflict, the frequent absence of a ground-to-air threat made some rescues relatively benign.

Certainly distances to fly, as well as the speed and range of rescue aircraft also play a critical role in the success rate of CSAR. The ability to place rescue units close to the locations where aircraft are vulnerable to being shot down in the Indochina conflict helps explain the high success rate. Technologies like stealth, threat jammers, and terrain-following radar also mitigate the threat level to rescue aircraft. Theoretically, technological advantages of the rescue forces of the Gulf War and Operation Allied Force should have enabled higher success rates than those of the Indochina conflict. Although

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⁵ Darrel D. Whitcomb suggested this measure of merit.

there are many factors that impact the success rate of CSAR, this thesis will concentrate on organization of command and control.

General Arnold, in the opening quote, advised that the essence of proper defense is the perfection of the organization. If the combat organization of CSAR can be improved, it may cost a pittance in new helicopters and threat-protection equipment. It is hoped that only a change in joint/service doctrine may be required to improve CSAR for future conflicts.

This paper will consist of four case studies reviewing the history of pre-hostilities doctrine for CSAR C2, actual CSAR C2 organization, and strengths/problems with implementation. Chapter two will review the Indochina conflict (1962-64). Chapter three will review the Indochina conflict (1964-73). Chapter four will review the Gulf War (1990-91). Finally, chapter five will review Operation Allied Force (1999). A sample size of four case studies will provide statistical significance for suggested conclusions concerning improving CSAR C2. Accordingly, the last chapter will examine three basic questions: What are the problems in current CSAR C2 doctrine? Does the history of CSAR C2 suggest solutions? What are the implications and potentially new problems that will arise if we implement the improvements? The last chapter will also suggest improvements, if applicable.

Assumptions

Improving all aspects of C2 is the key to fighting smarter. Having belatedly come to recognize this fact, we can't afford to ignore it just because defense budgets shrink. Improved C2 will continue to be the basis for doing more with less.

Thomas P. Coakley

Any suggested changes to joint doctrine must be flexible enough to cover the spectrum of military conflict. Suggested changes must be applicable to a major theater war, yet flexible enough to apply to limited-duration humanitarian missions. Closely related is the assumption that future U.S. "high-intensity" warfare will be waged quickly. The luxury of on-the-job training will not be available to U.S. combatants. As a result, CSAR professionals must be highly trained, poised, and ready to successfully recover isolated survivors from the start of hostilities.

The second assumption is that CSAR is indeed a **combat** mission. Commanders must weigh the risks of committing combat rescue forces to a recovery. The ability to evaluate the risk to rescue forces is proportional to the training and experience of commanders and their staffs who task rescue forces.

The next major assumption is that CSAR is not an optional mission. The national character and culture of America is exemplified in a collective belief in the sanctity of individual human life. It is not possible, given the collective U.S. character, to not consider rescue of American soldiers, airmen, seaman, and Marines. The efficacy of prosecuting rescue missions has been well explored in previous scholarship.⁶

Fielding new technology will likely increase the effectiveness of CSAR. The ability to instantaneously and precisely locate an isolated survivor offers a tremendous advantage to CSAR forces. The biggest challenge for rescue forces is knowing precisely where to recover a survivor. Faster en-route speeds and stealth technology for rotary wing aircraft will assist rescue forces in recovering survivors faster and with less risk to themselves. These factors have also been well explored in previous scholarship.⁷ As a result, other than acknowledging technology's role in the future success of CSAR, this paper will not explore this factor.

The final assumption or working hypothesis is that perfecting CSAR C2 organization through doctrinal changes can improve the success rate of rescues. We can't change the geography issues and threats that rescue forces will face. Technological changes to rescue forces can cost large sums of money. Doctrinal changes are the cheapest and easiest method to improve CSAR. This paper will attempt to codify combat experience for joint doctrine.

Current CSAR C2 Joint Doctrine

When you look at the historical data, what hurts us isn't the speed of the helicopters, our limited weapons, or limited range. It's command and control.

Maj. Mark DiPaolo

Notes

⁶ I recommend "For Valor or Value: An Examination of Personnel Recovery Operations", a 2001 School of Advanced Airpower Studies thesis by Billy D. Thompson.

⁷ I recommend "The Future of USAF Combat Search And Rescue", a 1998 School of Advanced Airpower Studies thesis by Timothy J. Leahy.

CSAR MH-60 Pilot in Operation IRAQI FREEDOM

Joint Publication (JP) 3-50.2 (26 January 1996) is the umbrella document for how to conduct CSAR and like all joint doctrine states, “the guidance in this publication is authoritative; as such, this doctrine will be followed except when, in the judgment of the commander, exceptional circumstances dictate otherwise.” In short, joint doctrine is supposed to be the codification of the body of knowledge on how to best prosecute a mission.

JP 3-50.2 begins by assigning “primary authority and responsibility for CSAR” to the joint force commander (JFC). It tasks component commanders to plan and conduct CSAR in support of their own operations. The component commanders should be cognizant of joint combat operations and their impact on the joint ability to conduct CSAR.⁸

Joint doctrine advises JFCs to establish a Joint Search and Rescue Center (JSRC) to be the primary planning, coordinating, and executing C2 mechanism for joint CSAR.⁹ However, the JSRC should only provide command and control for a CSAR mission if a component cannot prosecute the mission with its own forces. When the JSRC is charged with a CSAR operation, joint doctrine is clear on responsibilities and roles. The JSRC director or the component commander who hosts the JSRC **exercises JFC command authority** for CSAR.¹⁰ Joint doctrine is clear in the requirement for all CSAR missions to be commanded by a single component commander. Joint doctrine also clearly states that the JFC normally **delegates responsibility** for CSAR to the component commanders.¹¹ Clearly joint doctrine delegates JFC authority and responsibility for joint CSAR to the component commander who hosts the JSRC.¹²

Joint doctrine recommends embedding the JSRC in the component staff that has the preponderance of forces and capabilities plus the means to command, control, and communicate to pertinent CSAR forces.¹³ Only if an operation is limited in nature, does

Notes

⁸ US Joint Chiefs of Staff, *Joint Pub 3-50.2, Doctrine for Joint Search and Rescue*, (Washington D.C.: 26 January 1996), vii.

⁹ *Ibid.*, viii.

¹⁰ *Ibid.*, ix.

¹¹ *Ibid.*, I-1.

¹² *Ibid.*, I-2.

¹³ *Ibid.*, I-1.

joint doctrine advise retention of the JSRC on the JFC staff.¹⁴ Traditionally, the Joint Force Air Component Commander (JFACC) has hosted the JSRC, because he usually commands the majority of the assets that participate in CSAR missions.

The following figure portrays the CSAR command relationship recommended in joint doctrine.¹⁵

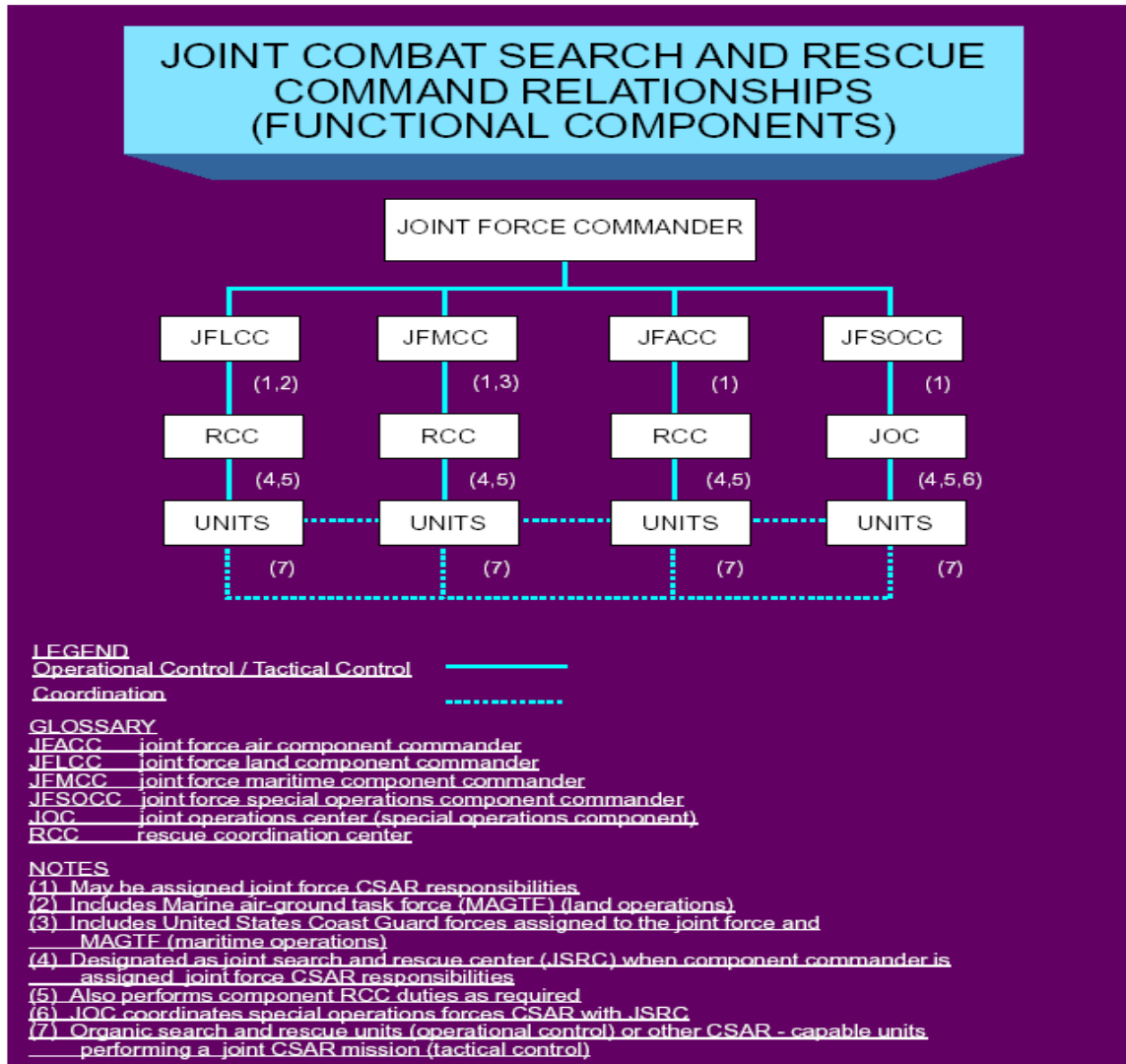


Figure 1 Joint CSAR Command Relationships

Source: US Joint Chiefs of Staff, *Joint Pub 3-50.2, Doctrine for Joint Search and Rescue*, (Washington D.C.: 26 January 1996).

Notes

¹⁴ Ibid., I-2.

¹⁵ Ibid., III-3.

Joint doctrine describes four types of CSAR command relationships at the operational or theater-level of war. First, a component may prosecute CSAR with its own assets and retain operational control (OPCON). Second, when a component needs joint capabilities, the JSRC tasks other components to provide tactical control (TACON) of the augmenting forces to the component that requires joint capabilities. Third, in a situation where a component cannot conduct CSAR for its personnel, the JSRC tasks another component to conduct the CSAR mission with its own forces with the tasked component retaining OPCON of its forces. Lastly, when no component can prosecute CSAR missions unilaterally, then the JFC may issue mission-type orders to all components, leveraging joint capabilities, to build a mission package capable of successfully recovering isolated personnel. This requires all component commanders to release their forces in a TACON relationship to a designated component commander, usually the component commander who hosts the JSRC.¹⁶ The common denominator in all four CSAR command relationships at the operational level of war is the designation of one component commander with at least TACON of all assets.

Joint doctrine also prescribes two tactical or mission-level C2 relationships: the single unit and Combat Search and Rescue Task Force (CSARTF). Joint doctrine unequivocally states that the single unit is the preferred method.¹⁷ It is characterized as a communication-silent, thoroughly pre-planned operation conducted usually by only the recovery vehicle (normally helicopter). The single unit method embodies the simplest C2 relationship and is usually the preferred method for recoveries in a medium-to-high threat environment.¹⁸ This method puts the fewest numbers of rescuers at risk.

The CSARTF, made famous in Indochina, is redundant in C2 and includes: Airborne Mission Commander (AMC), On-Scene Commander (OSC), recovery vehicle, rescue escort, rescue combat air patrol, and the JSRC. The full CSARTF is usually an option

Notes

¹⁶ Ibid., III-5.

¹⁷ US Joint Chiefs of Staff, *Joint Pub 3-50.2, Doctrine for Joint Search and Rescue*, (Washington D.C.: 26 January 1996), II-6.

¹⁸ US Joint Chiefs of Staff, *Joint Pub 3-50.21, Joint Tactics, Techniques, and Procedures for Combat Search and Rescue*, (Washington D.C.: 23 March 1998), III-5. Defines three levels of threat:

Low Threat: Highly dispersed, thinly concentrated enemy forces and assets; limited ability to reconstitute.

Medium Threat: Significant threats requiring passive and active measures to avoid or degrade the threats and prevent subsequent engagement.

High Threat: Hostile forces over a wide area of coverage, densely concentrated, and capable of rapid reconstitution and mobility.

only in low to medium-threat environments and when the location of the isolated personnel is questionable.¹⁹ One of the most critical decisions made in CSAR involves which rescue method to utilize. This paper traces the historical lineage of these four operational/theater-level and two tactical/mission-level C2 relationships in the next four chapters.

Notes

¹⁹ US Joint Chiefs of Staff, *Joint Pub 3-50.2, Doctrine for Joint Search and Rescue*, (Washington D.C.: 26 January 1996), II-7.

Chapter 2

INDOCHINA (1962-64)

No matter what era, area, or circumstance is involved, rescue has always been one of the great human interest stories. Be it a man trapped in a cave, a survivor drifting aimlessly on a life raft in the ocean, or a lone (sic) pilot lost and injured in the enemy-thick jungles of Vietnam, there is no saga quite as inspiring, as exhilarating or as dramatic as that of man risking serious injury or death itself to help his fellow man in trouble. Rescue is a compelling, all-encompassing human instinct. In crises people pull together as never before, often performing deeds far beyond their normal capacities when a life is in the balance. So it has always been and will always be. Such is the nature of man.

L.B. Taylor, Jr., That Others May Live

Services pulling together to rescue others in combat may not have been what the leaders of the U.S. military were expecting as the U.S. entered the Indochina conflict. However, the lack of service or joint doctrine concerning CSAR led to people pulling together in an ad hoc fashion to rescue isolated and distressed personnel in the early years of the Indochina conflict.

The national military strategy of the late 1950s was focused on nuclear war, with USAF Strategic Air Command bombers prepared to fly over the poles and deliver nuclear weapons against the Cold War antagonist, the Soviet Union. Consequently, conventional non-nuclear warfare was deprived of serious thought and funding.²⁰ This dearth of thinking and resources extended to CSAR. Dedicated combat rescue forces were relegated to amphibious fixed-wing airplanes for over-water recovery of SAC crews and

Notes

²⁰ Interview with Col. John Warden III, USAF (Ret), (Michael A. Wormley: 2 Feb 2002). Col Warden discussed how the USAF relied on think tanks like Rand Corporation to conduct the strategy and doctrine development for the USAF. He also stated that Rand concentrated on nuclear warfare theory and strategy to the detriment of all non-nuclear aerial warfare roles. Concurrently, all the services diverted large portions of their budgets to nuclear warfare equipment to the detriment of conventional warfare equipment.

helicopters for recoveries in the vicinity of local air bases. Interestingly, the US space program led to the largest monetary investment in CSAR technology. The requirement to recover space capsules and astronauts at sea led to planning for longer range and heavier lift helicopters like the HH-53, plus fixed wing aircraft like the HC-130, to search for and recover space assets plus provide tactical command and control.

However, the USAF Air Rescue Service (ARS) had been downsized, due to budget constraints, from fifty squadrons (7,900 personnel) in 1954 to eleven squadrons (1,600 personnel) in 1961.²¹ Worse than that, its doctrine for employment was changed in the late 1950s and its CSAR role emasculated:

ARS will be organized, manned, equipped, trained, and deployed to support peacetime air operations.

No special units or specially designed aircraft will be provided for the sole purpose of wartime search and rescue (SAR).

Wartime rescue operations will be dictated by the capabilities of equipment used for peacetime SAR, and will be conducted in accordance with JANAF (Joint Army, Navy, Air Force) and Standard Wartime SAR procedures.²²

It's little wonder that when U.S. counterinsurgency warfare evolved in Indochina in 1960, the ARS was not ready with equipment or doctrine to conduct CSAR. Air Force Regulation 55-7, Wartime Search and Rescue Procedures, referred to in the quote above stated, "Wartime SAR procedures are essentially an extension of peacetime procedures."²³ According to a South East Asia Project Contemporary Historical Evaluation of Combat Operations (CHECO) report, "Following the Korean War, the combat aircrew recovery requirement was deleted from the ARS mission and combat crews were denied a planned and trained rescue recovery force to meet tactical requirements."²⁴ By 1961, U.S. military involvement in Laos and Vietnam consisted of aviation and counter insurgency support. Predictably, on March 23, 1961 the first aircraft was lost over Laos and required a CSAR mission. Unfortunately, there was no

Notes

²¹ John L. Vandegrift, Jr., ed., *A History of the Air Rescue Service*. (Winter Park, Fla., 1959), 94.

²² HQ USAF letter to MATS, 26 Sep 1958, in Earl H. Tilford, Jr., *The United States Air Force Search and Rescue in Southeast Asia, 1961-1975*. (Washington, D.C.: Government Printing Office, 1980), 16.

²³ CHECO Report, *USAF Search and Rescue (SAR) in SEA, 1961-1966*. (24 Oct 1966, K717.0414-1, in USAF Collection, AFHRA), 79. Document declassified on 28 Mar 2001.

²⁴ *Ibid.*, 79.

organization available to coordinate and control a rescue attempt, let alone dedicated rescue aircraft and personnel. Subsequently, Captain Stanley P. McGee was captured and spent seventeen months as a prisoner of the communist Pathet Lao.²⁵

According to the Department of Defense National Search and Rescue Plan of 1956, overall responsibility for CSAR in Indochina fell to the Commander in Chief, Pacific. CINCPAC, Admiral Harry D. Felt delegated the mission to his subordinate functional combatant commanders.²⁶ By requiring each service to rescue its own personnel, this operational-level C2 relationship closely mirrors current-day joint doctrine, with the notable exception of no Joint Search and Rescue Center (JSRC). This exception was rectified with the December 1961 deployment of rescue personnel to Vietnam.

Two factors caused significant friction in the deployment of professional CSAR personnel. First, the covert nature of U.S. military and other government agency participation in counter-insurgency warfare in Indochina necessitated a low profile and small numbers for U.S. military deployments. Second, ARS personnel had embraced their doctrinal peacetime SAR role. ARS was not prepared to engage in combat SAR.

Major Alan W. Saunders, the first commander of Detachment 3, Pacific Air Rescue Center lamented, “We have no professional rescue forces to do this with. We are more or less beggars. We have to rely on the Army or the Marines, and occasionally the VNAF, to provide us with the equipment and the crews and helicopters to go into these areas to rescue people and bring them out.”²⁷ Ironically, on 1 April (April Fools’ Day), 1962, the Search and Rescue Coordinating Center (SARCC) or Det. 3, Pacific Air Rescue Center, was officially established at Tan Son Nhut Air Base.²⁸ Manned by three officers and two noncommissioned officers, it served as a nascent CSAR C2 node.

The Joint Vietnamese/U.S. Search and Rescue Agreement of 15 November 1962 delineated some C2 relationships in theater. The South Vietnamese were responsible for civil and Vietnamese military SAR. Commander, U.S. Military Assistance Command,

Notes

²⁵ Earl H. Tilford, Jr., *The United States Air Force Search and Rescue in Southeast Asia, 1961-1975*. (Washington, D.C.: Government Printing Office, 1980), 33.

²⁶ Corona Harvest Report, *USAF Search and Rescue in Southeast Asia, 1954-11 March 1968*. (31 Jan 1969, in JPRA library), 12-13. Document is declassified.

²⁷ Corona Harvest Oral History Interview, *Saunders, A.W., 1 June 1963-1 June 1964*. (1 July 1964, K239.0512-168, in USAF Collection, AFHRA), B-1. Document declassified on 19 Aug 1992.

²⁸ CHECO Report, *USAF Search and Rescue (SAR) in SEA, 1961-1966*. (24 Oct 1966, K717.0414-1, in USAF Collection, AFHRA), 1. Document declassified on 28 Mar 2001.

Vietnam (MAC-V) and Commander, Second Air Division were concurrently responsible for all U.S. CSAR in Indochina.²⁹ The establishment of the SARCC and the Joint SAR agreement allowed ARS personnel to settle into steady-state operations.

The standard operating procedure was for all overdue aircraft to be reported to Detachment 3, Pacific Air Rescue Center. The rescue controller would request all available aircraft to search for the missing aircraft. When found, the rescue controller would send appropriate and available rescue-capable aircraft to the scene. This CSAR model included Air Force, Army, Navy, and Marine aviation assets. Meanwhile, the Det. 3 commander, one of the few trained rescue professionals, would fly to the crash area to assume on-scene commander duties.

Despite having a working model for C2 of CSAR missions, it became evident that the ad-hoc “send whoever is available” approach to CSAR was high-risk and lethal. Not having professional CSAR forces led to many disasters in the early days of the Indochina conflict.

In early January 1964, four Americans, a Vietnamese crewmember, and a Royal Air Force wing commander flying as an observer, were aboard an armed Huey that crashed in to the mouth of the Mekong after being hit by Viet Cong small arms fire. The helicopter sank rapidly, carrying two trapped crewmen to their deaths. The pilot, copilot, Vietnamese crewman, and the British officer escaped, treading water while another Huey circled in for the pickup. As it hovered over the water, the rotor wash created a frontal wave that drowned the hapless pilot. With the pilot dead, the would-be rescuer wheeled his helicopter around to aid another survivor. A crewmember had the man by the hand, and was hauling him to safety, when an Army H-21 that was circling overhead, radioed instructions to clear the area so Mae West life vests could be dropped. The crewmember loosed his grip and watched the horror-struck face of the victim slip beneath the muddy water. The other two men were rescued, and two bodies washed up on the shore the following morning.³⁰

Major Alan W. Saunders was convinced that ad hoc rescue forces would not lead to success. “We know of specific instances where we have lost people, due to the lack of experience of the Army or Marine crew that was attempting the rescue. Or the lack of knowledge of accepted tactics in performing a rescue and picking people up out of the

Notes

²⁹ Ibid., 14.

³⁰ Earl H. Tilford, Jr., *The United States Air Force Search and Rescue in Southeast Asia, 1961-1975*. (Washington, D.C.: Government Printing Office, 1980), 43.

water or out of the jungle. That, had they known proper procedures, let's say, approaching a man in the water from where they wouldn't drown him with the rotor wash, or how to go about picking a man up out of the water, we could have saved a number of people."³¹ Despite the political sensitivities of introducing more U.S. military forces into Indochina, if the leadership was serious about recovering every human lost, it would require professional rescue forces and more education for potential survivors. Accordingly, Major Saunders prepared a study of CSAR highlighting the need for dedicated rescue forces and survivor training.³² Unfortunately, the study confronted both the traditional political bugaboo of troop ceilings and some vexing organizational problems.

The bureaucratic infighting between the Army and the Air Force over combat roles and ownership of helicopters was the larger problem. The Army felt that their utility helicopters could accomplish the CSAR mission, despite a notable lack of CSAR training. As the theater coordination center for CSAR, Det. 3 worked for two masters: Commander, MAC-V as the Joint Force Commander and Commander, Second Air Division as the Commander, Air Force Forces (COMAFFOR in current terminology). The report was endorsed through Air Force channels up to CINCPAC but based on the inter-service battle over helicopter roles and ownership, it was sat upon in Army (MAC-V) channels. The stonewalling was resolved in May, 1964 when the Joint Chiefs of Staff assigned the CSAR mission to the Air Force and ARS.³³

During the summer of 1964, the Air Force moved HH-43B (Huskies) designed for combat rescue into theater. After the Gulf of Tonkin Incident (August 2-4, 1964) and the subsequent U.S. Congressional resolution, the ARS was able to send factory-new HH-43Fs into Indochina.³⁴ The story of the buildup of CSAR in Indochina after August 1964 will be told in the next chapter.

Notes

³¹ Corona Harvest Oral History Interview, *Saunders, A.W., 1 June 1963-1 June 1964*. (1 July 1964, K239.0512-168, in USAF Collection, AFHRA), C-1. Document declassified on 19 Aug 1992.

³² CHECO Report, *USAF Search and Rescue (SAR) in SEA, 1961-1966*. (24 Oct 1966, K717.0414-1, in USAF Collection, AFHRA), 15. Document declassified on 28 Mar 2001.

³³ *Ibid.*, 16.

³⁴ *Ibid.*, 19.

Lessons Learned

To me it has always been a source of wonder and pride that the most potent and destructive military force ever known should create a special service dedicated to saving life. Its concept is typically American...we hold human lives to be the most precious commodity on earth.

BG Thomas J. Dubose, Commander, ARS (1952-59)

Many lessons should have been learned from the first four years of U.S. military involvement in Indochina. Three major issues surface: first, the necessity for joint or service doctrine for combat search and rescue; second, the requirement for clear command and control relationships; and third, the need for trained and educated professional CSAR personnel in C2 nodes and crews flying missions.

The U.S. military in general and the Air Force specifically abrogated their responsibilities to organize, train, and equip CSAR forces to recover their most precious commodity, people. In a climate dominated by nuclear warfare, the services paid little attention to preparing for conventional warfare, and were remiss in building a capability to fly combat missions to rescue isolated combatants. When USAF doctrine was promulgated, it boldly stated that CSAR was to be a “come-as-you-are” mission. The services were not going to invest in CSAR equipment or personnel. In their defense, tough times did call for tough decisions, and CSAR was relegated to a “discretionary,” ad hoc status.

Major Saunders’ description of coordinating his CSAR study through dual channels is illustrative of the necessity of clear command and control relationships. The principle of unity of command should ensure concentration of effort for every objective under one responsible commander. In the early days of the Indochina conflict, the organization charged with coordinating CSAR efforts in theater, the SARCC, was beholden to two immediate commanders. This resulted in lives lost.

Lastly, the lack of codification of the body of knowledge (doctrine) on how to conduct CSAR C2 led to a “pick-up” game mentality on the part of the Det. 3 personnel. The requirement to use “rescue” assets that had no standard rescue training, techniques, or procedures bordered on criminal, because it resulted in the unnecessary loss of lives. The ramshackle character of CSAR operations is evidenced in the lack of statistical

evidence concerning the success of rescues from April 1962 to August 1964. Fortunately, the ARS professionals had almost nine more years of CSAR missions in Indochina to perfect their CSAR C2 organization and provide rescue coverage for their brothers in arms.

Chapter 3

INDOCHINA (1964-73)

When the history of the war in Vietnam is finally written, the story of Air Rescue may well become one of the most outstanding human dramas in the entire history of the Air Force.

Secretary of the Air Force, Harold Brown

CSAR C2, based on experience, was off to a good start by the 1964 Gulf of Tonkin Congressional resolution. ARS personnel in Indochina had used the previous two years to grow into an effective combat organization through experimentation and practice. However, the next nine years held even more improvements. Unfettered by the covert nature of the war previous to the Gulf of Tonkin resolution, the buildup of combat power, specifically aviation, required the buildup of CSAR forces. Concurrent with the U.S. buildup, the North Vietnamese and Viet Cong began introducing large numbers of light-medium anti-aircraft artillery (AAA) and more small arms. The proliferation of 12.7-mm, 14.5-mm, 37-mm, and 57-mm AAA was particularly lethal to low, slow-flying rescue helicopters.

In an effort to conserve their valuable aircraft, rescue helicopter crews refused to fly into a threat area until other assets had located the survivor. ARS rescue staff supported the crews' reluctance to fly into threat areas prior to locating survivors.³⁵ To locate survivors, the now famous Search and Rescue Task Force (SARTF) was codified and utilized. The SARTF also fulfilled a secondary role of tactical/mission-level C2. It initially consisted of fixed-wing search aircraft, rescue helicopters, and rescue escort

Notes

³⁵ Interview with Col. James V. Berryhill, 2 May 1977, in Earl H. Tilford, Jr., *The USAF Search and Rescue in Southeast Asia, 1961-1975*. (Washington D.C.: Government Printing Office, 1980), 62. And in CHECO Report, *USAF Search and Rescue (SAR) in SEA, 1961-1966*. (24 Oct 1966, K717.0414-1, in USAF Collection, AFHRA), 49. Document declassified on 28 March 2001.

aircraft. In late 1964, the task force consisted of HU-16 amphibious planes and HH-43 helicopters, with A-1 Skyraiders (Sandys) and F-100s in an escort role.

The HU-16 was primarily a search aircraft but it also served as an airborne command and control aircraft. It functioned as a communication relay station between the SARCC and the SARTF. In its C2 role, it would determine what other assets were needed for the rescue, brief the SARTF on survivor information, and relay the threat situation. The helicopters were the primary pickup vehicles, however the amphibious HU-16 could do water pickups. Lastly, the escort aircraft would suppress ground and air threats to the SARTF. In its C2 role, the escort aircraft would act as a platform for on-scene command and determine the survivor's location/health status as well as the threat situation. While specific aircraft changed over time, the SARTF remained the focal point of tactical-level CSAR command and control for the rest of the Indochina conflict.

The following is a description of the SARTF in action.

A typical search and rescue for the period occurred on June 23, 1965, when Maj. Robert Wilson's F-105 was hit by ground fire while on a mission over southwestern North Vietnam. Wilson could not fly his damaged Thunderchief over a ridgeline, so he ejected. After a normal descent he found himself suspended upside down in a tree 150 feet above the jungle floor. Wilson managed to swing into a crotch of the tree where he wiggled out of his parachute harness. He then took out his survival knife and cut a small branch from the tree. Wilson used the branch to snag his seat pack which contained all his survival equipment. After drawing the pack over to where he stood, he retrieved his URC-11 survival radio. Wilson contacted the HC-54 airborne rescue command post called "Crown" which, in response to his mayday, had moved off its orbit along the Thai-Laotian border and now flew nearby. Half an hour later four Air Force A-1 Skyraiders droned into view and contacted the survivor. Soon the pilots spotted Wilson's chute and, after radioing the downed pilot's exact position to Crown, flew to an orbit several miles away so as not to reveal Wilson's location to any enemy troops that might be lurking nearby. Had Wilson or the A-1 pilots spotted the enemy, the A-1s would have attacked them with 20-mm cannon fire, rockets, and fragmentation bombs. Ninety minutes after Wilson's ejection, an HH-53, from a forward operating base in Laos, showed up. Wilson fired off a small flare that was part of his survival equipment. The Huskie pilots spotted it and moved their chopper directly overhead while the parajumper lowered the penetrator through the foliage. Wilson grabbed it, strapped himself on, and began his ascent to the helicopter. A few hours later, safe at the

Nakhon Phanom officer's club, Wilson set up drinks for the chopper pilots. The next day he returned to Korat.³⁶

CSAR command and control wasn't always so easy, and the tactical-level SARTF wasn't the only C2 improvement. By the summer of 1965, unfettered by political limitations, large numbers of temporary duty (TDY) rescue forces converted to permanent party, although tours were only a year long. The professionalism of rescue forces rose with the introduction of longer-tour personnel.³⁷ Additionally, on 1 July 1965, Det 3, Pacific Air Rescue Center was re-flagged as the 38th Air Rescue Squadron. The new 38th ARS's primary mission remained manning the newly-named Joint Search and Rescue Center (JSARC) in the Air Operations Center (AOC) at Tan Son Nhut AB.³⁸ The JSARC became truly joint in December 1965, with the assignment of a U.S. Navy rescue officer.³⁹

The JSARCs' primary mission remained overall control for the coordination of rescue activities in Cambodia, Laos, Thailand, and most of Vietnam. Similar to the infamous "route package" system, the Navy had primary CSAR responsibility over water and along the coast of North Vietnam. Despite the Seventh Fleet task force commander's CSAR responsibilities, the JSARC still exercised overall CSAR C2 for the theater. The Air Force operated two regional rescue control centers at Da Nang and Udorn, which coordinated activities through the JSARC. The following figure illustrates the geographical responsibilities for CSAR in Indochina.

Notes

³⁶ Earl H. Tilford, Jr., *The USAF Search and Rescue in Southeast Asia, 1961-1975*. (Washington D.C.: Government Printing Office, 1980), 66.

³⁷ CHECO Report, *USAF Search and Rescue (SAR) in SEA, 1961-1966*. (24 Oct 1966, K717.0414-1, in USAF Collection, AFHRA), 22. Document declassified on 28 March 2001.

³⁸ CHECO Report, *USAF Search and Rescue (SAR) in SEA, 1961-1966*. (24 Oct 1966, K717.0414-1, in USAF Collection, AFHRA), 22. Document declassified on 28 March 2001.

³⁹ CINCPAC message to CINCPACFLT, 270047Z Dec 1965, in Earl H. Tilford, Jr., *The USAF Search and Rescue in Southeast Asia, 1961-1975*. (Washington D.C.: Government Printing Office, 1980), 74.

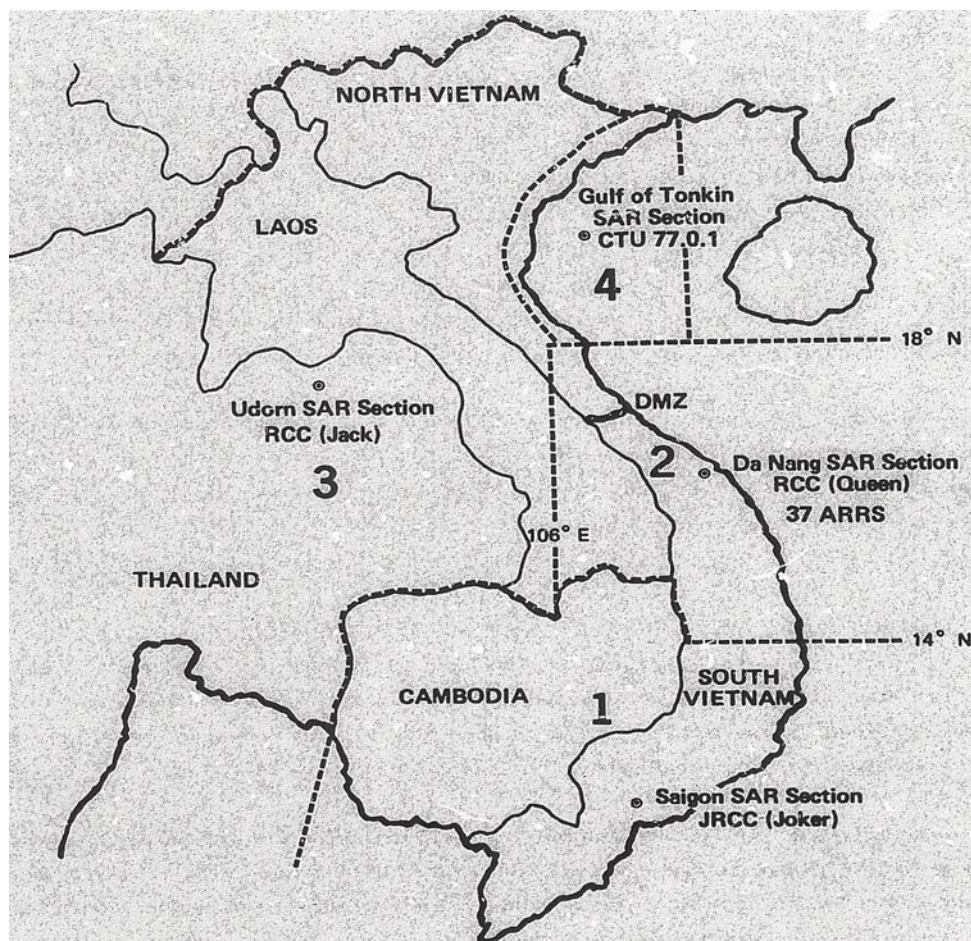


Figure 2 Designated Indochina CSAR Sectors

Source: Office of Naval Research Report, *Navy Combat Search and Rescue*. (Washington, D.C.: Naval Air Systems Command, September 1979)

The JSARC was manned twenty-four hours a day, seven days a week by a rescue officer controller, non-commissioned officer, and radio operator. The staff analyzed the tactical operations plan for the following day's joint Air Force/Navy air strike sorties, and then issued a fragmentary order (FRAGO) to rescue assets. The FRAGO included a communication plan, alert schedule, and helicopter preposition site assignments.⁴⁰ By 1966, CSAR C2 was a well-oiled machine, with standard operating procedures and working doctrine.

Notes

⁴⁰ Corona Harvest Report, *Joint Search and Rescue Center (JSARC) in Southeast Asia, 1954-31 March 1968*. (20 March 1969, in JPRA library), 158.

In recognition of the yeomen service that Air Rescue Service was providing in Indochina and to the NASA space program, it was re-designated the Aerospace Rescue and Recovery Service (ARRS) on 8 January 1966. The influx of more aircraft and personnel also spelled organizational changes in Indochina. The 3rd Aerospace Rescue and Recovery Group stood up at Tan Son Nhut to provide administrative and operational control for all ARRS personnel and aircraft in theater.⁴¹

CSAR's Heyday

By 1966, the dismal days that saw air operations conducted without effective rescue forces had passed. A downed aircrew, depending on where it was located, could look forward to at least a one in three chance of rescue.

Earl H. Tilford, Jr.

By the time the Rolling Thunder (1966-67) aerial strike campaign commenced, the doctrine for CSAR command and control had been ironed out, and improvements to CSAR overall capability were focused on upgrading the rescue equipment. Longer range HC-130 aircraft replaced HU-16s and HU-54s, heavier-lift HH-53 helicopters replaced HH-43s and HH-3s, heavier-armed A-1 and OV-10 escorts replaced O-1s and O-2s, and F-4 fighters replaced F-100s. In-flight refueling capability was added to the rescue helicopters to extend their range and shorten their response time. Helicopter aerial refueling capability was added to the HC-130, bolstering its multiple-mission capability.

The JSARC, by necessity, grew adept at integrating every type of strike asset. It was not unusual for B-52s, Navy A-6s, A-7s, F-105s, and AC-119/130s to divert from their primary missions to aid in a CSAR mission. The JSARC controller's ability to visualize the four-dimensional battle space (including time) and synchronize strike sorties to support the rescue effort grew apace with improvements to equipment and organization. The ability to visualize the threat to the survivor and the SARTF was paramount to the JSARC controllers and improved, as one might expect, with experience and the dedication of resources to the mission. The well-oiled CSAR C2 organization could successfully improvise during its heyday.

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⁴¹ CHECO Report, *USAF Search and Rescue (SAR) in SEA, 1961-1966*. (24 Oct 1966, K717.0414-1, in USAF Collection, AFHRA), 27. Document declassified on 28 March 2001.

The following narrative of the SARTF in action on 15 February 1969 highlights combat power, bravery, and fine-tuned procedures.

A rescue effort for the pilot of an F-4, down in the enemy-infested A Shau Valley area near the Laos-South Vietnam border, dragged into its second day. Enemy 37-mm and 57-mm antiaircraft gunners shot down and killed the on-scene commander, Sandy (A-1s) Low lead. The whole effort to rescue the F-4 pilot seemed in jeopardy. Any attempt to use the Jolly Greens (HH-53s) would have been suicidal. The only hope of success seemed to be with use of riot control munitions. A-1s, loaded with CBU-19 (tear gas), took off from Pleiku Air Base, Vietnam, and reached the A Shau Valley half an hour later. Braving the constant hail of antiaircraft fire, the Skyraiders made the required mile-long run at 300 feet and 220 knots to hit all their targets – enemy antiaircraft gun positions. While the gunners choked, coughed, cried, and retched uncontrollably, a Jolly Green, with its crew wearing gas masks swooped in and saved the pilot.⁴²

As alluded to earlier, helicopters were not the only recovery rescue asset available. JSARC personnel were well versed in using disparate assets like special operations ground teams, Marine and Army long-range reconnaissance teams, and Air America (CIA) aircraft to rescue isolated personnel. Lt. Col. William M. Harris, IV, 37th ARRS commander, expounds, “During my tour, rescue efforts have called upon every conceivable military resource as well as commercial air (Air America), special ground force teams, clandestine operations, frogmen, aircraft carriers, tanks, and so on. There is no limitation on tactics or concepts to be employed to effect a rescue.”⁴³ Many U.S. and South Vietnamese airmen were recovered by means other than the traditional SARTF. The JSARC showed great ability to coordinate such disparate assets.

The numerical peak of the ARRS strength occurred in the summer of 1969. The 3rd Aerospace Rescue and Recovery Group commanded four squadrons and seventy-one rescue-dedicated aircraft.⁴⁴ The change in U.S. presidents and incoming President Nixon’s new strategy of Vietnamization for the war spelled the end to the heyday of CSAR in Indochina. Vietnamization meant turning over combat equipment and responsibility to the South Vietnamese. However, the technologically advanced CSAR-

Notes

⁴² Earl H. Tilford, Jr., *The USAF Search and Rescue in Southeast Asia, 1961-1975*. (Washington D.C.: Government Printing Office, 1980), 96.

⁴³ CORONA HARVEST End of tour report, Lt Col William M. Harris, IV, Commander, 37th ARRS (10 Jun 1972, K318.2131, in USAF Collection, AFHRA), 2.

⁴⁴ CHECO Report, *USAF Search and Rescue (SAR) in SEA, 1 Apr 1972-30 Jun 1973*. (27 Nov 1974, K717.0414-1, in USAF Collection, AFHRA), 14. Document declassified on 31 Dec 1982.

dedicated aircraft were not turned over to the South Vietnamese; instead, U.S. CSAR-dedicated aircraft were drawn down. The new strategy proved workable for U.S. Army equipment and doctrine, but woefully lacking for aviation.

The aviation-heavy emphasis of CSAR proved unworkable for the South Vietnamese Air Force. First, by the early 1970s, the ARRS standard equipment was too expensive for South Vietnam to obtain and maintain. Second, at the risk of sounding elitist, the CSAR C2 structure of the re-designated Joint Rescue Control Center (JRCC) and the SARTF was extremely complicated for the nascent South Vietnamese Air Force. Third, the cultural ethos Americans brought to CSAR was lacking among the South Vietnamese. The U.S. cultural emphasis on the value of the individual meant that all available servicemen responded to the mayday call. The influence of Buddhism and other cultural factors induced a form of fatalism among the South Vietnamese that was not conducive to rescue. There was an aspect of South Vietnamese culture that squelched the desire to risk it all for one.⁴⁵

The heyday of CSAR was also eroded in the early 1970s because of the nature of the threat. Concurrent with the draw-down in US combat power came the rise in conventional warfare capability of the North Vietnamese. No longer satisfied with insurgency warfare, the North Vietnamese began strengthening their conventional army with more equipment and personnel. This transformation brought significant numbers of surface-to-air missiles (SA-2, 3, and 7s) into their ranks. Up to this time, the relatively low threat environment made for easy CSAR C2 decisions. When notified of a Mayday call, emergency locator beacon, or overdue aircraft, the JRCC immediately launched or diverted search aircraft into the suspected crash area. When the survivor was located, the CSARTF had the imbedded firepower to deal with the primary threat (light to medium AAA) to rescue forces. But by the 1970s, CSAR decision-makers were slow to recognize the impact that more lethal threats would have on the CSARTF concept.

Despite the draw-down in numbers of rescue-dedicated aircraft and personnel and the rise in threat, the CSAR organization in Indochina continued to do yeoman work. During the course of the eleven-day rescue operation (April 1972) for BAT-21B (Lt Col Iceal E.

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⁴⁵ CHECO Report, *USAF Search and Rescue (SAR) in SEA, 1 Jul 1969-31 Dec 1970*. (23 Apr 1971, K717.0414-1, in USAF Collection, AFHRA), 73-81. Document classified, pages cited declassified on 16 May 2003.

Hambleton, an EB-66 electronic warfare officer), at least three aircraft were lost and eleven potential rescuers killed.⁴⁶ Numerous strike sorties dedicated to support operations elsewhere were diverted to support the rescue operation. Their diversion meant incalculable others were not supported. The JRCC imposed a no-fire zone around Lt Col Hambleton and continued to push rescue aircraft over his location. This meant that South Vietnamese troops could not effectively interdict a North Vietnamese army offensive south through their area. The no-fire restriction may have caused South Vietnamese to lose their lives. Ultimately, Lt Col Hambleton facilitated his own rescue by floating down a river to a JRCC-arranged rendezvous with a Marine unit in a sampan boat.⁴⁷

The BAT-21 rescue mission near the end of CSAR operations in Indochina best illustrates the central command and control question for CSAR. Is the risk involved in rescuing one service member worth it? Should we commit to a rescue attempt based on threat, geography, and our capabilities? This central question illustrates that C2 is the dependent variable in successful CSAR. Even after ten years of CSAR in Indochina, there were no written guidelines/regulations that specified when survivors were on their own. There was a general expectation among American servicemen that they would always be rescued.

Brigadier General R.G. Cross, Jr., USAF, Deputy Director of Air Operations, MACV commented, "I believe that it is a definite morale factor that every person that flew over here felt that if he was to go down that there was some chance he would be rescued. However, I feel also that there was a tendency on the part of the aircrews to expect that they must be rescued above the requirements of the battle situation at any one time and as airmen or soldiers or sailors we should expect that there are times when as one person we must be sacrificed for the overall."⁴⁸ Only effective command could weigh the risk and answer the go/no-go question.

Notes

⁴⁶ The definitive account and analysis of the BAT 21B CSAR is in *The Rescue of BAT 21* by Darrel D. Whitcomb.

⁴⁷ CHECO Report, *USAF Search and Rescue (SAR) in SEA, 1 Apr1972-30 Jun 1973*. (27 Nov 1974, K717.0414-1, in USAF Collection, AFHRA), 39. Document declassified on 31 Dec 1982.

⁴⁸ CHECO Report, *USAF Search and Rescue (SAR) in SEA, 1 Apr1972-30 Jun 1973*. (27 Nov 1974, K717.0414-1, in USAF Collection, AFHRA), 40. Document declassified on 31 Dec 1982.

After the Vietnam ceasefire agreement in January 1973, the ARRS and JRCC moved to Thailand to continue to support operations in Laos and Cambodia. The last pure CSAR mission in Indochina was conducted in early January 1973, before the move. The ARRS personnel stayed busy nonetheless with CSAR exercises, evacuation planning and execution (Cambodia/South Vietnam), and hostage recovery missions (Mayaguez). From 1 April 1962 to 15 December 1975, when the Joint Rescue Coordination Center closed for business, the ARRS professionals had overcome many hurdles.⁴⁹ In combat, they had sculpted a C2 organization that suited the conditions of Indochina. Yet even at the end, they had not conquered the ultimate C2 question: Should we launch?

In his seminal history of USAF Search and Rescue, Earl H. Tilford lists two lessons learned from the ARRS experience in Indochina. First, readiness: the ability to perform successful CSAR requires C2, personnel, and equipment ready to fight immediately. Second, flexibility: possession of the “spirit of innovation and ingenuity that made combat rescue successful in the wars of Southeast Asia.” Tilford’s analysis is sound, however there are a few more lessons to be learned.

Lessons Learned

Experience gleaned from the first two years of professional CSAR involvement in Indochina allowed later CSAR efforts to be successful once the Vietnam War went conventional in late summer 1964. After the Gulf of Tonkin resolution, three major issues in CSAR C2 surfaced: first, command and control functions can not be accomplished by a single person or organization; second, the ability to control many disparate types of assets is crucial to effective CSAR C2; and third, ultimately someone has to be in command and make smart decisions on whether to initiate a rescue attempt.

With the rise of the SARTF and the routine diversion to the rescue effort of a myriad of assets, the mechanisms to exercise tactical control had to be robust and redundant. The majority of the assets belonged to the US Air Force, so it was helpful for the JSRC/JRCC to be collocated with the Tactical Air Control Center at Tan Son Nhut. The ability to reach any or all of the weapon system experts was invaluable when trying to conduct CSAR with non-rescue organic aircraft. The Tactical Air Control Center was

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⁴⁹ Earl H. Tilford, Jr., *The USAF Search and Rescue in Southeast Asia, 1961-1975*. (Washington D.C.: Government Printing Office, 1980), 154.

one of the few places in Indochina that had all the weapon systems represented and the connectivity. The SARTF required an airborne control center and the overall rescue effort needed an on-scene commander. These C2 positions needed codified mission descriptions so that all players knew their role.

Closely related, CSAR was truly a joint operation. In Indochina, it was routine to integrate Navy strike aircraft, special operations ground teams, Air America (CIA) aircraft, Army helicopters, or Marine long-range reconnaissance personnel in a rescue mission/SARTF. Thus, those who commanded and controlled rescue missions had to be versed in the capabilities/limitations of all these joint assets. At a minimum, they had to have access to those who had the knowledge to enable effective integration of all the contributions to the rescue effort. Experience in the later years of the conflict in Indochina proved that CSAR C2 couldn't be effective as a pick-up game.

Lastly, the ultimate question in CSAR command and control revolves around whether or not to employ assets in the rescue attempt. No story highlights this quandary better than the Bat 21 rescue operation. Bat 21 involved many rescue attempts, loss of rescue assets and personnel, and it affected the larger war. There are myriad factors in the CSAR launch decision calculus. Weather, geography, threat, survivor health, and recovery vehicle capabilities are just a few. Interviews after the BAT-21 rescue attempt highlight that there were no regulations or guidelines for the JRCC or higher commanders to lean on to make their decision. Command and control is fundamentally about making decisions. Ultimately, the CSAR C2 decision-making apparatus revolved around the experience and training of the individual(s) making the decisions. Luckily, the CSAR C2 decision makers had over a decade to gain the necessary education and institutional memory. Yet in the case of the Bat 21 rescue, commanders underestimated the threat and they made the wrong decision.

The first chapter presented statistics that seemed to indicate that CSAR in Vietnam was very successful, indeed more successful than in Operation Desert Storm. It also presented a measure of merit that is more comprehensive in assessing the success of CSAR. This measure of merit includes number of rescue forces lost. This formula asserts that the success of CSAR cannot be ascertained without accounting for the value

of the lives and equipment lost in rescue attempts. The following table uses this formula and is drawn from a U.S. Navy report on CSAR in Indochina.

I. All Southeast Asia Combat				
A. Rescues of:				
Air Force	+	Navy	=	Total
59		178		237
B. Navy SAR Aircraft Losses				
Fixed Wing	+	Helicopter	=	Total
13		6		19
C. Navy SAR Personnel Losses				
Killed in Action	+	Prisoner of War	=	Total
12		3		15
D. SAR Loss per Save				
SAR Aircraft				
$\frac{237}{19} = 1 \text{ Loss per } 12.5 \text{ Rescues}$				
SAR Personnel				
$\frac{237}{15} = 1 \text{ Loss per } 15.8 \text{ Rescues}$				

Navy CSAR

I. All Southeast Asia Combat				
A. Rescues of:				
Air Force	+	Navy	=	Total
484		57		541
B. Air Force SAR Aircraft Losses				
Fixed Wing	+	Helicopter	=	Total
67		23		90
C. Air Force SAR Personnel Losses				
Killed in Action	+	Prisoner of War	=	Total
51		10		61
D. SAR Loss per Save				
SAR Aircraft				
$\frac{541}{90} = 1 \text{ Loss per } 6 \text{ Rescues}$				
SAR Personnel				
$\frac{541}{61} = 1 \text{ Loss per } 8.9 \text{ Rescues}$				

Air Force CSAR

Table 1 Summary of Navy and Air Force CSAR rescues in Indochina

Source: Office of Naval Research Report, *Navy Combat Search and Rescue*. (Washington, D.C.: Naval Air Systems Command, September 1979)

The better SAR loss-per-save ratios for the Navy reflect the higher number of CSAR missions conducted in relatively benign threat areas, characteristic of over-water situations. The total all-service numbers are:

A. Total CSAR Rescues:	778
B. CSAR Aircraft lost:	109
C. CSAR Personnel lost:	76
CSAR Loss per Save:	
CSAR Aircraft	$778/109 = 1 \text{ loss per } 7.1 \text{ rescues}$
CSAR Personnel	$778/76 = 1 \text{ loss per } 10.2 \text{ rescues}$

The heyday of CSAR in Indochina was dependent on three factors: first, the length of the conflict evolved mature doctrine and organization; second, the rescue-dedicated

aircraft improved dramatically in capability; third, the flying in the majority of the country was relatively low-threat. Towards the end of the war, when the number of experienced personnel and aircraft were drawing down and the threat to rescuers was going up, it wasn't the rescuers and their equipment that failed. It was the commanders and decision makers at C2 nodes, who didn't identify the higher risk to the CSARTF. Despite all the experience, sometimes commanders made poor decisions and sacrificed more personnel and equipment. The next chapter on the 1991 Gulf War will explore the legacy of Indochina CSAR decision making in more detail.

Chapter 4

GULF WAR (1990-91)

I was appalled at the situation with CSAR prior to (Desert Shield/Storm) starting...I thought that the Air Force leadership had been very shortsighted...The decision made by the corporate Air Force was to spend the absolute minimum on SAR or CSAR, and we would leave that responsibility to somebody else.

Buster C. Glosson

On the eve of the invasion of Kuwait by the Iraqi military in late summer 1990, the US military had again relegated CSAR to a secondary mission at best. The dominant paradigm consisted of US military forces resisting the invasion of Warsaw Pact forces through the Fulda Gap on the European plains. Most military planners accepted the fact that combat rescue of isolated personnel among the high-threat Soviet military forces would not be feasible. So faced with an insurmountable task, the US military logically forgot about CSAR.

In the USAF during the mid-1980s, the 23rd Air Force was the numbered air force responsible for CSAR. In light of the growing strength of Special Operations Forces (SOF), the USAF approved the plan to transfer all rescue HC-130s and HH-53s to SOF in May 1986. This left the Aerospace Rescue and Recovery Service (ARRS) with the old HH-3 rescue helicopter. The HH-3 had been originally replaced by the HH-53 during the heyday of CSAR in Indochina, 20 years earlier. The ARRS had also decommissioned its UH-1N fleet. The ARRS had some new but generic UH-60A helicopters, which had very little combat capability. 23rd Air Force concluded that after the transfer to SOF, “all the

assets remaining in rescue units were non-combat capable.”⁵⁰ Further compounding the problem, the new SOF units did not take the CSAR mission with the new assets. Per Air Staff direction, the designed operational capability (DOC) statement for SOF units did not include combat search and rescue.⁵¹

General Cassidy, Military Airlift Command (MAC) commander, vowed to fix the loss of USAF CSAR capability. First, he reorganized air rescue by divorcing ARRS from 23rd Air Force. ARRS re-activated as the Air Rescue Service (ARS) on August 8, 1989 at McClellan AFB, CA. This left 23rd Air Force focused on Special Operations and gave General Cassidy full responsibility for USAF CSAR. Second, he pressed the procurement program for HH-60G combat rescue helicopters. The new ARS published its mission statement accepting the CSAR mission on 2 July 1990.⁵²

Air Rescue Service (ARS) is the focal point for USAF rescue.

The missions of ARS include combat rescue, peacetime SAR, humanitarian SAR, support for the National Aeronautics and Space Administration, and worldwide USAF Rescue Coordination Center activity.⁵³

The primary mission of ARS is combat rescue which traditionally involves the helicopter recovery of downed aircrew members from a hostile environment, usually supported by HC-130 tankers and dedicated fighter aircraft.⁵⁴

Unlike the ARS of the late 1950s, the ARS of the late 1980s understood its primary mission was to recover isolated personnel in combat. However, very much like the earlier ARS, it did not have the equipment completely fielded to successfully conduct the mission in Operation DESERT SHIELD/STORM.

Notes

⁵⁰ Lt Col Joe E. Tyner, *AF Rescue and AFSOF: Overcoming Past Rivalries for Combat Rescue Partnership Tomorrow*. (National Defense Fellows Program, HQ USAF and Air University, undated) in Darrel D. Whitcomb, *Mixed Bag: Combat Search and Rescue in DESERT STORM*. (Un-published edition, 3 Feb 2003), 20.

⁵¹ Military Airlift Command History CY90, Vol 1 in Darrel D. Whitcomb, *Mixed Bag: Combat Search and Rescue in DESERT STORM*. (Un-published edition, 3 Feb 2003), 24.

⁵² *History of Air Rescue Service, 1 Jan-31 Dec 1990, Volume I*. (HQ MAC, K318.2, in USAF Collection, AFHRA), 2.

⁵³ Ibid. 3.

⁵⁴ Ibid. 6.

In the US Navy, a similar story was playing out. In testimony before the House Armed Services Committee in 1983, Admiral Paul T. Gilchrist summarized Navy CSAR investment:

Coming out of Vietnam, having learned much about the survivability of aircraft in a modern threat environment, but faced with a very constrained budget to work with, the Navy was really faced with a choice to either put its resources into improved survivability or to modernize its rescue capability. The Navy elected to do the former.⁵⁵

Two Navy Reserve units, HCS-4 and HCS-5, inherited the proud heritage of CSAR earned by the HC-7 squadron in Indochina. At the start of the Gulf War, they were better equipped with HH-60H Seahawks than their ARS brethren. Downed Airman Locator System (DALS) was a critical capability that USN rescue HH-60s had over the ARS H-3s. DALS allowed rescue aircraft to home in on discrete channels resident in the new PRC-112 survival radio. The only drawback to USN CSAR capability was its organization in the Reserve component. This was a drawback because deploying the units required a Presidential Selected Reserve Call-up (PSRC). This requirement meant that USN CSAR capability did not deploy until December 1990.⁵⁶

Deployment wasn't just a USN problem though. The deployment of US military forces to the Persian Gulf region was administered on a time schedule called the Time Phased Force Deployment List (TPFDL). The ARS forces identified on the TPFDL to deploy in case of war in the Persian Gulf region were not available when alerted to deploy. Many of the units no longer existed and some were not coded combat capable. The conversion from HH-3 to HH-60 was underway, and minimal combat-capable aircraft were available. ARS was not ready for CSAR at the start of the Gulf War.

The JFC, General H. Norman Schwarzkopf (CENTCOM commander), could not accept the long train-up and organization time that CSAR in the Indochina conflict took. He also understood that ARS was not ready for the war. He pragmatically assigned

Notes

⁵⁵ House Armed Services Committee testimony by Admiral Paul T. Gilchrist, Director, Aviation Plans and Requirements Division, Washington, D.C., 5 April 1983, in Major Rickey L. Rife, *Combat Search and Rescue, a Lesson we fail to Learn.* (Unpublished Research Paper, School of Advanced Military Studies, Fort Leavenworth, Ks: May 1994), 15.

⁵⁶ Detachment Summary Report, Helicopter Combat Support Special Squadron 4 (HCS-4), DESERT SHIELD/STORM, 9 DEC 90-20 Mar 91 in Darrel D. Whitcomb, *Mixed Bag: Combat Search and Rescue in DESERT STORM.* (Un-published edition, 3 Feb 2003), 42.

command of the theater CSAR mission to his SOF component, Special Operations Command, Central Command (SOCCENT).⁵⁷ Military planners recognized, particularly in light of the high threat level, that the combat rescue capable assets and experience now resided in SOF. Col Jesse Johnson, SOCCENT commander, tasked his aviation component, Air Force Special Operations Command, Central Command (AFSOCCENT) as “the single manager for all CSAR aviation.”⁵⁸ Col George Gray, AFSOCCENT commander, and his deputy, Col Ben Orrell, were well qualified to provide command and control for CSAR. Col Orrell had earned the Air Force Cross for combat rescue in Indochina.⁵⁹

Unfortunately, unity of command was not achieved, because the war plan also designated Lt Gen Chuck Horner, Commander, US Central Command Air Force (COMUSCENTAF), as the SAR Coordinator. OPLAN 1002-90 defined SAR Coordinator as:

SAR Coordinator (SC)- 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.⁶⁰

According to the war plan, Lt Gen Horner had the authority to direct components and use assets from other components to conduct CSAR.⁶¹ Lt Gen Horner was responsible for hosting the CENTCOM Joint Rescue Coordination Center (JRCC). The JRCC, using Lt Gen Horner’s authority, would control and coordinate all CSAR in the theater and task supporting components for CSAR assets.⁶²

The CENTCOM JRCC was established at Lt Gen Horner’s Tactical Air Control Center (TACC) in Riyadh in September. Lt Col Joe Hampton was brought into theater from the Air Force RCC at Scott AFB to lead the JRCC. No one on his staff had CSAR experience. In his post-conflict lessons learned, Lt Col Hampton noted:

Notes

⁵⁷ Gulf War Air Power Survey, VOL IV. (Washington D.C.: Government Printing Office, 1993), 301.

⁵⁸ Gulf War Air Power Survey, VOL IV. (Washington D.C.: Government Printing Office, 1993), 301.

⁵⁹ Interview with Colonel Ben Orrell, 1st SOW. (Hurlburt AFB, Fl.: 1st SOW, undated) in Darrel D. Whitcomb, *Mixed Bag: Combat Search and Rescue in DESERT STORM*. (Un-published edition, 3 Feb 2003), 30.

⁶⁰ APPENDIX 6 TO ANNEX C TO USCINCCENT OPLAN 1002-90. (18 July 1990, NA-41, in USAF Collection, AFHRA), C-6-1.

⁶¹ Ibid. C-6-2.

⁶² Ibid. C-6-2.

Deployed JRCC controllers did not receive adequate combat rescue training prior to deployment.

Most of the people that were sent to Operation DESERT SHIELD were not familiar with combat search and rescue (CSAR) procedures, and none had participated in any previous exercises.

RCC controllers are trained in peacetime SAR operations. They receive no combat SAR training during initial training at the National SAR School.⁶³

Major John Steube, a USMC representative to the JRCC recalled:

In the JRCC, nobody had any combat experience. There wasn't a single person there who was a combat SAR type. They were all the Scott AFB guys and they had two Navy liaisons and two Marine liaisons and none of us had any combat SAR experience... There were a lot of shortcomings there. It was obvious to me that CSAR was an afterthought in the whole DESERT STORM experience.⁶⁴

After arriving, Lt Col Hampton realized that a SOF liaison officer in the TACC, Captain Randy O'Boyle, had already started planning Operation DESERT STORM CSAR operations. Integrating some of Capt. O'Boyle's work, Lt Col Hampton produced the theater CSAR plan.

Dated 1 Nov 1990, the OPERATION DESERT SHIELD COMBAT SEARCH AND RESCUE PLAN, established detailed procedures for accomplishing CSAR in theater. Lt Gen Horner endorsed the plan in writing. It detailed the capabilities and limitations of the Army, Air Force, Marine Corps, Navy, Special Ops, Royal Saudi Air Force, French Air Force, and Royal Air Force CSAR assets. Interestingly, in this long list, the US Air Force stands out as the only force without rescue helicopters. The other interesting aspect of the plan was the absolute assertion that the JRCC would only coordinate CSAR; all rescue assets would remain under the operational control (OPCON) of their normal command structure. Lt Col Hampton recognized that the JRCC did not have the ability to provide command and control of the rescue helicopters.⁶⁵ Lack of training, personnel,

Notes

⁶³ Joint Universal Lessons Learned System (JULLS) # 14943-28400, (04/06/91, in JPRA library).

⁶⁴ Interview with Major John Steube. (Darrel D. Whitcomb: 6 Jan 2000) in Darrel D. Whitcomb, *Mixed Bag: Combat Search and Rescue in DESERT STORM*. (Un-published edition, 3 Feb 2003), 163.

⁶⁵ Interview with Lt Col Joe Hampton. (Darrel D. Whitcomb: 12 Mar 2000) in Darrel D. Whitcomb, *Mixed Bag: Combat Search and Rescue in DESERT STORM*. (Un-published edition, 3 Feb 2003), 162.

equipment, and doctrine prohibited his JRCC ad hoc team from being the C2 node for all CSAR forces.

However, the Air Force component did command and control the majority of the search assets traditionally involved in CSAR: strike aircraft that could do the initial search for downed aircrew (usually wingmen), E-3 (AWACS), EC-130E (ABCCC), A-10 (Sandys), and OA-10 (FAC). Strike aircraft were assisted in searching by intelligence, surveillance, and reconnaissance (ISR) assets like RC-135 (Rivet Joint) and space-based assets. Despite a lack of recovery vehicles, the USAF contribution to CSAR was substantial.

The delineation between USAF searching and SOF rescuing led to a tense relationship between the JRCC and SOCCENT. No quote captures the friction better than these post-conflict comments from Lt Col Hampton:

The JRCC was not empowered to be the overall focal point for CSAR within the AOR.

Other components perceived the JRCC to be nothing more than a component RCC. Whenever questions arose about guidelines, authority, or taskings, the JRCC was left out of the decision making because it was essentially only functioning as the USCENTAF RCC. SOCCENT representatives, therefore, did not feel they had to attend JRCC conferences since they were on an equal footing with USCENTAF. Accordingly, SOCCENT tried to establish itself and operate as if it were a JRCC. SOCCENT directly coordinated and tasked other component agencies to provide dedicated assets for CSAR, and in some cases delayed employing them on a particular mission.

The JRCC was not the central coordination agency for CSAR. If SOF forces are to be employed as dedicated rescue assets, then they should coordinate with the JRCC and avoid operating independently.

Use of SOF forces to perform the dedicated CSAR mission, leads to conflicts in roles, missions, tactics, command and control, and general philosophy on how CSAR should be performed.⁶⁶

However, Col Gray was comfortable with the theater CSAR plan. He knew that SOF could not provide C2 for the Air Force search assets. The delineation of tasks was quite clear: Conventional Air Force assets would locate and authenticate the survivor, and then

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⁶⁶ Joint Universal Lessons Learned System (JULLS) # 14951-37900, (04/06/91, in JPRA library).

dedicated SOF aircraft would go rescue the survivor.⁶⁷ This relationship violated unity of command for CSAR under one commander and caused friction within the C2 nodes, but it was workable.

Desert Storm CSAR

We did not expect to be part of a SARTF that much. We expected to talk to AWACS and the high wingman. We did not expect ourselves to be in the old classic Sandy daisy chain.

Brigadier General Richard Comer

The quote from then Lt Col Comer, 20th SOS commander, is about how the SOF MH-53 helicopters expected to rescue isolated personnel at night without the SARTF. Based on the level of threat to the recovery vehicle, the SOF helicopters planned to minimize exposure to threats by flying low-level at night and without the large signature of an armada of aircraft to recover survivors. This concept of recovery was antithetical to many Air Force senior leaders who flew in Indochina when the dominant paradigm was that rescue helicopters would launch when it was certain an American was down in “Indian” country. This old paradigm was to be painfully shattered during the next six weeks of DESERT STORM. Combat rescue professionals had discarded that old paradigm quickly after the Indochina conflict, but their thoughts were not communicated to the rest of the US military. As discussed in the previous chapter, by the end of the war in Vietnam, combat rescue professionals had realized that the threat to rescue vehicles was rising quickly and to successfully recover isolated personnel would require a new construct for CSAR doctrine. The notion of putting slow-moving aircraft in a medium to high-threat area to find and then rescue survivors during daylight was ludicrous.

SOF personnel felt that the theater CSAR plan captured the new dynamics well. USAF combat search assets would have to locate and authenticate survivors in most cases before rescue vehicles could launch to recover them. With the coordinates for location, SOF would then analyze the type of threat likely to be encountered and plan a flight profile to minimize the risk to their aircraft. After the first few combat losses, when SOF did not launch rescue helicopters, the message started to be understood. It did

Notes

⁶⁷ Interview with Col George Gray. (Darrel D. Whitcomb: 3 May 2001) in Darrel D. Whitcomb, *Mixed Bag: Combat Search and Rescue in DESERT STORM*. (Un-published edition, 3 Feb 2003), 41.

not make sense to immediately launch rescue helicopters if the location and status of isolated personnel were not reasonably known.

The JRCC maintained surveillance over all lost or potentially isolated personnel. Similar to Indochina operations, the JRCC monitored all mayday calls and overdue aircraft reports. JRCC monitored communications between airborne C2 platforms like AWACS and ABCCC. The JRCC was well postured to coordinate the initial response to shoot downs. In fact, six CSAR exercises were executed during the Operation DESERT SHIELD to iron out C2 problems.⁶⁸ The following table, based on the JRCC log, captures all the combat losses of aircraft in or near Iraqi controlled battle space.

DATE	SERVICE	CALLSIGN	AIRCRAFT	PERSONNEL	CSAR Launch?	OUTCOME
17-Jan	USN	Sunliner 403	F-18	Lt Cmdr Speicher	none/no contact	MIA
	RAF	Norwich 02	Tornado	Flt Lt Peters/Flt Lt Nichol	none	Captured in 1 hour
	Kuwaiti AF	Bergan 23	A-4	1 Man crew	none	Rescued by Kuwaiti Resistance in minutes
	RAF	Norwich 21	Tornado	Wing CC Elsdon/Flt Lt Colier	none	KIA
	USAF	T-Bird 56	F-15E	Major Koritz/Major Holland	none	KIA
	USN	Quicksand 12	A-6	Lt Wetzel/Lt Zaun	none/no contact	Lost Radios & were captured with an hour
18-Jan	Italian AF	Caesar 44	Tornado	2 Man crew	none/no contact	Captured in minutes
	USMC	Hostage 75	OV-10	Lt Col Acree/CWO4 Hunter	search effort	Captured in minutes
	USN	Jackal 11	A-6	Lt Costen/Lt Turner	search effort	KIA
19-Jan	USAF	Stroke 65	F-16	Major Tice	search effort	Captured in minutes
	USAF	Clap 74	F-16	Captain Roberts	none/no contact	Captured in minutes
	RAF	Newport 15	Tornado	Flt Lt Waddington/Flt Lt Stewart	none/no contact	Captured in minutes
	USAF	Corvette 03	F-15E	Col Eberly/Major Griffith	search effort	Both evaded for 50 hours before capture
20-Jan	USN	Slate 46	F-14	Lt Jones/Lt Slade	rescue effort	Rescued by AFSOF / Captured after 4 hours
22-Jan	RAF	Stamford 01	Tornado	Flt Ldr Lennox/ Flt Ldr Weeks	none	KIA
23-Jan	USAF	Wolf 01	F-16	Major Ball	rescue effort	USN rescue in Persian Gulf
24-Jan	RAF	Dover 02	Tornado	Flt Lt Burges/Sqd Ldr Ankerson	none	Captured in minutes
28-Jan	USMC	Cat 36	AV-8	Capt Berryman	search effort	Captured in minutes
	USAF	Spirit 03	AC-130	14 Man Crew	search effort	KIA
2-Feb	USN	Heartless 531	A-6	Lt Connor/Lt Cdr Cooke	search effort	KIA
	USAF	Uzi 11	A-10	Capt Storr	search effort	Captured in minutes
9-Feb	USMC	Jump 51	AV-8	Capt Sandborn	search effort	Captured in minutes
13-Feb	RSAF	Hunter 26	F-5	1 Man crew	search effort	Captured
	USAF	Ratchet 75	EF-111	Capt Bradt/Capt Eichenlaub	search effort	KIA
14-Feb	RAF	Belfast 41	Tornado	Flt Lt Clark/Flt Lt Hicks	none	Captured in minutes/KIA
	USAF	Enfield 37/38	2 x A-10	Capt Phyliss/Lt Sweet	none	KIA/Captured in minutes
17-Feb	USAF	Benji 53	F-16	Capt Thomas	rescue effort	Rescued by ARSOF
19-Feb	USAF	Nail 53	OA-10	Lt Col Fox	none	Captured in minutes
20-Feb	USA	Tango 15	OH-58	2 man crew	search effort	KIA
23-Feb	USMC	Pride 16	AV-8	Capt Wilbourn	none	KIA
25-Feb	USMC	Jump 42	AV-8	Capt Walsh	none	Recovered by USMC in minutes
	USMC	Pepper 77	OV-10	Major Small/Capt Spellacy	none	Captured in minutes/KIA
	USA		AH-64	Capt Klingele/CW4 Butler	none	Recovered by flight member AH-64 in minutes
27-Feb	USMC	Magic 14	AV-8	Capt Underwood	rescue effort	KIA
	USA		UH-1	4 man crew	rescue effort	3 KIA/ one recovered by USA
	USA		UH-60	6 man crew	rescue effort	6 KIA
	USAF	Mutt 41	F-16	Capt Andrews	rescue effort	Captured in minutes
	USA	Bengal 15	UH-60	8 Person Crew	none	5 KIA/3 Captured in minutes

Search effort - when location questionable
Rescue effort - when location determined

Table 2 Combat Losses in Iraqi Controlled Battle Space

Sources: Author's collation of archival data.

Notes

⁶⁸ Gulf War Air Power Summary, VOL V. (Washington D.C.: Government Printing Office, 1993), 180.

The numbers show that the coalition lost 39 aircraft and 85 potential survivors in or near Iraqi controlled battle space. Of the 85 potential survivors, 47 were killed in action and 26 were captured within minutes upon landing, leaving 12 isolated personnel (14%) who had a reasonable chance of being rescued.

The CSAR command and control for these 12 isolated personnel was adequate.⁶⁹ On the first day of air war, two of the 12 personnel were put into difficult situations. First, Sunliner 403, Lt Cmdr Michael Speicher never made a MAYDAY call which was heard. His flight mates never saw him shot down or eject. No CSAR attempt was made because no one reasonably knew where he was or if he survived. His status was initially reported as missing in action (MIA). It was changed to KIA after the war but recently has been returned to MIA. Second, Bergan 23, a Kuwaiti A-4 pilot was shot down by AAA and ejected over Kuwait. Kuwaiti resistance soldiers quickly picked him up.

Corvette 03, was a USAF F-15E shot down near Al Qaim, an area of western Iraq covered by extensive surface-to-air missile (SAM) threat and large troop concentrations.⁷⁰ The area was nicknamed “Sam’s town” due to large number of SAMs. The two-man crew of Colonel Dave Eberly and Major Tom Griffith evaded capture for over 50 hours after ejection. The flight lead reported the shoot down and rough coordinates. Lt Col Hampton, JRCC director, wanted to launch helicopters. When the request was passed to SOF, they wanted to wait for the survivors to be better located and authenticated. SOF initially felt that the high threat area precluded a rescue helicopter doing a search of the area for survivors that whom no one had spoken.

The next night, two separate flights of aircraft made voice contact with Corvette 03. The first aircraft commander had no idea who Corvette 03 was. He was neither briefed that there were downed aircrew near the area where he was flying nor prepared to authenticate the survivors. However, he did report the contact. The second contact was luckily made between Major Griffith and his squadron commander, Lt Col Steve Turner.

Notes

⁶⁹ The narrative of the CSAR C2 of these 12 isolated personnel is drawn heavily from Darrel D. Whitcomb, *Mixed Bag: Combat Search and Rescue in DESERT STORM*. (Un-published edition, 3 Feb 2003).

⁷⁰ Corvette 03 is the most controversial CSAR incident of Desert Storm. To get a better understanding for the incident, I recommend Rick Atkinson, *Crusade*. (New York: Houghton Mifflin Company, 1993), pp. 124-139; Tom Clancy and General Chuck Horner, *Every Man A Tiger*. (New York: G.P. Putnam’s Sons, 1999), pp. 397-410; and especially Darrel D. Whitcomb, *Mixed Bag: Combat Search and Rescue in DESERT STORM*. (Un-published edition, 3 Feb 2003), pp. 78-88.

While Lt Col Turner didn't authenticate Corvette 03 using CSAR standard procedures, the two men's close relationship was enough for SOF to launch a rescue attempt using forces out of Turkey.

Unfortunately, diplomatic problems arose which delayed the rescue attempt. To minimize the en-route flight time and threat to the rescue helicopters, a MH-53 two-ship formation was to fly out of southwestern Turkey through Syrian airspace to orbit along the border near Al Qaim. It took time to obtain the diplomatic clearance for over-flight from the Syrians. Once the helicopters got to their orbit location, the high wingman/on-scene commander that the helicopters had requested was a no-show. They had requested a fighter-type aircraft to remain in high orbit near the area to help search for and authenticate Corvette 03, plus destroy ground to air threats if necessary.

Not wanting to waste the sortie, the two helicopters made radio calls for Corvette 03 and drew intense AAA fire onto their location in the process. It was apparent that the Iraqis were direction finding the radio calls and using the information to aim their AAA guns. After searching and without a response from Corvette 03, the MH-53s flew back to Turkey. Unbeknownst to the MH-53 crews, Col Eberly and Major Griffith had already been taken prisoner after over two days on the ground.

However, the day prior, MH-53s based in Saudi Arabia had been successful in making the first rescue by US forces. Slate 46, a US Navy F-14 was shot down by an SA-2 near H-1 airfield in western Iraq. A member of their strike package was able to radio ejection and rough location of the two-man crew to AWACS. The JRCC received this information and diverted an on scene commander (OSC) to orbit over the survivors. With voice contact and a rough location in a relatively low-threat area, a single SOF MH-53 launched to recover the two survivors. It searched for almost half an hour in the general location provided (about 50 miles south of the real location) without contact. The MH-53, by then low on fuel and options, returned to Saudi Arabia.

In the meantime, AWACS continued providing airborne command and control to the search effort by pushing A-10s into the search area. Their efforts paid off, when one of the A-10 (Sandys) made voice contact with Lt Devon Jones, pilot of Slate 46. With voice contact and direction finding equipment the A-10s steered to his position. Hearing the A-10 make voice contact with Lt Jones, the MH-53 crew flew back into Iraq in daylight

with another MH-53 to rescue Slate 46. After rendezvousing with the A-10 (Sandys), the MH-53 finally landed less than 100 meters from the pilot, Lt Jones. Unfortunately, the radar intercept officer (RIO), Lt Larry Slade had been captured hours earlier, after evading the enemy for almost four hours.

Wolf 01, a USAF F-16 piloted by Major Jon Ball issued an AWACS-monitored MAYDAY call after his aircraft erupted in flames after striking targets in Kuwait City. Major Ball turned his dying jet out over the waters of the Persian Gulf and safely ejected. AWACS contacted the JRCC, which tasked the Navy to rescue the pilot. An SH-60 helicopter with Navy SEALs aboard, quickly plucked Major Ball from the dangerous waters off the coast of Kuwait.

Benji 53, a USAF F-16 piloted by Capt Scott Thomas had its engine fail over southern Iraq. Turning south for Saudi Arabia, Capt Thomas ejected when the engine irretrievably seized. The alerted AWACS continually pushed USAF strike aircraft over Capt Thomas's position to maintain contact and act as an on-scene commander (OSC). Meanwhile two US Army SOF MH-60 helicopters based along the Saudi/Iraqi border launched to recover Benji 53 roughly 60 miles into Iraq.⁷¹

Jump 42, a USMC AV-8 Harrier piloted by Capt Scott Walsh was hit and severely damaged by an infrared heat seeking missile while providing close air support over Kuwait. Attempting to land at soon-to-be-liberated Al Jaber airfield in Kuwait, Capt Walsh had to eject from his badly crippled aircraft. An airborne forward air controller (FAC) working with him radioed his situation to the Marine Corps TACC. Within minutes of being on the ground Capt Walsh linked up with USMC ground forces and was returned to friendly control. Despite JRCC participation, this rescue dramatically highlights the importance of immediate notification and locating of isolated personnel in proper C2 of CSAR.

A US Army (USA) AH-64, crewed by Capt Mike Klingele and CW4 Mike Butler, had a similar quick recovery. Fatally crippled by a SAM, it crashed and its flight member (AH-64) immediately landed and recovered the crew. The next day, another USA helicopter, a UH-1 was hit by enemy fire and crashed immediately killing three of the four crewmembers aboard. The Army rescue coordination center (RCC) directed the

Notes

⁷¹ *Conduct of Persian Gulf Conflict*. An Interim Report to Congress. (DOD, July 1991), 5-5.

rescue of the fourth individual. These two incidents did not involve the JRCC or a full theater CSAR effort. But they do highlight the importance of responsive C2 in combat search and rescue.

Of the 12 cases of isolated personnel who could reasonably expect to be rescued from “Indian” country, eight were rescued. This equates to a 66 percent success rate. Excepting the rescues of Bergan 23, Jump 42, and the two USA helicopters, all of which did not require JRCC or SOF involvement, this leaves 7 isolated personnel who needed help. Three of these 7 survivors were rescued by the efforts of the JRCC and SOF. This equates to a 42 percent success rate. However, the non-rescue of the remaining four men (Lt Cmdr Speicher, Col Eberly, Maj Griffith, and Lt Slade) deserves re-examination.

Lt Cmdr Speicher was not seen ejecting nor was voice contact ever made with him. Col Eberly and Maj Griffith were never formally authenticated nor positioned with any degree of certainty. Lastly, voice contact was never made with Lt Slade. Of these four, clearly Col Eberly and Maj Griffith’s situation is the most contentious. There is plenty of blame to spread around for the non-rescue of these two men. Per the theater CSAR command and control plan, perhaps CENTAF could have done more to find and authenticate the survivors and perhaps SOCCENT could have bent their rules a little and tried to search for them sooner than two days after their shoot down. In later rescues, AWACS did a much better job maintaining and diverting aircraft to remain on-scene to find and protect isolated airmen on the ground. In later rescues, SOF pushed across the border much quicker than two days after the shoot down, as was the case in the Corvette 03 CSAR mission. SOF claimed that the threat level around the presumed location of Corvette 03 was too high to facilitate search operations by their helicopters. The last tragic CSAR mission of Desert Storm seems to exonerate the SOF insistence on voice authentication and location.⁷²

Mutt 41, a USAF F-16 piloted by Capt Bill Andrews was interdicting Iraqi Republican Guard mechanized units fleeing north out of Kuwait to Basra. His aircraft was wracked by an explosion and consumed in fire. He quickly ejected and while drifting to ground under his parachute radioed his position. An OA-10 (FAC) nearby

Notes

⁷² The narrative of the CSAR C2 of these missions is drawn heavily from Darrel D. Whitcomb, *Mixed Bag: Combat Search and Rescue in DESERT STORM*. (Un-published edition, 3 Feb 2003), pp. 134-144.

heard his calls and an intense conversation ensued. Capt Andrews's situation was passed to AWACS, which quickly passed the information to the JRCC. JRCC sent a rescue request to SOF units on alert. Since it was daytime and a high threat environment, SOF responded that they would plan a night pickup.

Meanwhile, Capt Andrews hit the ground hard and broke his right leg. Worse, Iraqi soldiers immediately surrounded him and took him prisoner. The FAC who had been in contact with Capt Andrews, reported that he was sure Capt Andrews had been captured when the radio conversation he had been having with Mutt 41 abruptly ended.

Back at the TACC, unsatisfied with the SOF response, the US Army battlefield coordination element (BCE) was asked if they had any capability to pick up Mutt 41. The BCE passed the request to the US Army XVIII Corps, where it was received with skepticism. Unfortunately, the request also was passed to the aviation brigade of the 101st Division. In the fog and friction of war, the request was interpreted as an order, which was given to 2nd Battalion/229th Aviation Regiment. Without consulting their regimental commander and armed with only a call sign and rough location, Bengal 15, a UH-60, launched with two AH-64 Apache helicopters for armed escort.

After take off, Bengal 15 made contact with AWACS, which provided vectors to the shoot down location. AWACS also started to divert strike aircraft to the area to aid the CSAR effort. After several attempts to find Mutt 41 and after receiving multiple infrared surface-to-air missile launches and AAA volleys, all the strikers warned AWACS that the area was too hot for helicopters to enter. However, Bengal 15 did enter the area and was shot down by AAA. In the ensuing crash, five crewmembers were killed instantly and three were captured immediately. The escort Apaches also took fire, but they were able to escape after watching Bengal 15 crash with all hopes of any survivors onboard dashed.

2nd Battalion/229th Aviation Regiment commander Lt Col Bill Bryan was a veteran of Indochina and vividly remembered the CSAR sacrifices from that conflict.

My experience from (Vietnam) had molded my feelings that you need to think long and hard about sending 4, 5, 6, 7 or more people to rescue someone who is possibly mortally injured, captured, or dead. That may sound cold-blooded but at some point, someone has to say 'no more.' I was prepared to make that decision if I had to. That is some of the unwritten stuff that commanders get paid to do, but not necessarily trained.

Had I been there when this mission came up, the first thing I would have done would to insist on knowing about the ground situation. That information was non-existent because of the 'rout.' But what was known was that the Iraqis had shot down an F-16, the pilot had ejected and was talking on his radio going down...and the Iraqis were shooting at him in the chute. Knowing these facts (or lack of them) would have led me to conclude that the pilot had either survived and was now a POW or he was dead – murdered by Iraqi cowards who shot him before he hit the ground or shortly thereafter.

For me the next decision would have been easy. I would not put another 3-4 aircraft and 10-15 of America's sons and daughters at risk! Some would scoff at that, but I remain firmly convinced that that rationale was valid then and is valid today.

CSAR is like any other military mission. It takes planning, coordination, and resources. Because we are dealing with life and death here and extreme urgency, many overlook the planning, coordination, and resource requirement.⁷³

Did SOF err by not sending rescue helicopters into the Corvette 03 search area sooner or did the US Army err by rushing into the Mutt 41 search area too soon? The Gulf War CSAR experiences re-validated the overarching C2 question: Do we launch a rescue?

Lessons Learned

The next Chuck Horner to fight an air war had better pay close attention to the way he (or she) organizes and controls the employment of his or her combat search-and-rescue efforts.

Gen Charles Horner

In Operation DESERT SHIELD/STORM, the theater CSAR C2 relationships wrestled with the decision to launch. In his Gulf War biography, Gen Chuck Horner concludes his discussion of CSAR with this observation.

The combat search-and-rescue mission involves lots of heart-breaking decisions. In Vietnam, we tried so hard to rescue all downed pilots that on some occasions we lost more aircraft and aircrews than were saved. CSAR is not a no-risk situation. It requires rescue crews that take risks that are far beyond those normally expected in combat operations.

Notes

⁷³ Email from Lt Col Bill Bryan to Darrel D. Whitcomb. (12 Mar 2002) in Darrel D. Whitcomb, *Mixed Bag: Combat Search and Rescue in DESERT STORM*. (Un-published edition, 3 Feb 2003), 144.

And it takes commanders who are hard-hearted enough to leave a downed airman to the mercies of the enemy when it is likely that more men and women will be killed or captured.

In Desert Storm, there was a failure to fully coordinate these aspects of the CSAR mission. While there were at times brilliant rescues, the aircrews were far from confident in the system.⁷⁴

Three major C2 issues emerge from the CSAR experience in the Gulf War: first, the JRCC was an ad hoc organization; second, not having OPCON/TACON of recovery vehicles hampered CENTAF plans for rescue; and third, confused C2 relationships destroyed unity of command.

The JRCC was constituted using personnel un-trained in CSAR procedures, tactics, and doctrine. Despite six CSAR exercises during DESERT SHIELD, the JRCC was still not adequately prepared to command, control, or coordinate all aspects of CSAR. The JRCC did not have the authority to divert airborne assets to search for and protect survivors. The JRCC had no SOF personnel on staff. All these facts combine to illuminate the ad hoc nature of the JRCC organization, which hampered effective C2 of CSAR.

Due to peacetime political and budgetary decisions, the USAF did not have a credible CSAR recovery vehicle. The ARS HH-60 program had just started, but there were no combat capable squadrons ready to deploy. As a consequence, CENTAF was the only component or coalition air force that did not have an organic rescue helicopter capability. Despite having the lion's share of search assets, inability to launch rescue helicopters hampered CENTAF's concept of how they wanted to prosecute CSAR. Brig Gen Buster Glosson, CENTAF C-5, summed up the situation:

I think that not having the CSAR under the direct tasking order of the air component commander is the dumbest thing I have ever seen. Give me a break! We chop all air related weapon systems in a theater to the air component commander except CSAR? Now how damn stupid is that?... If those assets are going to be used for other than CSAR purposes, they should be under the special ops commander. But when there is a CSAR requirement whether they go or not should be at the discretion of that air component commander and not at the discretion of some other

Notes

⁷⁴ Tom Clancy and General Chuck Horner, *Every Man A Tiger*. (New York: G.P. Putnam's Sons, 1999), 410.

commander. It is just not right. It defies all logic of chain of command and jointness.⁷⁵

Closely related, the decision to task SOF for theater rescue and CENTAF for SAR Coordinator (SC) ruined unity of command. Undoubtedly, SOF was best trained and equipped to C2 its helicopters and CENTAF was best trained to C2 its search assets. However, CSAR should be a seamless operation that smoothly transitions from finding and authenticating survivors to recovering them. By establishing two de facto commanders for CSAR, CENTCOM caused undue friction and strife in command and control of CSAR.

Ultimately, the CSAR C2 decision-making apparatus revolves around the experience and training of the commanders and staffers making the decisions. How successful was CSAR in the Gulf War? Surveying all combat rescues:

A. Total CSAR Rescues:	8
B. CSAR Aircraft lost:	1
C. CSAR Personnel lost:	8
CSAR Loss per Save:	
CSAR Aircraft	8/1 = 1 loss per 8 rescues
CSAR Personnel	8/8 = 1 loss per 1 rescue

The aircraft lost number is comparable to Indochina numbers (1 loss per 7.1 rescues), but the personnel lost ratio is unacceptable. Granted the sample size is very small, but no commander could justify losing personnel for rescued survivors on a one for one basis.

Examining only CSAR missions coordinated by the JRCC:

A. Total CSAR Rescues:	3
B. CSAR Aircraft lost:	0
C. CSAR Personnel lost:	0
CSAR Loss per Save:	
CSAR Aircraft	3/0 = no loss
CSAR Personnel	3/0 = no loss

This table does not capture the dozens of other JRCC-coordinated CSAR sorties flown that were not successful in rescuing isolated personnel who were captured quickly

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⁷⁵ Interview with Brigadier General Buster C. Glosson. (Darrel D. Whitcomb: 25 Sept 2002) in Darrel D. Whitcomb, *Mixed Bag: Combat Search and Rescue in DESERT STORM*. (Un-published edition, 3 Feb 2003), 163.

or killed. However, despite its small sample size, it does unequivocally show that joint CSAR C2 was successful in the Operation DESERT SHIELD/STORM. Despite confused C2 relationships, joint CSAR in the Gulf War was successful, especially when compared to Indochina. In almost all instances, when survivors could evade capture and make contact with CSAR assets, they were recovered.⁷⁶ Equally important, no JRCC-coordinated CSAR assets were unnecessarily put at risk and lost in combat.

Notes

⁷⁶ Corvette 03 is the only exception, which makes it controversial.

Chapter 5

OPERATION ALLIED FORCE (1999)

Rescue is a compelling, all-encompassing human instinct. In crises people pull together as never before, often performing deeds far beyond their normal capacities when a life is in the balance. So it has always been and will always be. Such is the nature of man.

L.B. Taylor, Jr.

By March 1999, the world community had reached the breaking point with Slobadan Milosevic. The President of Serbia was encouraging an ethnic cleansing campaign in Kosovo. NATO was prepared to initiate an air campaign to force Serbian military forces to withdraw from Kosovo and end the ethnic genocide. The strategy called for a limited series of air strikes to compel Milosevic to withdraw from Kosovo. Accordingly, Gen Wesley Clark, commander of European Command (EUCOM) turned to the Joint Task Force- Noble Anvil (JTF-NA) Joint Force Air Component Commander (JFACC), Lt Gen Michael Short to execute a short air campaign.

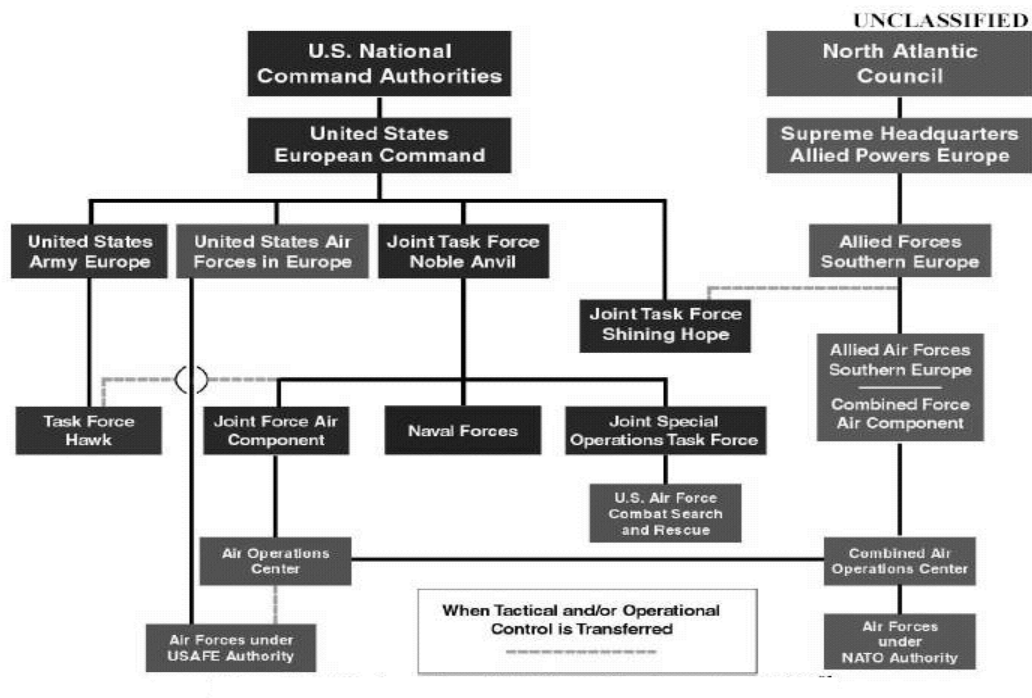


Table 3 Operation ALLIED FORCE Command Structure

Source: Air War Over Serbia, One Year report. (Washington, D.C.: HQ USAF, Oct 2000)

The wiring diagram above shows the dual C2 relationships for Operation ALLIED FORCE. Particularly misleading is the designation of USAF CSAR forces under SOF operational control (OPCON). This is misleading because in April 1999, there were no USAF CSAR forces in theater. The USAF rescue-dedicated assets like the HH-60D and HC-130, did not initially participate in the air campaign due to compelling requirements elsewhere. USAF rescue units were deployed providing CSAR coverage for Operation NORTHERN WATCH (Turkey) and Operation Southern Watch (Kuwait) and responsible for SAR coverage in Iceland.

Unlike Indochina and the Gulf War, by this time there was approved joint doctrine offering guidance for the prosecution of CSAR C2.⁷⁷ The joint doctrine reviewed in the opening chapter offered authoritative guidance that commanders were to use in accomplishing CSAR. Unfortunately, long-established CSAR C2 relationships between USAF and SOF would complicate rescue efforts. Since 1993, SOF helicopters

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⁷⁷ Specifically, Joint doctrine publications 3-50.2 (26 Jan 1996) and 3-50.21 (23 Mar 1998).

and refueling aircraft had been providing CSAR coverage for UN and NATO air operations in the former Republic of Yugoslavia (FRY). This six year-old tasking had conditioned SOF to conduct CSAR in accordance with joint doctrine, using special operations tactics, techniques and procedures (TTP).⁷⁸ For example, in Operation Deliberate Force (1995), the French lost a Mirage (call sign: Ebro 33) and SOF deliberately planned a search and rescue mission that launched days after the aircraft was lost. In this case, it was prudent because the location and condition of the survivors was uncertain and the threat level was relatively high.

Lt Gen Short made it quite clear that in this limited series of air strikes, SOF would operate using joint CSAR not special operations TTP. As JFACC, Lt Gen Short placed great emphasis on successfully recovering all isolated airmen. The political ramifications of losing airmen as POWs in a short-duration coercive air campaign were unacceptable.⁷⁹ In Lt Gen Short's mind, the SARTF was to be used in all CSAR situations and the A-10 (Sandy), as On Scene Commander (OSC), was to be the tactical-level commander.⁸⁰ For the SOF helicopters, this C2 relationship ran counter to the six years of experience and organization that they had been utilizing in the region. SOF joint doctrine and TTP directed using the recovery vehicle as the tactical level CSAR commander and SOF routinely put an extra field-grade officer on board their helicopters to serve as air mission commander unfettered by aircrew duties. This difference in concepts of operation would cause undue friction between the Air Force and SOF personnel.

As in the Gulf War, although USAF rescue units existed, they were not available for Operation ALLIED FORCE. Therefore, the JFACC had to rely solely on SOF assets to provide the recovery vehicle for CSAR. Unlike the Gulf War, Lt Gen Short was adamant about achieving unity of command and treated all aircraft that flew as his assets. He asserted, "You are in the ATO, you will do what you're told."⁸¹

The strategic level C2 relationship for CSAR was based on personal relationships. Gen Clark, the Joint Force Commander never issued orders tasking Lt Gen Short to be

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⁷⁸ Joint Publication 3-50.2, F-2.

⁷⁹ Interview with Lt Gen Michael Short. (Michael A. Wormley: 25 Feb 2003).

⁸⁰ Interview with Lt Gen Michael Short. (Michael A. Wormley: 25 Feb 2003).

⁸¹ Oral history interview with Lt Gen Michael Short. (27 Jul 1999, K570.051-59, in USAF Collection, AFHRA), 7. Document classified, page cited is unclassified.

responsible for CSAR.⁸² Brig Gen Eldon Bargewell, the Joint Force Special Operations Component Commander (JFSOCC), was not relieved of SOF's six-year old responsibility to provide CSAR coverage in the region. There was no formal turnover of CSAR responsibility at the start of Operation ALLIED FORCE. However, there was an understanding between the two component commanders, that the JFACC would command and control CSAR and JFSOCC would provide rescue assets. Lt Gen Short recalled, "at my level, there never was a bid by the SOF to be in charge of CSAR. Bargewell and I got together and we understood and agreed that the A-10 guys, who did CSAR for a living, would always be the on-scene commander and mission commander."⁸³ Brig Gen Bargewell understood that the JFACC already controlled most of the search assets and had the most interest in recovering his airmen.

At the operational level, C2 relationships were strained by the same rivalries that beset the Gulf War relationships. The JFACC stood up a Personnel Recovery Coordination Cell (PRCC) to provide theater CSAR command and control. The director of the PRCC, Major John McGonagil, was a career USAF CSAR helicopter pilot. Despite not having combat experience, he did have an advantage of being in theater for a year.⁸⁴ His time on station allowed him to become familiar with the region and draft a CSAR plan prior to hostilities. The Joint Special Operations Task Force (JSOTF) at San Vito Air Station was somewhat hampered by six years of experience doing CSAR in-theater their way. Based on the two organizations' length of time studying the theater CSAR issue, friction was unavoidable but surmountable.

Major McGonagil's theater CSAR plan was in accordance with joint doctrine and the JFACC's wishes. It called for utilizing the SARTF as the primary method for recovery of isolated personnel. However, Major McGonagil noted, "SOF doesn't like doing what we call professional CSAR."⁸⁵ Despite some SOF reluctance to employ in accordance with the CSAR plan, Major McGonagil noted that Lt Gen Short insisted, "Hey, you're ready, you have to do this in a conventional mode, you are going to work with the SARTF,

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⁸² Author interview with Lt Gen Michael Short. (Michael A. Wormley: 25 Feb 2003).

⁸³ Oral history interview with Lt Gen Michael Short. (27 Jul 1999, K570.051-59, in USAF Collection, AFHRA), 10. Document classified, page cited is unclassified.

⁸⁴ Oral history interview with Maj John McGonagil. (1 Jul 1999, K570.051-60, in USAF Collection, AFHRA), 2. Document classified, page cited is unclassified.

⁸⁵ Oral history interview with Maj John McGonagil. (1 Jul 1999, K570.051-60, in USAF Collection, AFHRA), 3. Document classified, page cited is unclassified.

you're going to work with the A-10 and ABCCC and we're going to have (an) immediate response.”⁸⁶

The previous six years of experience in the theater had prepared SOF for working with the A-10s and they were prepared for an immediate launch, but no one in theater was prepared for the operation of the entire CSARTF. There were no exercises using all the parts of CSARTF. There was no attempt to practice linking the PRCC, ABCCC, AWACS, Sandys, RC-135, rescue helicopters, MC-130, and survivor on the same communication radio nets. Despite the lack of exercise, CSAR C2 in Operation ALLIED FORCE was successful by any measure of merit.

Rescue for all my friends

JFACC understood CSAR. He had a big investment in it and he made damn sure that it was going to be conducted the way the CSAR experts would have wanted it conducted. That was the big difference. His marked involvement made the impact.

Major John McGonagil

On the third night of the air war (27 March 1999), a F-117 Stealth fighter surprisingly was lost over Serbia.⁸⁷ The shock of losing an aircraft, which many felt was immune to shoot-down, was palpable in the Combined Air Operations Center (CAOC) and PRCC. The pilot, call sign Vegas 31, immediately contacted allied forces on his survival radio while floating down to ground under his parachute. The shock of the loss wore off quickly as the rescue staff began to ascertain the survivor's location. Survivor authentication data was passed to pertinent parties and alert A-10s (Sandys) were launched from Italy. Despite uncertainty surrounding the survivor's location, the PRCC told the SOF helicopters to launch from Tuzla, Bosnia-Herzegovina to rendezvous with the Sandys at a certain time and place. However, there was confusion between Zulu time and local time, one of those minor details that a full dress rehearsal probably would have

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⁸⁶ Oral history interview with Maj John McGonagil. (1 Jul 1999, K570.051-60, in USAF Collection, AFHRA), 5. Document classified, page cited is unclassified.

⁸⁷ The narrative of the CSAR C2 for the 2 OAF rescues relies heavily on the: oral history interview with Maj John McGonagil. (AFHRA: 1 Jul 1999); 20th SOS After Action Report for CSAR of Vega 31 (5 Apr 1999); SOF Rescue Mission Commander After Action Report for Hammer 34 Rescue Mission (2 May 1999); and Major Mike McKinney and Mike Ryan, *Chariots of the Damned*. (New York: Thomas Dunne Books, 2001), pp. 180-192.

caught. Based on the wrong time, the SOF helicopters (2 MH-53s and a MH-60), took off to meet their Sandy escort.

Arriving at the rendezvous point, which was many miles and opposite direction away from the survivor, the SOF helicopters realized that the A-10 escorts were not there. To conserve fuel they landed and tried to get communication with any CSARTF asset for further direction and await the arrival of their escorts. Meanwhile, the A-10s were searching for Vegas 31. Between the survivor's reporting and electronic intelligence, the CSARTF was able to pinpoint Vegas 31. After the SOF helicopter crews received an updated survivor location, they realized that they would need more fuel. They passed their intentions to refuel to the CSARTF. They took off heading for the survivor and aerial refueled en-route to the pickup location.

Ignorant of the helicopters' capability to refuel en-route to the survivor and assuming that aerial refueling would delay the SOF helicopters, the A-10s also left the immediate area to refuel.⁸⁸ The SOF helicopters arrived at the Serbian border, prepared to cross and rescue Vegas 31, but PRCC held them for two hours awaiting the A-10 escort that was refueling. Ignorance of SOF TTP and capabilities caused near-tragic delays in the CSARTF crossing the border to rescue Vegas 31. This lack of knowledge is also information that a full dress rehearsal could have imparted to all the CSARTF members.

The weather over Serbia obscured visibility to the point where A-10 escort could not provide fire support if the helicopters received enemy fire. However, the Sandys were able to fly ahead of the helicopters, authenticate the survivor, and precisely locate Vegas 31 again. After finally receiving the execution order from Sandy, the SOF helicopters crossed the border and ingressed to the survivor location, without A-10 escort. The SOF MH-60 was able to land within meters of Vegas 31, and he was rescued after spending almost seven hours on the ground.⁸⁹ The pickup could have been at least four hours sooner, if the helicopters had not been quickly launched toward an erroneous survivor location and if they had not been held at the Serbian border awaiting an escort that never happened. The SOF after-action report noted, "After given an order to launch immediately, we spent 4.5 hours holding while C2 agencies coordinated other

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⁸⁸ Oral history interview with Maj John McGonagil. (1 Jul 1999, K570.051-60, in USAF Collection, AFHRA), 11. Document classified, page cited is unclassified.

⁸⁹ 20th SOS After Action Report for CSAR of Vega 31 (5 Apr 1999, in JPRA library), 3.

movements associated with the rescue.”⁹⁰

Despite a successful rescue, the PRCC realized that synchronization of the CSARTF or the ability to link the CSARTF together needed more thought and planning.⁹¹ The theater CSAR plan was strengthened with inclusion of SOF planning factors and capabilities, but more importantly, experience was gained for all the elements of the CSARTF from the Vegas 31 rescue. That experience would pay off on the morning of 2 May 1999.

At approximately 0015 Zulu time, Hammer 34, a USAF F-16CG was shot down by a surface-to-air missile over Serbia. Unlike the Vegas 31 CSAR, Hammer 34’s wingman immediately assumed the On-Scene Commander (OSC) role. With allied aircraft overhead and daylight approaching, the PRCC decided to launch the SOF helicopters immediately from Tuzla towards the general location of the survivor, less than 40 miles.⁹² A-10 Sandys launched from alert posture in Italy to rendezvous with the helicopters over the survivor. Synchronization, compared to Vegas 31 CSAR, was a much easier prospect for the PRCC.

The PRCC used the single-unit method as its C2 model. However, the weather was good over Serbia and the PRCC did not direct the pre-border crossing linkage of escort and helicopter. Subsequently, the helicopters lost the firepower of the escort A-10s and on ingress, the SOF helicopters took fire from surface-to-air missiles and AAA. “It was extremely dangerous. We had pushed in maybe a little too quick because of the daylight thing,” recalled Major McGonagil.⁹³ Fortunately, none of the helicopters were fatally hit by the missiles or AAA and continued on to the recovery area. The SOF MH-60 was able to land within meters of Hammer 34, and he was rescued after spending roughly two and half hours on the ground.⁹⁴

These were the only two aircraft lost in the air war over Serbia. The difference in

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⁹⁰ 20th SOS After Action Report for CSAR of Vega 31 (5 Apr 1999, in JPRA library), 6.

⁹¹ Oral history interview with Maj John McGonagil. (1 Jul 1999, K570.051-60, in USAF Collection, AFHRA), 16. Document classified, page cited is unclassified.

⁹² Oral history interview with Maj John McGonagil. (1 Jul 1999, K570.051-60, in USAF Collection, AFHRA), 18. Document classified, page cited is unclassified.

⁹³ Oral history interview with Maj John McGonagil. (1 Jul 1999, K570.051-60, in USAF Collection, AFHRA), 19. Document classified, page cited is unclassified.

⁹⁴ SOF Rescue Mission Commander After Action Report for Hammer 34 Rescue Mission (2 May 1999, in JPRA library), 2.

how the two CSAR efforts were controlled was stark and highlights the necessity to have flexible TTP and doctrine. The Vegas 31 CSAR basically went according to conventional CSAR doctrine with the full SARTF operation and took a long time to complete. The Hammer 34 CSAR was more akin to the single-unit method and was executed very quickly when compared to Vegas 31. Both were successful, but encountered difficulties that could have been significantly lessened by more training and exercises.

Lessons Learned

One of the keys to future CSAR success would be the ability of both conventional and special operations forces to retain the flexibility to mold their operations to fit each particular situation rather than force inflexible models onto inappropriate situations.

SOCEUR After Action Report

In an interview shortly after Operation ALLIED FORCE, Major McGonagil stated, “One of the big lessons learned should be conventional rescue mission is always going to be applied... if you’re going to make a commitment, it can’t be piecemeal. It’s got to be all the way. It’s got to be an honest commitment to insure that we don’t get more survivors on the ground, have more people out there. We have to have the equipment and training to be able to do that.”⁹⁵ The training he refers to is not just for the CSAR professionals, but also all aviation assets that might find themselves assisting the CSAR effort. From strike aircraft wingmen who might need to assume on scene commander duties to reconnaissance aircraft like the RC-135 that have capabilities to search for isolated personnel. Additionally, the component commander who is responsible for CSAR, usually the JFACC, must be trained. Major McGonagil identified, “We need to train the JFACC... we need to train those Lt Gen’s out there, but Gen Short understood CSAR.”⁹⁶

Two other lessons should be learned from the CSAR experiences in Operation ALLIED FORCE: first, everyone needs to be flexible enough to execute a CSAR while

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⁹⁵ Oral history interview with Maj John McGonagil. (1 Jul 1999, K570.051-60, in USAF Collection, AFHRA), 22-23. Document classified, page cited is unclassified.

⁹⁶ Oral history interview with Maj John McGonagil. (1 Jul 1999, K570.051-60, in USAF Collection, AFHRA), 24. Document classified, page cited is unclassified.

minimizing the risk; and second, never underestimate the power of unity of command.

Despite the “this is way we always have done it” attitude of the SOF in theater prior to the start of Operation ALLIED FORCE, the entire CSARTF was able to come together and successfully execute. Without a full exercise of the C2 relationships, the operators were able to overcome friction and rescue the survivor on the Vegas 31 CSAR mission. With experience and revamped planning, the PRCC and JFACC were able to command and control the Hammer 34 CSAR using the single-unit method to achieve a successful rescue. Every CSAR mission will be different, and dogmatic execution of doctrine is unwarranted and unwise.

Lt Gen Short, JFACC and Brig Gen Bargewell, JFSOCC were able to set aside traditional turf wars to ensure that one commander had responsibility for rescuing isolated personnel during the air war. The JFACC had the preponderance of CSAR forces and the means to control them. Yet despite having the explicit tasking of CSAR for the ongoing Operation NOBLE ANVIL, Brig Gen Bargewell did not wait for orders from Gen Clark to give tactical control (TACON) of his SOF helicopters to the JFACC for Operation ALLIED FORCE CSAR missions.⁹⁷ With unity of command over all CSAR forces, Lt Gen Short was able to craft a responsive organization and posture it for success.

Using the formula proposed in the first chapter, it is clear that they were successful.

A. Total CSAR Rescues:	2
B. CSAR Aircraft lost:	0
C. CSAR Personnel lost:	0
D. CSAR Loss per Save:	
CSAR Aircraft	2/0 = no loss
CSAR Personnel	2/0 = no loss

Despite its small sample size, it does show that joint CSAR C2 was successful in the Operation ALLIED FORCE. Despite tension within the tactical level of C2, joint CSAR in Operation ALLIED FORCE was extremely successful, especially when compared to Indochina. Most important, no PRCC-controlled CSAR assets were lost in combat.

Notes

⁹⁷ Author interview with Lt Gen Michael Short. (Michael A. Wormley: 25 Feb 2003).

Chapter 6

CONCLUSION

I am tempted indeed to declare dogmatically that whatever doctrine the Armed Forces are working on now, they have got it wrong. I am also tempted to declare that it does not matter that they have got it wrong. What does matter is their capacity to get it right quickly when the moment arrives.

Sir Michael Howard

Following the above quote, Sir Michael Howard asserts, “still it is the task of military science in an age of peace to prevent the doctrines from being too badly wrong.” This thesis assumed that joint CSAR C2 doctrine was wrong or at least inadequate. The research and analysis demonstrated the difficulty for doctrine to foresee and address all situations. The best that one can hope for is doctrine that is flexible enough to apply in most situations.

A trend in the nature of US warfare from Indochina to the Gulf War to Serbia has been the shorter duration of combat operations and declining numbers of CSAR missions. This means that CSAR forces will not have the advantage of on-the-job training in the future. Thus preparation through adequate doctrine and training is essential to ensure success.

The trend of declining numbers of CSAR missions may lead some to question the efficacy of investing in and prosecuting CSAR. There are four key reasons for retaining and improving the CSAR mission area. First, Americans place great value on the sanctity of human life. The US military has a moral obligation to recover all its personnel. Second, by assuring our military members that we will do everything within reason to recover them, we sign an implicit contract with them. In return, they will exert their utmost in times of great stress. Third, rescue and recovery of our military members

denies our enemies valuable sources of intelligence. Fourth, all trends are cyclical and future combat may put more military personnel in isolated survivor status. We cannot discard CSAR as a valuable mission, because the future by its very nature is unknown. The four case studies examined in this thesis are helpful in identifying the current trend. However, future combat operations will differ from the nature of these four case studies.

So what of the thesis question and its corollaries? Should command and control of CSAR be reorganized? Will reorganizing CSAR command and control doctrine make it more effective? Has the current joint doctrine for CSAR C2 captured the historical lessons? Will new problems arise if we implement the historical lessons learned?

The analysis of the historical development of CSAR indicates that the current joint doctrine has captured most of the lessons learned. In other words, there are no major problems with current joint doctrine for CSAR C2. Anecdotal evidence suggests that most members of the US military, particularly the USAF and USSOCOM, are not very familiar with joint doctrine concerning CSAR. Based on historical evidence, it is the potential for poor application of doctrine, due to lack of knowledge, that could cause problems in CSAR, not the lack of good doctrine.

Historical Lessons Learned

The detailed presentation of a historical event, and the combination of several events, make it possible to deduce a doctrine: the proof is in the evidence itself.

Carl Von Clausewitz

From the early years of conflict in Indochina, the CSAR history indicates that: we must have joint and service doctrine; clear command and control relationships; and trained/educated CSAR professionals working in C2 nodes. The CSAR history of the later years of the conflict in Indochina indicates that: CSAR is truly a joint mission; CSAR professionals must be trained and educated to employ joint assets; and CSAR demands unity of command—ultimately, one commander must be tasked with prosecuting joint CSAR.

From Operation DESERT SHIELD/STORM, the CSAR history demonstrates that: the JRCC was a “pick-up game” of poorly trained individuals; not having

OPCON/TACON of recovery vehicles hampered CENTAF plans for rescue; and confused C2 relationships destroyed unity of command. The history of Operation ALLIED FORCE demonstrates that: everyone needs to be flexible enough to execute a CSAR while minimizing the risk; and we must never underestimate the power of unity of command.

The cases studies examined within this thesis offer three overarching lessons learned:

1. Unity of Command: one commander for joint CSAR is essential
2. CSAR demands well-trained and educated personnel to be successful
3. CSAR joint doctrine should be applied flexibly

Conclusion

While individual training is generally good, there are problems in getting realistic training for staff organizations and the rescue task forces. As a result, we do a lot of 'on the job training' during the opening days of a conflict, such as in Operation Allied Force and during the rescue operation.

General Henry H. Shelton
Chairman, Joint Chiefs of Staff

Current joint CSAR C2 doctrine has already incorporated historical lessons learned and is appropriate for ensuring the success of CSAR. The only historical lesson learned that can be codified in joint doctrine is the requirement for unity of command (one combatant commander for joint CSAR). The current joint doctrine clearly states that the Joint Search and Rescue Coordinator (JSRC) director or the component commander who hosts the JSRC exercises Joint Force Commander (JFC) command authority for CSAR.⁹⁸ Joint doctrine is clear in the requirement for all CSAR missions to be commanded by a single component commander. Joint doctrine also clearly states that the JFC normally delegates responsibility for CSAR to the component commanders.⁹⁹ Clearly, joint doctrine delegates authority and responsibility for joint CSAR to the component commander who hosts the JSRC.¹⁰⁰

Joint doctrine describes four types of CSAR command relationships at the operational

Notes

⁹⁸ US Joint Chiefs of Staff, *Joint Pub 3-50.2, Doctrine for Joint Search and Rescue*, (Washington D.C.: 26 January 1996), ix.

⁹⁹ Ibid., I-1.

¹⁰⁰ Ibid., I-2.

or theater-level of war. First, a component may prosecute CSAR with its own assets and retain operational control (OPCON). Second, when a component needs joint capabilities, the JSRC tasks other components to provide tactical control (TACON) of the augmenting forces to the component that requires joint capabilities. Third, in a situation where a component cannot conduct CSAR for its personnel, the JSRC tasks another component to conduct the CSAR mission with its own forces with the tasked component retaining OPCON of its forces. Lastly, when no component can prosecute CSAR missions unilaterally, then the JFC may issue mission- type orders to all components, leveraging joint capabilities, to build a mission package capable of successfully recovering isolated personnel. This requires all component commanders to release their forces in a TACON relationship to a designated component commander, usually the component commander who hosts the JSRC.¹⁰¹ The common denominator in all four CSAR command relationships at the operational level of war is the designation of one component commander with at least TACON of all assets.

In warfare, one component commander must be tasked with overall responsibility for the execution of joint CSAR. At the operational or theater-level of war, based on preponderance of assets and the means to control them, in most cases it should be the Joint Force Air Component Commander (JFACC). At a minimum, the JFACC should always have tactical control (TACON) of any asset tasked to support the joint CSAR mission. Operation ALLIED FORCE is the case study that proves that with one commander responsible for CSAR, a successful command-and-control relationship is attainable. Despite its small sample size, the objective measure of merit was the recovery of 100 percent of “recoverable” personnel with no losses of rescue assets.

The other two historical lessons learned can be addressed only by having the joint doctrine known and followed. For the best use of joint CSAR assets, all personnel working in the Joint Search and Rescue Center (JSRC) or Personnel Recovery Coordination Center (PRCC) must be educated in the capabilities and limitations of joint CSAR assets. All components must send augmenting personnel who are well versed in their service capabilities and limitations as well as familiar with other service assets. All CSAR professionals must be flexible and must be intimately familiar with joint CSAR

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¹⁰¹ Ibid., III-5.

doctrine and understand the risks associated with deviating from the doctrine.

Current joint CSAR doctrine recommends two tactical-level C2 relationships. The single-unit method is doctrinally preferred. However, its use requires the survivor's location to be known. The CSARTF is only recommended if the survivor's location cannot be pinpointed and armed escort is required for the recovery vehicles. Neither method is always best, and success in CSAR can be dependent on which method is chosen. Choosing which tactical-level C2 relationship to use requires trained and educated CSAR professionals.

The only cost in adopting these conclusions is the price of educating the US military on joint CSAR doctrine and tactics, techniques, and procedures. The training and education piece requires large joint force-on-force exercises that include CSAR tasks. The price for not adequately preparing to execute joint CSAR doctrine pales in comparison to the cost of losing isolated personnel and their would-be rescuers.

The solution to improving joint CSAR resides in ensuring unity of command, following joint doctrine, and educating CSAR professionals. The current joint doctrine for CSAR C2 has already incorporated the historical lessons learned and is appropriate for ensuring the success of CSAR. Based on the evidence, it is not appropriate to change joint doctrine. The doctrine for CSAR C2 has evolved, as it should, with the history of CSAR.

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