Small Wars in a Big Theater

Special Operations Air Component Integration with the Joint Air Component in Theater Operations

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Abstract

In the 15 years since the formation of the US Special Operations Command, the special operations forces (SOF) communities of all services have strongly emphasized the integration of their combat capabilities. However, Air Force Special Operations Forces (AFSOF) have not put this same degree of effort into integration of combat capabilities with the rest of the US Air Force. Consequently, AFSOF are experts at the joint tactical fight but are less proficient at integrating into larger conventional air operations. This deficiency is most evident when SOF air forces must work within the command and control (C2) system of theater air forces. This study addresses the issue and proposes measures to enhance the coordination between special operations air forces and conventional air forces in theater operations.

The history of this issue is examined through three case studies: the 1st Air Commando Group in Operation Thursday, the Son Tay Raid, and SOF C2 in Operation Desert Storm. From these case studies, three main lessons stand out as applicable to the issues facing the SOF air component today: (1) SOF must integrate their operations into the larger set of theater operations; (2) SOF air assets should be centrally controlled by the theater SOF component; and (3) SOF cannot plan missions in a vacuum.

Recommended measures are broken down into three specific areas: doctrine, personnel and training, and equipment. From an examination of these areas, the study proposes a set of nine reforms: (1) Prevent the decentralized control of SOF airpower by forming one joint special operations air component (JSOAC) per contingency; (2) Balance operational security with planning considerations to work within the constraints of the conventional airpower targeting cycle; (3) Establish doctrine for JSOAC operations similar to that of the joint special operations task force (JSOTF); (4) Establish qualifications to serve on a JSOAC staff; (5) Realign the operational support squadron (OSS) to function as a garrison JSOAC; (6) Increase OSS squadron strength by 15 percent; (7) Link key peacetime positions to JSOAC duties; (8) Use the theater battle management core system (TBMCS) for peacetime C2; and (9) Operate from a daily AFSOC air tasking order (ATO) during peacetime. The goal is to develop a professional C2 organization based on the model used by the USAF air operations center (AOC). Some of these measures may be implemented individually, but they will have the most impact if integrated as a coherent course of action.

About the Author

Maj William P. West was commissioned upon graduation from Texas Tech University in 1989. He attended undergraduate navigator training at Mather AFB, California, and was assigned to McGuire AFB, New Jersey, to fly as a crew member on the C-141B. He served as a standardization and evaluation navigator and executive officer before being assigned to the AC-130U at Hurlburt Field, Florida. There he served as an instructor navigator, flight commander, and operations group executive officer. Colonel West participated in Operations Joint Endeavor, Joint Forge, and Allied Force. He graduated from the US Army Command and General Staff College, Fort Leavenworth, Kansas, before attending the School of Advanced Air and Space Studies (SAASS) at Maxwell AFB, Alabama. He holds a bachelor's degree in political science from Texas Tech University and a master's degree in aeronautical science from Embry-Riddle Aeronautical University.

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Chapter 1

Introduction

First, break down the wall that has more or less come between special operations forces and the other parts of our military, the wall that some people will try to build higher. Second, educate the rest of the military—spread a recognition and understanding of what you do, why you do it, and how important it is that you do it. Last, integrate your efforts into the full spectrum of our military capabilities.

—Adm William J. Crowe Jr.

On 24 April 1980 in a remote part of Iran, code-named Desert One, an attempt to rescue American hostages from the embassy in Tehran came to an abortive end. The Holloway Commission, formed weeks later to investigate the operation, concluded that the root cause was a failure of Special Operations Forces (SOF) coordination.[1] Since the issuance of the commission's report, the SOF communities of all services have strongly emphasized integration of their combat capabilities. As a result, US SOFs have become an effective joint fighting force over the past 15 years. However, Air Force SOFs (AFSOF) have not put this same degree of effort into integration of its combat capabilities with the rest of the USAF. Consequently, AFSOFs are experts at the joint tactical fight but are less proficient at integrating into larger conventional air operations. This deficiency is most evident when SOF air forces must work within the command and control (C2) system of theater air forces. This leads one to ask, What measures should be taken to enhance the coordination between special operations air forces and conventional air forces in theater operations?

Methodology of Research

To examine the broad issue of coordination between SOF air forces and conventional air forces, this study examines three specific areas: doctrine, personnel and training, and equipment. Within each of these areas, potential solutions are analyzed for suitability and feasibility. Evidence comes from a review of SOF operations in World War II, Vietnam, and the 1991 Persian Gulf War. This evidence is based on a review of both primary and secondary sources. Primary sources include interviews with key SOF and Air Force leaders as well as documents from the US Air Force Historical Research Agency (USAFHRA). Secondary sources include publications on SOF history, regulations, and doctrine, as well as biographies and memoirs of key leaders. The study analyzes several problems that have occurred in the history of Air Force SOF and examines their relevance to current issues. It also assesses possible solutions to current problems and proposes

a course of action to improve integration of the SOF air component with the theater air component.

Background

During the 1980s there was a significant effort by Congress and a few senior leaders in both the Army and the Air Force to address the poor state of readiness of the nation's SOFs. Despite the recommendations of the Holloway Commission, the same problems with C2—as well as a lack of joint planning—were evident during Operation Urgent Fury, the rescue mission in Grenada which came three and one-half years after the abortive Iranian hostage rescue.[2] As a consequence of the Iran and Grenada operations, Congress established the Special Operations Command (SOCOM) as a new unified command on 1 June 1987.[3] Three years later the effort that created SOCOM led to the redesignation of the Twenty-third Air Force to Air Force Special Operations Command (AFSOC). During the next decade the reorganized AFSOC dramatically improved its joint special operations capability. This capability was recently demonstrated in Operation Enduring Freedom (OEF), during which—among numerous other SOF missions—AFSOC forces successfully executed seven Desert One–type missions in three months. This capability is only possible today because of the emphasis AFSOC has placed on joint SOF training.

The drawback to this emphasis on the special operations mission was the creation of a culture in AFSOC that did not perceive itself as part of the larger mission of the Air Force. Many saw a clear distinction between SOF missions and larger theater operations. According to Col Kenneth "Redman" Poole, one of the few remaining active duty personnel who participated in the Desert One mission, "For a long time those of us in AFSOC believed we had our specialized mission, and the Air Force had their big wars. We saw no need, and had no desire, to integrate our operations."[4] Only recently has AFSOC acted to correct this deficiency in integration with the combat air forces (CAF).

The July 2001 creation of a special operations liaison element (SOLE) as a standing organization within AFSOC was a significant step toward SOF-CAF integration.[5] Personnel in the SOLE were able to participate in large-scale SOF exercises that included joint forces air component commander (JFACC) and air operations center (AOC) staff inputs. This training noticeably enhanced their ability to operate in the AOC during OEF. Colonel Poole served as the SOLE director in OEF and credits the success of his staff to those exercises of the previous year. "These exercises were the first of their kind, and their timing was perfect to prepare us for the war."[6] Despite the success of the SOLE, there were significant problems in OEF that must be addressed if SOF air is to operate effectively as part of larger theater operations.

Doctrine

Under current joint doctrine, the theater SOF component may establish a joint special operations task force (JSOTF) for specific missions of limited duration.[7] The JSOTF normally organizes its assigned air forces into a joint special operations air component (JSOAC). A JSOAC is analogous to the theater air component in that it is established for the purpose of centralized control of SOF air operations. JSOACs are normally staffed by personnel from AFSOC with additional SOF augmentees and are responsible for planning and executing SOF air operations while ensuring effective coordination and integration with conventional air operations.[8] The JSOAC coordinates and resolves conflict with the AOC through the SOLE (see fig. 1). The SOLE serves as the liaison element between the JSOTF commander and the JFACC, ensuring all SOF air and surface activity is annotated in the air tasking order (ATO). The most critical role of the SOLE is to prevent fratricide of SOF, who often operate deep into enemy territory.[9] Due to the temporary nature of JSOTFs, there are no permanent JSOAC organizations.

To carry out their responsibilities effectively, members of the SOF air component staff must be familiar with the internal workings of an AOC. Both the JSOAC and SOLE work for the JSOTF commander and are tasked to plan and execute special air operations. However, the JSOAC does not control all the resources required to conduct operations; this is the domain of the JFACC. The theater air component controls the airspace, the theater airlift, and the theater intelligence, surveillance, and reconnaissance (ISR) capabilities. If the JSOAC wants to operate in-theater or re-

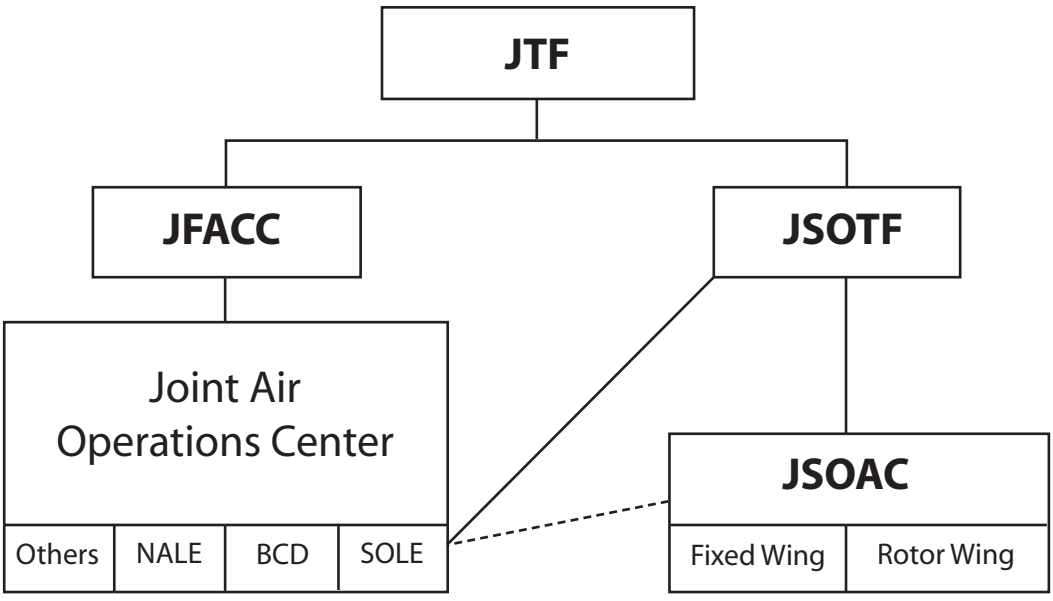


Figure 1. Theater air integration. Adapted from AFSOC command briefing, Special Operations Liaison Element.

ceive additional support from conventional air assets, it must operate in concert with the AOC.

Personnel and Training

AFSOC is among the smallest of USAF major commands (MAJCOM).[10] Additionally, the variety and nature of the AFSOC joint mission require significant time for aircrew and support personnel to gain the necessary experience with the other SOF components to develop a pool of available assets that can perform combat and support functions.

The JSOAC does not exist in peacetime. When a staff is formed, personnel are supplied from the existing structure of the wing, groups, and squadrons. As a result, tactical forces are expected to train for both tactical and operational levels of war. As with SOF mission qualification, considerable training is required to qualify for AOC staff duty. According to Air Force Instruction (AFI) 13-1AOC, volume 1, *Ground Environment Training—Aerospace Operations Center*, a combination of initial qualification coursework plus six months of AOC experience is required to receive a special experience identifier.[11] The Joint Special Operations University (JSOU) recently created a curriculum to teach SOLE and JSOAC operations, but the challenge of building a cadre of experienced personnel to serve on a staff still exists. Thus, under the current system, AFSOC has insufficient personnel qualified to serve on a JSOAC staff and an even greater shortage of personnel with AOC training. It is clearly necessary to increase the number of personnel trained and qualified for operational-level war fighting while meeting the AFSOC requirement to provide highly trained forces for special operations missions in support of theater operations.

Equipment

The lack of personnel trained in C2 of SOF air operations has been exacerbated by the lack of equipment and lack of standardization of collaborative software systems. The current system used for theater air C2 is the theater battle management core system (TBMCS). The TBMCS is an effective system, but it requires extensive training for both staff and commanders to become familiar with its operation. For many on a JSOAC staff, their first encounter with the TBMCS is when they deploy for an operation. This is a recurring issue because AFSOC does not use the same systems for C2 in-garrison during peacetime as it does in war. This difference in systems created difficulties during Operation Enduring Freedom. The JSOACs had difficulty placing mission information into the system, and the SOLE had to take over this function. Additionally, a lack of understanding of the TBMCS by both JSOAC and SOLE personnel led to numerous delays until system experts arrived in-theater to provide assistance.[12]

In addition to the training issues involved with C2 systems, a lack of standardization of software, such as collaborative tools, increases the workload for both JSOAC and SOLE staffs. Collaborative tools allow geo-

graphically separated organizations to work together through a secure Internet connection. In the case of theater C2, these tools allow dispersed staffs to coordinate planning throughout the theater simultaneously. Difficulties in OEF arose due to a lack of standardization of collaborative tools employed. At the AOC, the software of choice was InfoWorkSpace (IWS), while most SOF organizations chose to use Microsoft NetMeeting. There is some disagreement as to which is the more appropriate software for C2 operations; these systems are incompatible. This incompatibility prevented SOF from rapidly coordinating mission details with conventional operators. As a result, the SOLE staff had to work on both systems and serve as a bridge between planning efforts.[13]

Case Studies

For historical background relating to AFSOF integration with the USAF, this work analyzes three case studies from SOF history: Operation Thursday during World War II, the Son Tay Raid during the Vietnam War, and SOF C2 during Operation Desert Storm. These three cases were selected because they provide an overview of SOF air operations up to the current time. Operation Thursday is arguably a forgotten part of aviation history that marks the creation of the first SOF aviation organization, the Air Commandos. This operation in the China-Burma-India theater made military history with the first Allied all-aerial invasion. The challenges faced by the Air Commandos in World War II are similar to those facing today's modern air commandos.

Unlike Operation Thursday, the Son Tay Raid is well known. This well-executed raid on a prisoner of war (POW) camp in North Vietnam is often cited in contrast to the compartmentalized planning of the attempted rescue of embassy hostages in Tehran. The Son Tay Raid represents a joint special operations task force conducting an operation within a theater actively engaged in combat.

The final case study covers C2 of the special operations air component in the Gulf War. Desert Storm represents the first interaction between SOF and the theater air component in a major regional conflict after the Goldwater-Nichols Department of Defense Reorganization Act of 1986.

Potential Solutions

The three chapters following the case studies examine potential answers to the research question. Each of these answers/solutions will be evaluated for feasibility and suitability in five categories: cost, manpower, training, organizational restructuring, and technological feasibility. These five categories represent most of the constraints and issues facing SOF commanders and organizations. In this regard, the study takes a practical

rather than theoretical approach to the problem and looks for a balance between new ideas and the ability to implement them.

Potential solutions considered in this study fall into three categories: doctrine, personnel and training, and equipment. Doctrinal solutions consider methods to eliminate the differences between organizational processes during peacetime and in war. Doctrinal considerations also examine measures to standardize the structure of a JSOAC battle staff. Finally, the organization of the operational support squadrons (OSS) is addressed to determine the best means of meeting manpower requirements for a JSOAC and SOLE.

The personnel and training category considers proposals to make the JSOAC a more professional organization by following the USAF air operations center or AOC model. Specific qualification requirements are proposed, and various options for conducting formal training are discussed. The discussion balances ideal solutions against the realities of the limited number of personnel available within AFSOC. Complementing the doctrinal proposal of organizing peacetime processes to mirror those in war, formal identification of positions in organizations, such as the OSS that will serve on a JSOAC staff, is considered. Some prerequisite qualifications are necessary to serve in leadership and critical positions in these organizations.

The discussion of equipment solutions proposes procurement of additional C2 systems, such as the TBMCS, for daily operations of AFSOC units while at home station. Additional proposals highlight the need for standardization of software systems such as collaborative tools and mission planning systems.

SOFs have evolved over the past decade to become exceptional joint fighting forces. In AFSOC, however, the years of focusing on improving special operations joint warfare led to a culture that did not identify itself as part of the larger Air Force mission. AFSOC recognizes that in order to carry out its current mission, it must improve integration with the CAF and the theater air component. The research that follows is an attempt to identify those measures that will enhance the coordination between special operations air forces and conventional air forces in theater operations. The three case studies provide lessons from the experience of special operations aviation. Areas for improvement are categorized into three sections (doctrine, personnel and training, and equipment), and multiple potential solutions are analyzed for suitability and feasibility. The research concludes with a synthesis of the potential solutions and a proposed course of action for improved integration of the SOF air component with the theater air component.

Notes

1. Adm J. L. Holloway III, USN, retired, Special Operations Review Group, *Rescue Mission Report* (Washington, DC: Department of Defense, 23 August 1980), 60.

2. William S. Lind, *Report to the Congressional Military Reform Caucus: The Grenada Operation* (Washington, DC: Military Reform Institute, 5 April 1984); and Holloway, *Rescue Mission Report*, 50–52, 61–62.

3. History, United States Special Operations Command (MacDill AFB, FL: USSOCOM History and Research Office, November 1999), 5, 6.

4. Col Kenneth Poole (AFSOC/DO), interview by author, 15 January 2003.

5. History, Air Force Special Operations Command, January–December 2001, 199.

6. Poole, interview.

7. Joint Publication (JP) 3-05.1, *Joint Tactics, Techniques, and Procedures for Joint Special Operations Task Force Operations*, 19 December 2001, x.

8. Ibid., III-7.

9. Ibid., III-10.

10. In terms of active duty personnel and force structure, AFSOC is much smaller than the other MAJCOMS. For example: Air Combat Command (ACC) has 91,156 active duty personnel, three numbered air forces (NAF), and 25 wings; Air Mobility Command (AMC) has 51,892 active duty personnel, two NAFs, and 12 wings; AFSOC has only 9,121 active duty personnel, no NAFs, one wing, and three groups. "USAF Almanac 2003," *Air Force Magazine*, May 2003, 110–29.

11. Air Force Instruction (AFI) 13-1AOC, vol. 1, *Ground Environment Training—Aerospace Operations Center*, 1 November 2002.

12. Maj Robert Blythe (AFSOC C2 systems chief), interview by author, 16 January 2003.

13. Lt Col Bill Cumler (AFSOC SOLE/ADO), interview by author, 16 January 2003.

Chapter 2

The First Air Commandos

I want to demonstrate that we can use ships in the air just like we use ships on the sea. I want to stage an aerial invasion of Burma. This is going to be the 1st Air Commando Group.

—Gen Henry "Hap" Arnold

Operation Thursday

With the fall of Burma to the Japanese in 1942, the British looked for a military response that would retain land access to China and eventually retake Burma. Brig Orde C. Wingate led the first such campaign in February 1943 with three brigades and proved the effectiveness of his concept of the long-range penetration.[1] One lesson from this campaign was the need for dedicated air support. After discussing operations in the China-Burma-India theater with Adm Lord Louis Mountbatten of Britain in August 1943, Gen Hap Arnold saw a grand opportunity to show the world what airpower could do by conducting a full-scale aerial invasion. Soon after their meeting, Arnold created the 1st Air Commando Group, a composite unit of fighters, bombers, transports, and gliders, to support Wingate's expedition. This group, led by Col Phillip Cochran, developed the tactics and doctrine for this new mission and integrated the unit into a theater struggling to stay in the war.

Historical Background

By mid-1942 the Japanese had expanded their empire into most of Southeast Asia. Inspired by its success at Pearl Harbor and having nearly cut off China from outside assistance, Japan continued its expansion into Burma, which offered many strategic advantages. Control of Burma's mountainous north would complete the encirclement of China and provide a buffer for the western flank of the Japanese Empire. More importantly, it took Japan one step closer to the prize of India and perhaps even a linkup with Field Marshal Erwin Rommel's forces in the Middle East. Burma also had a natural resource desperately needed by the Japanese—rice. The "rice bowl" offered the potential of three million tons of rice to feed its population.

After a grueling retreat from Burma, Gen Joseph W. Stilwell, commanding general of US Army Forces China-Burma-India theater, commented, ". . . we got a hell of a beating. We got run out of Burma and it is humiliating as hell. I think we ought to find out what caused it, go back and retake

it."[2] In fact, one officer was doing just that. Upon arrival in India, 19 March 1942, British army colonel Orde C. Wingate studied the enemy, terrain, and tactics that led to the loss of Burma. He eventually developed his concept of long-range penetration (LRP). This concept was to send a highly mobile and well-trained force deep into the enemy's rear area to disrupt lines of communication and draw forces away from the front lines in support of a major offensive.[3] Wingate would be granted the chance to prove his ideas and lead a force of 3,000 men into Burma.

Operation Longcloth. Wingate's plan, code-named Operation Longcloth, called for three brigades to march into the harsh environment of the Burmese jungle with three objectives: (1) Disrupt the Kalewa-Kalemyo lines of communication; (2) Attack the railway between Shwebo and Myitkyina; and, (3) If possible, cross the Irrawaddy River and sever the railway between Mandalay and Lashio.[4] Initially the operation was to be conducted in conjunction with a major offensive, but Allied forces in the theater were unable to support such an aggressive plan. In February 1943 Admiral Lord Mountbatten, supreme Allied commander Southeast Asia, decided to send now Brigadier Wingate and his brigade of "Chindits" anyway.[5]

By March 1943 the LRP force had encountered many difficulties early into the operation, and eventually two of his brigades returned to India. Wingate chose to continue and successfully destroyed 75 sections of the Mandalay-Myitkyina railroad. In his desire to complete the mission and prove the LRP concept, he pushed on to the Irrawaddy River and overextended his brigade. With the Japanese in pursuit, the Chindits fought their way out of Burma. Five months after entering Burma, Wingate returned with 2,182 of his original 3,000 men, most unfit for future duty due to malaria, exhaustion, or tropical disease. Although the operation did not accomplish all assigned tasks, it was the first major offensive operation against the Japanese in the theater and thus considered a success.[6]

Wingate believed Operation Longcloth validated his LRP concept and soon began planning his next operation. In the first campaign, planners overestimated the Royal Air Force's (RAF) ability to supply the brigades. Another concern to be addressed prior to further LRP incursions into Burma was the inability to evacuate the sick and wounded. On the march out of Burma, those who could no longer walk or be carried were left behind with only a rifle and a canteen of water, devastating unit morale.[7] The solution to many of the problems encountered during Operation Longcloth came in the form of a new group of airmen—the Air Commandos.

1st Air Commando Group. During the Quadrant Conference in Quebec, Canada, Wingate briefed Pres. Franklin D. Roosevelt on his plan to continue operations inside Burma. The plan was well received, and Roosevelt directed Gen Hap Arnold to provide the necessary assistance. Arnold immediately saw this as an opportunity to increase the role of airpower and further his goal of expanding the Army Air Forces.[8] Arnold's vision was to create a new organization dedicated to supporting Wingate's LRP operations in Burma.

To lead this new organization, initially called Project 9, Arnold called upon two experienced combat pilots, Lt Col Philip G. Cochran and Lt Col John R. Alison. Both officers attempted to decline the assignment, but Arnold was insistent that they were just the leaders and personalities he desired and made them co-commanders. However, because Cochran was a few months senior, they agreed he would be the commander and Alison his deputy. Arnold's final direction was, "I not only want you to [take out the wounded] . . . but I [also] want the USAAF to spearhead General Wingate's operations."[9]

After months of recruiting personnel and procuring aircraft, Cochran and Alison developed a concept of operations that supported all of Wingate's requirements for his LRP into Burma. Both men envisioned landing the Chindits and their equipment deep into the jungle via gliders. Fighters and bombers would provide escort and close air support as needed during combat operations, while cargo aircraft performed resupply. Light aircraft would solve the problem of casualty evacuation. By November 1943 Cochran and his group were ready to deploy. Only three months after its creation, Project 9 was a composite group consisting of fighters, cargo transports, gliders, light aircraft, and even a few prototype helicopters as noted in table 1. This unique unit was redesignated the 5318th Provisional Unit (Air).[10]

Table 1. Aircraft of the 1st Air Commando Group

Assault Force	Transport Force
P-51 Mustang fighters	Douglas C-47B Skytrains
B-25H Mitchell bombers	UC-64 Norsman
Stinson L-1 Vigilant fighters	CG-4A Waco gliders
Stinson L-5 Sentinel fighters	Sikorsky YR-4 helicopters

Adapted from *Joint Intelligence Collection Agency China Burma India, First Air Commando Force Invasion*, report no. 1448, 29 March 1944, 810.6091A in USAF collection, USAFHRA, 3–5.

Theater Integration

The China-Burma-India theater was an obscure theater with a complicated command structure. In addition to the decision to support Wingate's next expedition with US airpower, President Roosevelt and Sir Winston Churchill realigned the command structure, creating the Southeast Asia Command (SEAC). Admiral Lord Mountbatten was appointed supreme Allied commander. General Stilwell, commander of US forces in China, Burma, and India, was appointed as his deputy. Initially, Stilwell also maintained OPCON over the US Tenth Air Force and all US troop carrier aircraft. In November 1943, Arnold authorized Mountbatten to integrate the American and British air units under his command. In the realignment, Tenth Air Force and RAF units in-theater were placed under Air Chief Marshal Sir Richard Peirse, air commander in chief, Southeast Asia. Stilwell and his subordinate air commander, Gen George E. Stratemeyer, opposed the realignment. Stratemeyer became the commander of the newly

created Eastern Air Command and retained OPCON over all aircraft operating in Burma. Soon afterward, Cochran and Alison had to integrate their Air Commandos into this contentious command structure.

Arnold realized that his goal of creating a dedicated group to support Wingate's operations, as well as his own desire to prove airpower's capabilities, required his direct support to prevent the Air Commandos from being absorbed by theater commanders to support other missions. Upon his arrival in the theater, Cochran had his first meeting with Mountbatten. No one in the theater understood what he and his composite force were sent to do. Up to this point, senior theater leadership had envisioned aircraft being used to transport troops to China, where they would begin their lengthy march south into Burma. The airmen would then continue to provide some degree of resupply to sustain the LRP. Cochran had done his homework. He and Alison had analyzed the mission and their capabilities and recommended that they insert the troops directly into Burma and then establish an airfield for further resupply. When told his brigades could be carried 200 miles behind enemy lines in one week, Mountbatten was thrilled. "You are the first ray of sunshine we have seen in this theater in a long, long time!" he exclaimed.[11]

Cochran still had several hurdles to overcome. General Stilwell saw the new group as an addition to the air forces under his command and did not necessarily agree with Cochran's plans and tactics. Fortunately, Cochran had letters signed by Arnold to both Mountbatten and Stilwell directing their support for the Air Commando mission. Arnold's letter read, in part, "A dispatch . . . to the Air Staff indicated a desire to amalgamate air commando units with the existing Air Tactical organization. With this concept I cannot agree. In order to get the maximum value from our Air Commandos, and develop new principles for their participation in air warfare, we must have extreme flexibility."[12] Despite Arnold's support, Gen William Old, commander of the Troop Carrier Command, persisted in his assertions that the C-47s and Waco gliders be under his command. Throughout their training with Wingate's forces, the Air Commandos had to fight to keep their supplies and even their personnel from being siphoned off by other commitments in the theater. Cochran recalled,

> I also had an order from him [General Arnold] saying that none of our supplies were to be used by anyone else. You see, you'd send all those supplies over to a hungry theater, and all this beautiful new stuff, and they would grab it. They would steal it from you. Now the American Army, General Stilwell's forces . . . did not much care for us. They tried to take us over. They tried to take all our supplies. They said, after all, they were there first, and they were poor. They were destitute, and who the hell are you Johnny-come-latelies to come over here and bring into the theater stuff and then say that's ours. It goes into one pot, and we all separate it. . . . but I had the "Dear Dickey" letter that said no one is going to assimilate that outfit after it gets in.[13]

The letters from Arnold were helpful but insufficient in themselves to gain theater acceptance of the unit's independent status. Cochran built personal relationships with the coalition commanders and went out of his

way to support anyone he could while still emphasizing his primary mission of support to Wingate's LRP. His commitment to integrating into the theater would pay huge dividends to the Air Commandos, the Chindits, and eventually, the entire theater.

Operation Thursday Commences

After months of training, developing tactics, and working out the command structure, Wingate's Chindits were ready to make their second expedition into Burma, code-named Operation Thursday. From 5 to 12 March 1944, they would bypass 200 miles of harsh Burmese jungle and infiltrate the Chindits deep into Burma on gliders and transport aircraft filled with troops, equipment, and mules. Hours before the mission commenced, Cochran dispatched one last reconnaissance flight to observe the landing zones, code-named Broadway and Piccadilly. When reports came back showing large logs blocking the Piccadilly landing zone, Cochran and Wingate were nervous. Had the Japanese detected their plans to land at Piccadilly? Broadway looked safe, but was it a trap? After much discussion the plans were changed, and the entire force was sent to Broadway.

At 2200 hours on 5 March, the first gliders landed at Broadway with disastrous results. Under the tall grass, invisible to reconnaissance, were teakwood tree trunks and large ruts, making the terrain unsuitable for glider operations. Within minutes the area was saturated with gliders, each making a controlled crash landing. The landing zone was so littered with destroyed gliders that Alison had to order a halt to further landings. After finding a functional radio, he was only able to transmit a single code word, SOYA-LINK, before the radio died. This actually meant the landing force was under attack and not to send any more gliders. The word spread to India, and operations ceased. Meanwhile, those back in India assumed the worst. Poor communications prevented further contact until the next morning. By morning, Alison was able to assess the situation and, despite the area being littered with the wreckage of CG-4A Waco gliders, his engineers promised the airfield could be ready by afternoon. Wingate and Cochran were ecstatic to hear the true circumstances of the previous night's events, and by the end of the day, they had landed 100 gliders in Burma. However, the Air Commandos' success was not limited to troop transport.

During the airlift into Broadway, Cochran's Air Commandos established air superiority by attacking Japanese airfields in Burma. Catching a high percentage of the Japanese air force on the ground, the Air Commandos destroyed 47 aircraft at two separate airfields. According to General Stratemeyer, commander of Eastern Air Command, "In one mission [the unit] obliterated nearly one-fifth of the known Japanese air force in Burma."[14] Meanwhile, unlike on Wingate's first expedition (Operation Longcloth), wounded personnel were evacuated by Cochran's light aircraft. According to Alison, "A man could be wounded anywhere in the battle area and that night he would be in a hospital in India."[15] After the success at Broadway,

the operation expanded to include two other airfields, Piccadilly and Chowringhee, though Piccadilly was soon abandoned for security reasons.

The insertion of forces for Operation Thursday was successful. In the seven days of the operation, the Air Commandos delivered more than 2,000 personnel, 136 mules, and 104,000 pounds of cargo. In addition to their airlift, the RAF and the Troop Carrier Command flew an additional 579 sorties.[16] The most significant aspect of this mission was that the Air Commandos delivered Wingate's Chindits 200 miles into enemy territory and built an airfield for follow-on operations. When the operation was completed on 11 March, the Chindits were deep in enemy territory, successfully attacking the railways and holding key terrain. The difference in this LRP operation was the dedicated air support providing resupply, close air support, and casualty evacuation. Wingate was especially impressed with the light aircraft, later noting, "Without your men and your aircraft this campaign could not have hoped to be a success."[17] Throughout the remainder of Wingate's campaign, the Air Commandos sustained the ground forces. Total logistic support is shown at table 2.

Table 2. Airlift during Operation Thursday

Location	Troops	Horses	Mules	Supplies (lbs.)
Broadway	7,023	132	994	444,218
Chowringhee	2,029	43	289	64,865
Total	9,052	175	1,283	509,083

Adapted from Herbert Mason Jr., SSgt Randy G. Bergeron, and TSgt James A. Renfro Jr., *Operation Thursday: Birth of the Air Commandos*, Air Force History and Museums Program, 1994, 36.

Lessons Learned

Cochran and Alison were given an enormous challenge—create a new organization, acquire aircraft, recruit personnel, develop the required tactics, and determine how to integrate their new unit into an unfamiliar theater to support a force about which they knew little. Because of these challenges, General Arnold provided an unprecedented level of support; however, his support alone would not ensure their success or acceptance in the China-Burma-India theater. Many saw the influx of fresh men and aircraft as replacements or reinforcements that should fall under their OPCON. The key to the group's success was their planning for integration. Cochran and Alison quickly adapted to their new mission and environment. Both men studied the theater and the mission they would be called upon to support. By quickly establishing an organizational concept, coordinating widely, and supporting whatever additional missions they could, they were able to integrate their force into the theater operations with minimal difficulties.

SOF Air Assets Should be Centrally Controlled. The Air Commandos were formed for a specific task—to support Brigadier Wingate's LRP into Burma. Cochran's major challenge was to take his newly formed unit into a theater with well-established command relationships and function in a semi-independent role. His insistence, with the support of General Arnold, that the Air Commandos function as a unit independent of the theater air component and report directly to the theater commander, Admiral Lord Mountbatten, ensured their ability to conduct their primary mission.

SOFs Cannot Plan in a Vacuum. Within a few days of their assignment, both Cochran and Alison were busy building an organization and conceptualizing future operations. They soon realized that they could not proceed without consulting those in the theater. During Cochran's initial meetings with Brigadier Wingate and theater planners, it became clear they all had different ideas on how air support would be used during the upcoming invasion of Burma. Cochran's early coordination synchronized the two planning efforts, ensuring they met both Brigadier Wingate's and the theater commander's requirements. The results increased the effectiveness and contribution of the Air Commandos to the invasion and to Mountbatten's theater objectives.

Implications for Contemporary SOF Operations

Today's air commandos have the benefit of a formal organization with a clear chain of command; however, SOF air forces are still fighting with the concept of centralized control of airpower. Like the first air commandos, SOF air forces are few in numbers. To ensure they are used efficiently and carry out their primary mission, they should not be divided across the theater or within the SOF community. In many ways Cochran's 1st Air Commando Group was similar to what we today call a JSOAC, and it was assigned to support a specific mission with a limited duration similar to a JSOTF within a joint task force. It was only through their independent organization that Cochran and Alison were able to support Wingate's invasion.

Cochran created an organization and established processes that allowed joint planning. Despite their independent organization, the Air Commandos provided additional support to the RAF and Troop Carrier Command during fighter and airlift operations. Those challenges of organization and joint planning were similar to ones facing our special operations airmen almost seven decades later. SOF planners today must remember that they are part of a greater theater mission. The organization and processes of the SOF air forces must enable detailed coordination with their conventional theater counterpart. This is especially true when SOF missions require additional air support.

The Son Tay Raid

On 18 November 1970, Pres. Richard M. Nixon gave the order to execute Operation Kingpin, launching one of the most daring special operations missions in American history. In contrast to the rescue mission that followed nearly a decade later in Iran, the Son Tay Raid is a textbook example of how to plan and execute a high-risk special operations mission. From its initial concept, Task Force Ivory Coast was built around a joint organization and given the ability to plan, live, and train together until its commanders, Brig Gen Leroy Manor, USAF, and COL Arthur D. "Bull" Simons, USA, declared the "Son Tay Raiders" prepared to execute the mission. Most historical accounts focus on the significant tactical training required for such a small force to execute such a demanding mission. There is, however, one additional challenge that is often overlooked. In addition to their already demanding mission, the Son Tay Raiders had to integrate, coordinate, and operate within a theater fully engaged in combat.

Historical Background

Nineteen seventy was a difficult year for the United States. Only months into his presidency, Nixon was dealing with pressure to extricate the United States from Vietnam. The invasion of Cambodia and the campus shootings by National Guard troops at Kent State in Ohio fueled the already significant public discontent for the Vietnam War, sparking large protests in front of the White House. President Nixon was continuing his plan of "Vietnamization," with the goal of ending US involvement in the war.

After nine years of air warfare, beginning with T-28 "Farm Gate" counterinsurgency operations in 1961, the United States had confirmation of 339 POWs, with an additional 400 other personnel listed as missing in action in North Vietnam.[18] After a meeting with 26 wives of POWs, President Nixon was moved to take significant action. He ordered an increase in diplomatic pressures on North Vietnam and directed his military advisors to provide rescue options.[19] When notified about recent intelligence on the location of a POW camp that was a good candidate for a rescue operation, an enthusiastic Nixon authorized the armed forces to commence planning for the mission.

A joint contingency task group (JCTG), code-named Task Force Ivory Coast, was created to plan and execute the rescue mission. From the beginning, this group was not ordinary. The strategic implications of both an incursion into North Vietnam and the rescue of POWs required considerable White House oversight and absolute secrecy. As the name implies, the JCTG was a joint organization consisting of Air Force and Army SOF. Brig Gen Leroy Manor was chosen to command the group, while COL Bull Simons was selected as his deputy. Based on a reputation spanning 28 years of combat, including World War II, Korea, and Vietnam, Colonel Simons was the first choice to lead the actual raid into Son Tay.[20] However, tactical experience was not the deciding factor on command of the task

group. The nature of the mission and the size of their force meant that substantial levels of support would be required from both the training facility and the theater of operations. Because the training would take place at a secluded auxiliary airfield outside Eglin AFB, Florida, an Air Force general was placed in command. This ensured the required level of support without drawing any unnecessary attention to the task group. Manor was well-suited for the mission. Like his deputy, Manor had extensive combat experience—345 missions in World War II and 275 in Southeast Asia.[21] In addition to his tactical combat experience, he understood theater-level operations. This would prove invaluable during the deployment and execution phase of the mission as he integrated his task group into the theater to obtain the required support without sacrificing security.[22]

Before conducting detailed planning, Manor and Simons visited the Defense Intelligence Agency, the Central Intelligence Agency, the National Security Agency, and the National Reconnaissance Office. Normally, Manor and Simons would not have access to these enigmatic organizations. But this mission was different—it had national strategic implications. To ensure that the JCTG had the resources required to complete the mission, Manor and Simons received direct support from the highest levels of government and the armed forces. General Manor was given a letter from the Air Force chief of staff, Gen John Ryan, granting him whatever support he required from *any* Air Force organization.[23]

General Manor and Colonel Simons used different methods to recruit the all-volunteer force needed for the mission. The Air Force special operations community was small, and Manor had a good idea of whom he wanted to recruit. Manor, with the assistance of Col Warner Britton, his most trusted helicopter pilot, selected only those he believed were qualified and who he knew would volunteer when asked. Of the 105 aviators who took part in the raid, only 65 were recruited to fly the primary mission. The additional 40 pilots were part of conventional units in the theater. These aircrews provided valuable direct support for the mission but did not require prior training with the JCTG. Despite the protests from the theater, many of those he selected were currently serving in Southeast Asia.[24]

Simons, in contrast to Manor, invited volunteers at Fort Bragg, North Carolina (where he was then assigned), with experience in the theater to interview for a mission. Simons was a legend at Bragg, and 500 soldiers showed up at the first brief. Each volunteer had to undergo an arduous review that included an interview with Simons, questions about his combat experience and family stability at home, a medical examination, and a screening of records to detect possible psychiatric or discipline problems. After three days of screening, Simons settled on the top 92 soldiers.

On 9 September the training began as the Ivory Coast task group took over an auxiliary airfield deep in the forests of West Florida. Training was realistic, with extensive live fire, relaxing of many peacetime safety restrictions for flying training, and even a full-scale replica of the compound. The ground force started with basic infantry skills, with marksmanship given

top priority. Aircrews flew lengthy night missions, experimenting with new techniques of formation flying using aircraft with dissimilar aerodynamic characteristics. The difference in airspeeds between the C-130s and the helicopters was only one of the challenges the airmen had to overcome. After two and a half months of training and 172 full rehearsals of the mission, General Manor notified senior leadership that Ivory Coast was ready to execute Operation Kingpin.[25]

The Plan

From the earliest inception, planners compared seemingly endless permutations of options for executing the mission. The final option would be to land a helicopter assault force inside and around the POW compound with a force of 56 men, capitalizing on shock and surprise to overwhelm an estimated force of 100 guards. If executed properly, the assault force would require no more than 30 minutes to neutralize the guards and abscond with the POWs. Everything in the lives of these men revolved around planning for these 30 minutes at Son Tay.

The plan called for an assault force, a strike force, and a support force. In all, over 100 aircraft would be involved in the mission. Taking off from Ta Khli, Thailand, the assault force boarded two C-130 aircraft and was transported to Udorn, Thailand, where the 56 Raiders transferred onto HH-3 and HH-53 helicopters for the three-hour flight to Son Tay. The HH-53s from Udorn and the A-1 Skyraiders from Nakhon Phanom, Thailand, were led to the target by specially configured C-130 Combat Talon aircraft. The strike force, made up of five Skyraiders and one Combat Talon, was to create a diversion by dropping flares, battlefield simulators, and firebomb markers. The A-1s were also to provide air support and prevent North Vietnamese reinforcements from attacking the assault force.[26] Once the compound was secure and the POWs extricated, the assault force would egress on the helicopters and take the prisoners back to Udorn.

Theater Coordination

As the training at Eglin neared completion, Manor and Simons knew the assault force had a high percentage of success. Now the most difficult part of the mission planning—securing the required support and coordinating within the theater—was left up to Manor. His experience at the Pentagon and in Southeast Asia taught him how critical such coordination is to mission success. However, this mission posed some unusual challenges to theater-level coordination. Manor had to find a compromise between the requirement for security and the necessity to brief additional personnel on the plan. At this point in the operation, most members of the JCTG had not been briefed on the purpose for their months of intense training. With advice from the Joint Chiefs of Staff, Manor started at the top by briefing the commander of Pacific Forces (CINCPAC), Adm John S. McCain. Soon after Manor's briefing to CINCPAC, he briefed the commanders of the Mili-

tary Assistance Command Vietnam, the Seventh Air Force, Task Force 77, and the Thirteenth Air Force.[27] The reactions to the mission were generally shock and surprise at the audacity of the undertaking, but each commander pledged his utmost support to the operation.

With just weeks before the raid, the "in-theater coordinating staff" went into high gear. To assault the compound, the 56-man team of Raiders required over 100 assault and support aircraft, high-tech communications equipment, and the installation of a robust C2 network.

The Diversion. The greatest tactical challenge to mission success was infiltrating 13 slow-flying aircraft through the North Vietnamese air defense network and arriving at Son Tay, 20 miles outside of Hanoi, without being detected. To slip through the net, the Raiders would require more than just low-level terrain-masking tactics—they would require a diversion. By 1970, with the exception of the occasional reconnaissance aircraft, the United States was not sending many sorties into North Vietnam. To divert the attention of the abundant radar sites, the operation would be supported by Carrier Task Force 77 (CTF 77). Three aircraft carriers, the USS *Ranger*, the USS *Hancock*, and the USS *Oriskany*, launched a total of 60 aircraft from the Gulf of Tonkin to attack Haiphong Harbor. Because there had been no bombing in the North for two years, the crews were perplexed by their strange mission. They were ordered to fly into a high-threat environment, attack Haiphong with flares and a few Shrike antiradar missiles, but not drop any bombs. The only explanation they received was that they were supporting a "special mission" and were to create a diversion to overwhelm the air defense system. In his official report, General Manor would later laud the Navy for its role in the success of the mission.

> The diversionary actions performed by the Carrier Task Force 77 were vital to the overall success of the mission. The result of this effort was exactly as foreseen during the planning phase. It caused the enemy defense authorities to split their attention and concern thereby contributing greatly to the confusion and chaos which resulted. In short, it served to deny the enemy the option of concentrating his attention to our true and primary mission. The timing of the Navy diversion was precisely according to plan. The US Navy planning and mission execution was superb in every respect. I am deeply grateful for the wholehearted and enthusiastic support received from the Commander of Carrier Task Force 77.[28]

During his predeployment planning, Manor added an additional layer of protection to ensure the survival of his Raiders. He coordinated with the 388th Tactical Fighter Wing at Korat Royal Thai Air Force Base (RTAFB), Thailand, for F-105 Wild Weasels to suppress enemy air defenses during the last and most vulnerable 12 minutes of the approach into Son Tay. The role of the F-105s was vital. They served as "bait" for the surface-to-air missiles (SAM), keeping the radar operators focused on an easily detectable air threat in the opposite direction of the assault forces' approach.[29] During the mission, no fewer than 20 SAMs were fired in their vicinity, and one F-105 was shot down. Fittingly, after the raid the very helicopters they protected recovered the F-105 crew.[30]

The POW camp's location close to Hanoi posed additional problems. Phuc Yen Airfield, home of Hanoi's main fighter base, was only 20 miles to the northeast. Combat air patrol (CAP) was provided by four F-4Ds of the 432d Tactical Reconnaissance Wing, Udorn RTAFB, Thailand. There were reports of MiGs attempting to take off and receive vectors from ground intercept controllers, but the North Vietnamese controllers were too overloaded to provide any direction to the fighters. There were no in-flight MiG threat warnings issued by US forces.

The combination of a diversion at Haiphong Harbor, Wild Weasel support in the vicinity of Hanoi, and a MiG CAP southeast of Son Tay overwhelmed the North Vietnamese air defenses. A degree of panic seemed to spread through the North Vietnamese, as if they viewed the diversions as the prelude to a full-scale invasion. Meanwhile, a small raiding party of 13 low-flying aircraft arrived undetected at Son Tay and began its assault on the POW compound.

Command and Control. Operation Kingpin required an elaborate C2 system relying heavily on the infrastructure already in Southeast Asia. Some additional support, such as radios and data-link equipment, was installed specifically to support the operation. Due to the reliance on theater C2 infrastructure, the obvious choice of location for Manor's operations center was the Tactical Air Control Center–North Sector (TACC–NS), Monkey Mountain, Da Nang, South Vietnam. The communications network consisted of three main parts: communications within the task group, commander JCTG C2 and communications, and command authority communications.[31] At Da Nang, Manor received support from theater communication specialists, intelligence analysts, and photographic reconnaissance interpreters. In addition to ground-based communications support, the operation relied upon KC-135, RC-135, and EC-131T aircraft for radio relay and data-link support. When it was all put together, the JCTG had an elaborate C2 structure facilitating communications from the assault force to the TACC–NS and all the way up to the National Military Command Center in Washington, DC.

The Raid. On 20 November, the night prior to the mission, Simons gave the full mission briefing to the Raiders. For a majority of Task Force Ivory Coast, this was the first time they were told the purpose and objective of their mission. "We are going to rescue 70 American prisoners of war, maybe more, from a camp called Son Tay. This is something American prisoners have a right to expect from their fellow soldiers. The target is 23 miles from Hanoi. . . . You are to let nothing interfere with the operation. Our mission is to rescue prisoners, not take prisoners."[32]

The three-hour flight from Udorn to the objective was uneventful. As the assault force approached the POW compound, the C-130s dropped flares and firefight simulators to distract and confuse enemy forces in the area, while A-1s attacked targets to prevent any reinforcements from interfering with the rescue. Minutes prior to reaching the objective, the lead helicopter pilot became focused on a similar building and landed 400 meters

south of target. As Simons and his men attacked the building, they came under much heavier resistance than anticipated. It did not take Simons long to figure out that he was at the wrong location. Intelligence reports had labeled this compound as a civilian secondary school. Within minutes they were extracted out of a now burning inferno, having killed hundreds of enemy soldiers. The mistake may have actually saved the mission. The school was, in fact, a military training facility with over 200 regular soldiers. Meanwhile, the remainder of the assault force executed the backup plan they had rehearsed hundreds of times during the previous months.

At the POW camp, the guards were surprised and easily overwhelmed by the smaller force. To prevent the enemy from having time to react while the assault force breached the walls, a single HH-3 helicopter crash-landed inside the compound. Soon thereafter, the entire assault force, including those from the lead helicopter, were inside the compound searching for the POWs. Eleven minutes into the raid came the call on the radio net, "Search complete: Negative items at this time."[33] Many were in disbelief; but after another search of the cells, Simons called for extraction. Despite the impressive execution, they were going home empty-handed.

During extraction, the assault force watched numerous SAMs, "large flying telephone poles," racing through the sky. One crew member noted, "They lit up the sky, just like a launch at Cape Kennedy."[34] Crews reported at least 18 SA-2s launched that night. However, they were not launched at the helicopters but rather at the F-105s providing cover. As the Raiders made their dash for the Laotian border, one of the missiles hit an F-105. The crew ejected from the aircraft but was now deep in hostile territory. Fortunately for the crew, the Raiders were close to the scene and had all the search and rescue capability required. The A-1s provided cover while an HH-53 retrieved the crew.

During the long flight back to Udorn, the men had time to think about what had happened. While they were pleased with the execution of the mission, they were disheartened about not finding any POWs. General Manor's after-action comments summed up these mixed emotions. "I can unequivocally state that, other than the absence of prisoners at the objective, there were not major surprises in the operation."[35]

Lessons Learned

The failure of the Son Tay Raid to bring back any POWs created much controversy immediately following the mission. Critics referred to the mission as "harebrained" and "a John Wayne approach."[36] Others, such as Secretary of Defense Melvin Laird, viewed the mission as a tactical success that sent a strategic message to the North Vietnamese "that we will take rather unusual means to see that these men are returned as free Americans."[37] Lost in the partisan debates was the fact that the raid may have had indirect effects beneficial to the POWs. According to Col Robinson Risner, a POW for seven years, "the raid may have failed in its primary objectives, but it boosted our morale sky-high!"[38] Whether viewed as a failure or

success, the Son Tay Raid provides one overarching lesson: SOF missions can produce national strategic effects, thus the value of properly coordinated planning and execution cannot be overstated.

SOF Cannot Plan in a Vacuum. Virtually no SOF operation is self-sufficient. At some point, an operation will require augmentation or additional support from national agencies or conventional military forces. As in Operation Kingpin, such support may include non-SOF combat and support aircraft, C2 infrastructure support, various forms of intelligence, or even additional equipment. When additional requirements are identified, it is important for the agencies providing them to be included in the planning process. Before the JCTG had selected its tactical force, its leadership was engaging the intelligence community for support. Conventional air forces have significant capabilities that can be used to assist SOF operations. If SOF units are to maximize the utility of conventional aviation, they must coordinate with the experts and specialists in that field. This leads to the next lesson: do not let mission secrecy prevent proper planning.

SOF Must Balance Operational Security with Integration of Supporting Agencies. The commanders of Operation Kingpin went to extreme measures to keep its mission, purpose, and target secret. Only hours before the actual mission were the members of Ivory Coast told what they had been training for during the past two and one-half months. Despite this security, the planners realized that mission success depended on theater support and included many outside organizations and personnel in the planning. In most instances, only the most senior commanders were briefed on the specifics; however, planning was conducted at all levels of command.

In his official report on the Son Tay Raid, General Manor acknowledged that the tactical success of the operation could only have been achieved with the support of the conventional air forces. In this regard, Manor had an advantage that will rarely be available to SOF planners and commanders today. The JCTG was the supported force during the entire operation. The operation had unlimited backing and support from the Department of Defense and the president of the United States. With this clout available, Manor did not have to negotiate for theater support; he only had to make his requirements known. But it is apparent that he did so in a cordial and respectful manner.

Successful SOF Air Operations Require Intratheater Coordination. Regardless of the national significance of the mission, SOF operations will have to work within the established theater structure. One advantage SOF commanders and planners have today that was unavailable to General Manor and his staff is a consolidated air operations center. The current level of centralized control far exceeds the capabilities of the Vietnam War. Manor realized he would need additional air support to conduct his operation and coordinated with each organization for its support. Had today's concept of an AOC existed in Southeast Asia, Manor would have only had to go to one organization to present his requirements.

Air operations require a robust C2 network. Operation Kingpin benefited from the existing theater C2 infrastructure and would not have been able to bring in an equivalent structure in time to execute the mission. The C2 system had some gaps in capabilities that required additional resources, but these were easily provided. The Son Tay Raiders also benefited from the fact that air operations in North Vietnam had been significantly curtailed since 1968, making coordination much simpler than it would have been with the thousands of sorties per night to which today's air forces are accustomed. Still, even with the relatively limited number of air assets taking part in the mission (just over 100), the mission could not have been accomplished without a robust C2 network.

Implications for Contemporary SOF Operations

Just as the 1st Air Commando Group received direct support from General Arnold, so did the Son Tay Raiders receive assistance from General Ryan. This level of support was required because the organizational processes and coordination were not sufficient to allow the mission to succeed without it. As the frequency of SOF operations increases and they take on an even greater role in the global war on terrorism, planners cannot expect the same level of direct support to ensure mission success. SOF are committed to joint fighting within their community, but they must extend this commitment to include conventional forces, especially conventional air forces. To conduct a Son Tay–style raid today would require the SOF air component to increase coordination with the theater air component.

SOF Command and Control in Desert Storm

Across a dark desert on the night of 17 January 1991, four MH-53J Pave Low helicopters led a flight of AH-64 Apaches in an attack on two air defense radar sites inside Iraq. Minutes after their arrival, the sites were destroyed, opening a 10-kilometer-wide air corridor that allowed hundreds of coalition aircraft to begin the air campaign of Desert Storm.[39] Based on their unique capabilities, SOFs had been reluctantly allowed to lead this strike and start the war. The mission success, however, was not a true reflection of the interaction between the SOF air component and their theater counterpart.

Only months after the establishment of AFSOC in May 1990, the new command was deploying forces to Saudi Arabia as part of Desert Shield. Numbering only 2,000 of the 500,000 troops that would take part in Desert Storm, the SOF air component would experience growing pains in its attempt to integrate itself into a major regional conflict. Conflicts with theater doctrine and the guarded special forces culture challenged the new command in what was then the largest-ever SOF deployment.

Command and Control

Desert Storm was the first major American war after the passage of the Goldwater-Nichols Act.[40] As the theater combatant commander of Central Command, GEN Norman Schwarzkopf became the supported commander and had the prerogative to organize his forces as he desired. He chose a command structure based on functional capabilities—land, air, maritime, and SOF components. From an airman's perspective, this arrangement provided for the centralized control of airpower and was thus most desirable; however, the joint force air component commander (JFACC), Gen Charles "Chuck" Horner, did not have control of all air assets in-theater. The Navy, Marines, and SOFs each had aircraft that were not transferred to operational control of the JFACC. Each organization had doctrinal reasons for keeping a portion of its air assets under its control. General Horner realized these airpower relationships had the potential to create employment problems during the war and made an effort to deal with them early in the planning process. "At the April 1990 briefing, I was lead-turning the issues that had been a problem in the past: failure of the Marines to fight jointly, ignorant attempts by the Army to own the air forces, and failure of land-force-trained CINCs to understand how to fight airpower."[41] Horner viewed his efforts as successful. He felt he had the trust of the combatant commander and the other component commanders, but the SOF air component was not pleased with some of the command relationships.

Much like the theater combatant commander, the theater SOF component commander, Col Jesse L. Johnson, organized all SOF airpower under a single subcomponent, Air Force Special Operations Command Central (AFSOCCENT), commanded by Col George Gray. All SOF airpower assets would be centrally controlled to ensure the most efficient and responsive use in support of theater SOF missions.[42] There were two exceptions to this central control of SOF airpower, the AC-130 Spectre gunship and EC-130 Volant Solo aircraft (see figs. 2 and 3). Against the wishes of AFSOC, Central Command (CENTCOM) and the Air Force component of CENTCOM (CENTAF) decided that the gunships and Volant Solo would operate under CENTAF control. According to a SOF unit history, "While Colonel Gray reported directly to Colonel Johnson at SOCCENT and had all of his assets in one location, he did not have the final say in all operational matters."[43] SOF airmen claim this led to "awkward, disjointed command and control of the AC- and EC-130s."[44] In AFSOC's view, this arrangement represented centralized execution of airpower. "By centralizing OPCON of all air assets used in the conventional role at the AFFOR [Air Force forces], some think that they are supporting the principle of centralized control. In reality, they are centralizing execution of those assets belonging to the other components, because they strip them away from their operational supervision."[45] This command relationship effectively removed any advocate to represent the SOF point of view in regard to mission taskings. According to Maj Randy Durham, one of the SOF liaison planners, "By removing SOCCENT from the chain of command for mission taskings, the highest

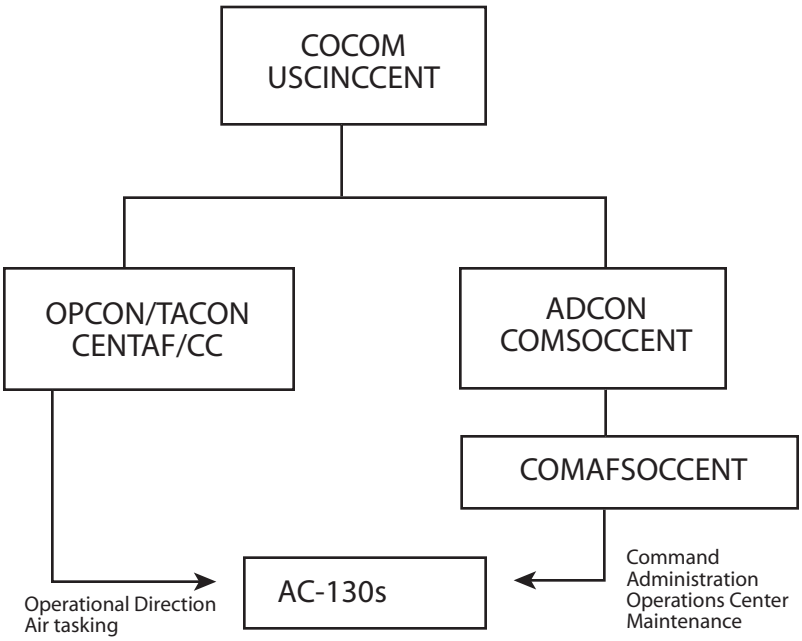


Figure 2. AC-130 command and control during Desert Storm. Adapted from "The Transparency of Tactical Control (TACON) in the Air Campaign," AFSOC white paper (Hurlburt Field, FL: HQ AFSOC/XPPD, December 1993), 5.

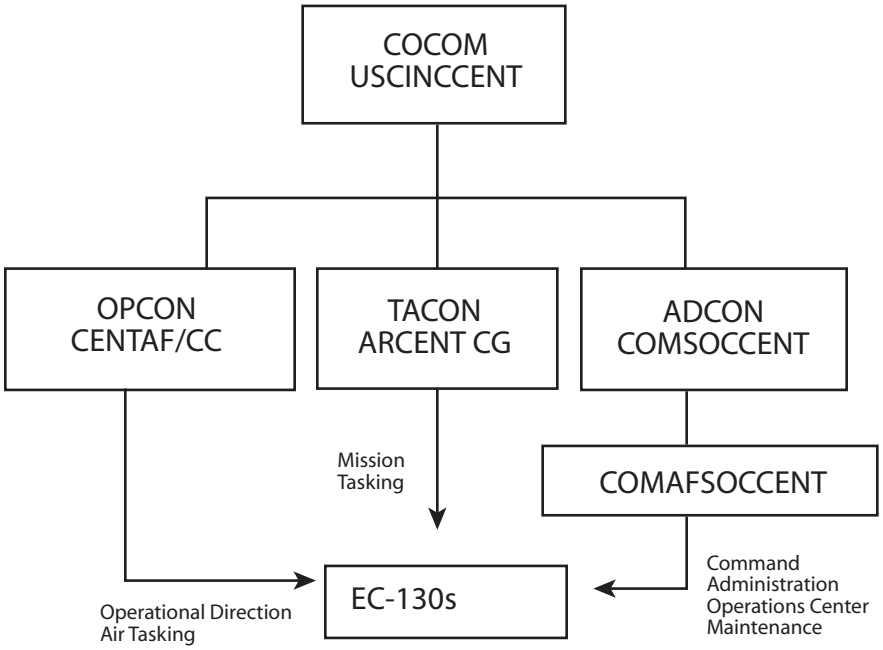


Figure 3. EC-130 command and control during Desert Storm. Adapted from "The Transparency of Tactical Control (TACON) in the Air Campaign," AFSOC white paper (Hurlburt Field, FL: HQ AFSOC/XPPD, December 1993), 6.

ranking SOF officer involved was a major at the TACC [tactical air control center]."[46] Additionally, as documented in an AFSOC white paper, "The EC-130s had the distinction of being the only unit controlled by three different components simultaneously during Desert Shield and Desert Storm."[47] Psychological operations (PSYOP) mission taskings originated from ARCENT (Army component of CENTCOM) and were scheduled in the ATO by CENTAF, while administration support resided with SOCCENT (Special Operations component of CENTCOM). Despite this committee-like command and control relationship for the EC-130s, it was the situation with the AC-130s that most disturbed AFSOCCENT.

The debate over the OPCON issue intensified after AC-130 crews complained about inappropriate mission taskings into high-threat areas. According to Major Durham, "TACC would task the gunships without understanding the aircraft capabilities or limitations."[48] Colonel Gray described the taskings as "totally inappropriate."[49] Gray blamed the problem on the combination of a broken intelligence system and the reluctance of CENTAF to listen to SOF intelligence reports from inside Iraq.[50] On one particular mission, a crew literally "bent" a gunship while evading a SAM. Eventually, Gray was authorized "risk assessment authority," allowing him to represent the crews and cancel missions.[51]

General Horner had a different view of the situation. First, he saw the OPCON issues as part of normal doctrine. "The EC-130s were tasked by the PSYOPs campaign planners; the JFACC just managed them—tracks, IFF, deconflicting—and used the ATO to keep all informed what was going on."[52] As for the gunships, "I felt the AC-130 folks were upset at being in the ATO and that the Army leadership in SOF did not like the SOF air being tasked to do rescue. . . . The forces were assigned to me according to CENTCOM. The AC-130s were always assigned to me in exercises, etc."[53] Second, Horner had a fundamental disagreement with the SOF community about how SOF airpower should be organized for combat. "I can see the value of a separate SOF organization for training, promotion, funding, but it should stop at the organize-train-and-equip level. When it comes to combat, SOF elements should be assigned to air, land, sea, and space components to insure we interact in the most effective and efficient manner."[54] With such fundamental disagreements in theater organization, C2 will continue to be an issue requiring greater attention. For the SOF air component in Desert Storm, these command relationships were frustrating but were not the only challenges they would face.

Theater Integration

In 1990 and 1991, Desert Shield and Desert Storm represented the largest deployment of SOFs in history.[55] This deployment provided more than just a logistical challenge for SOFs; it also meant they would have to reconcile their cultural differences with the conventional coalition they were supporting. This was the first major war for the United States since Vietnam, and the role SOFs would play was questioned from the beginning.[56] For

years SOF had grown accustomed to operating separately from the confines and restrictions of a large conventional force. This culture of working independently would be one of the greatest barriers to theater integration.

The initial deployment was chaotic. AFSOC launched aircraft and planners on short notice from the United States without knowing their destination. Upon arrival in-theater, a team of 10 SOCCENT planners was assigned to serve as the SOF liaison element to the theater air component staff. This element served as the main link between the two components. Shortly after his arrival, Maj Randy Durham, one of the senior members of the SOF liaison element, realized they were unprepared for the task ahead.[57] In terms of equipment and staffing, SOCCENT had been neglected and was probably in the worst shape of all the theater SOF components.[58] Durham and his counterparts had limited electronic connectivity with the SOF air operations. In the TACC, they had only grease boards, a telephone, and limited access to a computer.[59]

Soon after forces arrived in-theater, the cultural barrier between SOF and conventional forces started interfering with coordination. Secrecy and compartmented planning were the standard method of operation for SOF. Much to the consternation of the theater air component, SOF resisted attempts to be included in the ATO and refused to share mission details. Their argument was that their forces were operating deep in enemy territory and were very vulnerable. Remaining undetected was their best defense.[60] While understanding the desire for secrecy, some on the conventional side of operations saw this attitude to be a desire to assert SOF independence.[61]

AFSOC was not immune from the culture of secrecy. Over the previous decade, SOF aviation relied on the "trusted agent" model for integration with conventional forces. Rather than share mission details with non-SOF organizations, they would embed a liaison officer in C2 aircraft or operation centers. If a SOF asset were detected by friendly air forces, the trusted agent would confirm its identity.[62] This system worked in small contingencies, but its inadequacies soon became apparent in the Desert Storm air campaign.

On the evening of 6 February 1991, Major Durham was approached by the TACC airborne warning and control system (AWACS) controller, Maj Eric Thompson, and asked if he had any helicopters in the air. Thompson explained that a flight of F-15s had detected two unidentified helicopters and was requesting permission to engage. The ATO did not have any missions scheduled for this area, and Durham did not have any departures for the evening logged in the computer by SOCCENT. His initial response was, "No they are not mine."[63] After comparing the coordinates to a chart in his planning room, Durham noticed they were close to two predesignated helicopter landing zones and realized they probably represented the location of his aircraft. After a frantic call, he informed the TACC that the helicopters spotted by the F-15s were his aircraft.[64] Durham learned afterward that the helicopters were inserting a SOF team on a Scud-hunting mission.

Due to the desire for secrecy, neither he nor anyone else in the TACC had been notified about the mission. The helicopters, with two special reconnaissance teams, came within minutes of being killed by friendly forces.

General Horner points to this incident as evidence for his argument that SOF should be more open about their operations. "My problem with the US SOF land forces was that they kept everything secret and close hold so we did not know what they were doing. They had a liaison officer on duty in the TACC, but even he was not told about operations and it was a very difficult situation."[65] He uses the British special forces as an example of how he believes SOF should interact with the air component. "Interestingly enough the SAS [Special Air Service] liaison would announce to the entire TACC what their forces were doing so all knew what was going on and could take that into account in the event we had a change of plan (now called time-sensitive targeting)."[66]

Lessons Learned

The examples in this case study highlight some of the difficulties SOF had in adjusting to operations in a large, conventional war. The command and control issues provide three lessons to improve theater integration. While these problems may paint a negative picture of SOF operations in Desert Storm, this is not the intent of this study. At the tactical level, SOF operators proved the value of their intense training and unique capabilities through a wide variety of missions, making a significant contribution throughout the war. EC-130 and MC-130 aircrews provided the theater commander with various options for the PSYOP campaign—while the EC-130s broadcast television programs inside Iraq, the MC-130s dropped leaflets and BLU-82 "Daisy Cutter" bombs on fielded forces. After leading the initial strike to commence the war, SOF rotary-wing assets flew the majority of combat search and rescue missions and also inserted special forces teams into high-threat areas of western Iraq on special reconnaissance missions to destroy Scud missiles. The SOF problems in Desert Storm were at the operational level of war and are not a reflection of the performance of the forces at the tactical level.

SOF Must Integrate into Theater Operations. During Desert Storm, the relationship between SOF air and theater air was often adversarial. SOF had become accustomed to operating independently of conventional forces. The theater component viewed SOF as hiding behind the veil of secrecy to establish and protect their independence. New command relationships established by the Goldwater-Nichols Act contributed to the difficulties of integration. USSOCOM was still a new command and had not established the necessary relationships within the theater. Additionally, CENTCOM had been neglected in terms of staffing and equipment and was not as prepared as they could have been to facilitate SOF integration, asserts James Locher, former assistant secretary of defense for Special Operations and Low-Intensity Conflict.[67] Thus, both commands appear to share some responsibility for integration difficulties.

Operations in a major regional conflict intersect at the operational level of war. SOFs cannot operate as if their missions are part of a separate war. Both SOF and conventional air forces operate deep in enemy territory. Rather than protect their organizational control, both must integrate their operations. Integration does not require either component to surrender control over its forces; however, if they are going to operate in the same battlespace, some form of coordination must take place. The SOF air component is the most logical organization to cultivate this integration. As airmen they have a better understanding of airpower than their ground SOF counterparts.

SOF Cannot Plan in a Vacuum. Desert Storm called attention to the problems of excessive secrecy of SOF operations in a major regional conflict. In previous decades, SOFs had been able to operate in a culture of secrecy. Desert Storm proved that the battlefield in a major war is too complex for individual components to conduct their own smaller wars. While excessive secrecy hindered effective joint planning, the greatest danger to SOFs was the threat of fratricide. The SOF culture had not yet adapted to this reality in Desert Storm. Previously, SOFs equated mission secrecy with security; this paradigm changed after Desert Storm. The increased lethality of conventional airpower, combined with the difficulties of distinguishing between friend and foe, negate much of the benefit and safety of absolute secrecy. General Horner sums up this view best: "You may be able to hide from the enemy by flying low or in remote areas, but nobody hides from a capable US-led coalition. Now with the introduction of WMD, the risk of not shooting down an unknown track may be unacceptable, even knowing that it might be a friendly who is trying to maintain secrecy."[68]

Centralized Control of SOF Air. SOF doctrine supports the idea of centralized control of airpower. Desert Storm challenged this doctrine by removing operational control of the AC-130s and EC-130s from the SOF component. SOF viewed this command relationship as awkward and disjointed, effectively removing the SOF senior leadership from the chain of command. Those in the AC-130s believed this lack of SOF oversight led to their being sent on missions inappropriate for their weapon system. There are those who disagree that organizing airpower within a separate component, such as a SOF task force, represents centralized control. However, the example of the AC-130 shows how dysfunctional operations can become when forces are arbitrarily removed from their normal chain of command. Desert Storm is another example of the challenges of maintaining a separate SOF component in combat.

Implications for Contemporary SOF Operations

SOF air operations in Desert Storm highlight the requirement for a professional command and control organization. Unlike the Air Commandos and the Son Tay Raiders in the previous case studies, the SOF air component in Desert Storm did not have time to resolve the command relation-

ship and its role in the campaign prior to theater deployment. Another difference between the earlier examples and Desert Storm is the lack of direct involvement by Air Force senior leadership. The SOF air component in Desert Storm did not have special status or letters signed by the chief of staff specifying its mission and protecting SOF interests. This level of protection cannot be expected in future conflicts and should not be required. It does, however, partially explain the successful theater integration of the Air Commandos and the Son Tay Raiders. In Desert Storm, the lack of formal processes and organizational structure hindered the SOF air component's ability to interact with the theater air component. Few outside the SOF community were aware of the capabilities and limitations of SOFs; thus, it was more difficult for SOFs to be properly included in the campaign.

A professional C2 organization would prevent the ad hoc nature of SOF theater integration. The necessary formal doctrine and training require a full-time organization. Furthermore, the skills required to be a good aircrew member do not necessarily transfer to the operational level of war. The conventional air component has learned these lessons and applied them by establishing an organizational structure and training qualifications. By following the lead of their conventional counterpart, SOF air forces will improve the employment of their tactical forces.

Operations Enduring Freedom and Iraqi Freedom indicate future SOF air operations will more closely resemble SOF participation in Desert Storm than in the other case studies presented in this chapter. SOF participation in both Operation Thursday and the Son Tay Raid was smaller in scale than in Desert Storm. The increased level of participation in the theater campaign requires that the SOF air component resolve the difficult issues of coordination and integration prior to the next war. According to joint SOF doctrine, "Competent SOF cannot be created after emergencies arise."[69] This statement is not just relevant to the tactical level of war; special operations air forces must also be organized, trained, and equipped at the operational level of war.

Notes

1. Brig Orde C. Wingate, memorandum to War Cabinet, Chiefs of Staff Committee, Subject: Forces of Long Range Penetration, Future Deployment and Employment in Burma.

2. Barbara W. Tuchman, *Stilwell and the American Experience in China, 1911–45* (New York: Macmillan Publishing Co., 1970), 300.

3. Wingate, memorandum.

4. Ibid.

5. The name *Chindit* was given to General Wingate's 77th Indian Brigade. The term is the name of a mythical beast—half lion, half griffin—that stands guard outside of Burmese pagodas. Christopher Sykes, *Orde Wingate: A Biography* (New York: World Publishing Co., 1959), 380; and R. D. VanWagner, *1st Air Commando Group: Any Place, Any Time, Any Where* (Maxwell AFB, AL: Air Command and Staff College), 23.

6. VanWagner, *1st Air Commando Group*, 23.

7. Col Philip G. Cochran, US Air Force Oral History interview, 20–21 October and 11 November 1975, K239.0512-876 in USAF collection, USAF Historical Research Agency (USAFHRA), 150.

8. Ibid., 144–50.

9. Col John R. Alison, interview with assistant chief of Air Staff, Intelligence, 25 April 1944, 142.052 in USAF collection, USAFHRA.

10. VanWagner, *1st Air Commando Group*, 29.

11. Alison, interview.

12. Referred to as the "Dear Dickey" letter because General Arnold addressed Admiral Mountbatten by his nickname, Dickey. Gen Hap Arnold (commanding general, Army Air Forces) to Adm Lord Louis Mountbatten (supreme allied commander Advanced Headquarters, Southeast Asia), letter, 5 June 1944, GP-A-CMDO-1-HI, in USAF collection, USAFHRA.

13. Cochran, interview.

14. VanWagner, *1st Air Commando Group*, 76.

15. Alison, interview.

16. Herbert A. Mason et al., *Operation Thursday: Birth of the Air Commandos* (Air Force History and Museums Program, 1994), 36.

17. Joint Intelligence Collection Agency China-Burma-India, *Light Plane Operations of the First Air Commando Group in Burma*, Report 3138, 5 June 1944, 810.6091A in USAF collection, USAFHRA.

18. "Acting to Aid the Forgotten Men," *Time* 96, no. 23 (7 December 1970): 17. Farm Gate was the code name given to Detachment 2A, 4400th CCTS from Hurlburt Field, FL. They were the first USAF Airmen to conduct combat operations in Vietnam. Col Michael E. Haas, *Apollo's Warriors: United States Air Force Special Operations during the Cold War* (Maxwell AFB, AL: Air University Press, 1997), 228.

19. *Time*, 7 December 1970, 17.

20. Benjamin F. Schemmer, *The Raid* (New York: Harper & Row, 1976), 72–80.

21. Ibid., 82.

22. Ibid.

23. Lt Col Keith R. Grimes, US Air Force Oral History interview, Historical Research Center, Headquarters USAF, 83–84.

24. Ibid., 35–36.

25. Ibid., 78–79.

26. Commander JCS Joint Contingency Task Group, *Report on the Son Tay Prisoner of War Rescue Operation*, pt. 1 (Washington, DC: Office of the Joint Chiefs of Staff, 1970), 65.

27. Commander JCS Joint Contingency Task Group, *Report on the Son Tay Prisoner of War Rescue Operation*, pt. 2 (Washington, DC: Office of the Joint Chiefs of Staff, 1970), I-26.

28. *Son Tay Report*, pt. 1, iv.

29. Ibid., 69.

30. Ibid., 70.

31. Ibid., 12.

32. Schemmer, *Raid*, 192.

33. Ibid., 209.

34. Ibid., 213.

35. *Son Tay Report*, pt. 1, iv.

36. Schemmer, *Raid*, 230, 241.

37. Ibid., 239.

38. Robinson Risner, *The Passing of the Night: My Seven Years as a Prisoner of the North Vietnamese* (New York: Random House, 1973), 207.

39. *Conduct of the Persian Gulf War: An Interim Report to Congress* (Washington, DC: US Government Printing Office, July 1991), 5-4.

40. Ibid., 20-1.

41. Tom Clancy with Gen Chuck Horner, *Every Man a Tiger* (New York: G. P. Putnam's Sons, 1999), 247–48.

42. "Units assigned to Colonel Gray during Operations Desert Shield and Desert Storm included his own 1 SOW from Hurlburt Field, FL; the 71st Special Operations Squadron (SOS) of the 919th Special Operations Group (SOG), Air Force Reserves (AFRES), from Davis-Monthan AFB, AZ; 1720th Special Tactics Group (STG), also from Hurlburt Field, FL; 160th Special Operations Aviation Regiment (SOAR) from Hunter Army Airfield near Savannah, GA; and the US Navy's Helicopter Combat Squadron (HCS) 4/5 from the USS *Saratoga*." TSgt Randy G. Bergeron, USAF, *Desert Shield/Desert Storm: Air Force Special Operations Command (AFSOC) in the Gulf War* (2001; repr., Hurlburt Field, FL: HQ AFSOC/HO, May 2001), 15.

43. Bergeron, *AFSOC in the Gulf War*, 15.

44. AFSOC white paper, "The Transparency of Tactical Control (TACON) in the Air Campaign" (Hurlburt Field, FL, HQ AFSOC/XPPD, December 1993), 1.

45. Ibid., 2.

46. Lt Col Randy Durham, USAF, retired, interview by author, 24 April 2003.

47. AFSOC white paper, 5.

48. Durham, interview.

49. Brig Gen George Gray, USAF, retired, interview by author, 24 April 2003.

50. Gray, interview.

51. Durham, interview.

52. Gen Charles Horner, USAF, retired, interview by author, 3 May 2003.

53. Ibid.

54. Ibid.

55. *Interim Report to Congress*, 5-1.

56. Horner, interview.

57. Durham, interview.

58. James Locher, "Impact of Goldwater-Nichols," lecture, School of Advanced Air and Space Studies, Maxwell AFB, AL, 5 May 2003.

59. Durham, interview.

60. Gray, interview.

61. Horner, interview.

62. Durham, interview.

63. Ibid.

64. Ibid.

65. Horner, interview.

66. Ibid.

67. Locher, lecture.

68. Horner, interview.

69. JP 3-05, *Doctrine for Joint Special* Operations, II-3.

Chapter 3

Doctrine and Organization

The methods used to select and develop new weapons and the doctrines concerning their use will have an important bearing upon the success or failure of armies—and of nations.

—Irving B. Holley

Joint SOF doctrine is generally in agreement with Air Force doctrine on centralized control of air assets. The concept of organizing airpower into a JSOAC—although not under the command of the theater air component commander—represents centralized control. However, SOF doctrine becomes less consistent with Air Force doctrine when multiple JSOACs are established within a theater, thereby decentralizing control of airpower. Another challenge to JSOAC operations emerges from the differences between SOF and conventional theater air planning cycles. Special operations mission planning does not always fit into the timing or battle rhythm of the larger theater air component. The AOC's air tasking order requires information earlier in the planning cycle than SOF planning often permits. One final barrier to effective operation of a JSOAC staff is the lack of congruence between how the force provider, AFSOC, operates in peace and in war. The difference is exacerbated by the lack of joint doctrinal guidance for the formal structure of a JSOAC. This chapter deals with these three issues and proposes measures for resolution.

SOF Air and Central Control

According to joint doctrine, a JSOTF is normally organized for a specific mission with a limited duration. Operational control of a JSOTF is usually exercised by the theater special operations component.[1] Normally, a single JSOTF is established during a given contingency; however, under some circumstances, multiple JSOTFs may be established within a theater. One such case occurred during Operation Enduring Freedom in Afghanistan, where three JSOTFs were established. Although such organization is the prerogative of the joint force commander (JFC), multiple JSOTFs create problems for the theater C2 structure. In addition to problems within the SOF component, coordination between SOF and the theater air component also becomes more difficult. Technically, the director of the SOLE works for the JSOTF commander to synchronize SOF missions within the AOC and track ground forces to prevent fratricide. In this regard, the establishment of multiple JSOTFs violates the principle of unity of command, as the SOLE now reports to multiple commanders. The establishment of

multiple JSOACs (one per JSOTF) further complicates the problem of coordination with the AOC.

Establish One JSOAC per Contingency

Both AFSOC and Army SOF aviation have low-density, high-demand force structures. The time required to train qualified crew members and the additional modifications to their aircraft make the mass production of SOFs cost prohibitive. If SOF had unlimited aircraft and qualified crews, SOCOM could afford to equip each JSOTF with a substantial air component. When SOF aviation is divided among multiple JSOACs, the overall efficiency of the force suffers. This view is similar to the age-old argument of airmen who desire that airpower be centrally controlled to maximize their ability to employ it effectively and efficiently. SOF airpower is no different. Furthermore, multiple JSOACs increase the staff and equipment required of the supporting commands. Within AFSOC, the personnel required to staff multiple JSOACs jeopardize the ability to regenerate forces for lengthy operations or follow-on contingencies. A single, robust JSOAC for a theater would require far fewer personnel than two or three smaller JSOACs across the same theater.

The additional benefit of having all SOF air centrally controlled under a single JSOAC is improved coordination with the AOC through the SOLE. In addition to its primary job of preventing fratricide of SOF forces operating deep in enemy territory, the SOLE assists the JSOAC in coordinating conventional air support and ensures that their missions are represented in the ATO. It is much easier for the SOLE to accomplish this task if it only has to deal with one staff representing the entire SOF air contingent in-theater.

A JSOAC benefits from the central control in much the same way as an AOC. Having control over all the air assets enables a JSOAC to model its processes after the joint air targeting and tasking cycle used by the larger theater air component. This process not only improves the ability to translate the JSOTF commander's objectives and guidance into sorties, it also enables the JSOAC to work within the time constraints of the AOC's air tasking cycle. This cycle places a JSOAC commander in a good position to evaluate his theater SOF requirements and lobby theater air for additional support. In some circumstances the SOF air component may have excess capability and assets not being used in SOF operations. These forces, such as the AC-130 gunship, may then be provided to the JFACC to support the theater air campaign. However, only with centralized control can a SOF air component exercise such flexibility.

Place the JSOAC under the JFACC?

Since the issue is about centralized control of airpower, consideration should be given to moving the SOF air component from the JSOTF to the JFACC. The preponderance of SOF aircraft is in the Air Force. Why should

these assets be organized differently? Gen Chuck Horner, USAF, retired, the JFACC for Desert Storm, makes the case that the current command relationship is dysfunctional for both training and combat. "When dealing with airpower, the SOF air and the non-SOF air work the same and are interdependent, as we found out in Iraq when the endangered SOF elements could not be rescued without the assistance of AWACS and F-16s."[2] Further supporting this argument is the increased teamwork in the past two wars (Operations Enduring Freedom and Iraqi Freedom) by ground SOF teams and conventional combat aircraft to destroy the enemy and achieve the JFC's objectives. Those who believe as Horner does point to this extensive use of conventional combat air capability by SOFs as evidence that the theater air component should command all airpower in the theater. Horner adds, "A valid requirement for SOF air operations will always be met; no JFACC would do otherwise. However, if the SOF air assets are kept separate in order to assure their availability, even if the task is of low priority to the overall theater requirements, then we sub-optimize at the expense of some other more valid need."[3]

As part of the AOC, the JSOAC could be organized as its own division, similar to the air mobility division. Like the director of mobility forces (DIRMOBFOR), the JSOAC commander would become a director of SOF air forces, DIRSOFAIR. Personnel serving in the SOF AOC division would be required to meet the qualifications listed in AFI 13-1AOC, vol. 1, *Ground Environment Training—Air Operations Center*. Arrangements would be required to expand the FTU at the Command and Control Warrior School to accommodate the increased training requirements. JFACC OPCON of the JSOAC would also reduce the requirements on the SOLE. Without a JSOAC to support, the SOLE could focus on its primary role of representing the JSOTF commander and preventing fratricide. This new command relationship is feasible.

Embedding the SOF air component within the AOC could also solve previous coordination and communication problems. The SOF division would serve as an integral part of the AOC. By collocating with conventional air planners, it would be in a good position to ensure the JSOTF commander's objectives are represented throughout the entire ATO process, thus improving conventional air support for SOF missions. Additionally, the creation of a SOF division would reduce the number of personnel normally required to create a SOLE and JSOAC. However, the SOF air component will require a liaison element assigned to the JSOTF staff to coordinate and plan for SOF operations. This could eventually lead to the same coordination problem within SOF that exists now between the two air components. Any gains in integration from placing the JSOAC under the JFACC would be offset by an increase in friction for SOF mission planning.

US Special Operations Command was established as a unified combatant command to organize, train, and equip forces to accomplish nine principal missions: direct action, special reconnaissance, foreign internal defense, unconventional warfare, combating terrorism, psychological operations,

civil affairs, counterproliferation of WMD, and information operations.[4] These missions are sufficiently distinct to warrant congressional legislation creating USSOCOM. All theater commanders have a SOF component, just as they have service components. During war these components are organized by their service or functional specialty, but all are considered equal. Thus, the joint air force component is equal to the joint special operations component. Each theater component must coordinate its operations in order to meet the JFC's objectives. SOF is a joint organization comprised of land, sea, and air forces; so if each service retained OPCON of its service-specific role, then the SOF component would not exist. The Army provides a high percentage of SOF, and it too has challenges in coordinating operations. Yet the solution is not to take the Special Forces and Rangers out of the SOF component. General Horner argues that this is precisely one of the reasons SOF air is separate from the theater air component. "[O]vershadowing the separation of AFSOF as a command element from the JFACC is probably the result of intense efforts by the Army SOF to keep themselves separate from the regular Army," Horner notes.[5] SOFs are organized similarly to the Marine Corps—around a task force composed of airpower, ground forces, and naval forces, all under one operational commander. Arguing that the air theater SOF component should not have organic air assets separate from the theater air component implies that SOF is not equal to the air, land, and maritime components.

The argument to eliminate the theater SOF air component ignores the history behind the creation of SOCOM and AFSOC. SOCOM was created because the services refused to maintain a SOF capability. During the post-Vietnam era, SOFs lost their apparent relevance, and their capabilities were allowed to wither away. From 1968 to 1979, Air Force Special Operations downsized from the equivalent of a numbered air force to a single wing. The decline and neglect of US SOF is documented in Susan Marquis' detailed history of the rebuilding of SOF. "The extent to which the US Air Force special operations capability had been diminished would be demonstrated to the world in the tragedy in Iran in April of 1980. Following this failure, the Air Force's refusal to support special operations would be critical in the fight to rebuild the US special operations capability."[6] SOFs were created to provide the nation with a specific military capability. Joint doctrine states that "SOF are not a substitute for conventional forces, but a necessary adjunct to existing conventional capabilities."[7] Air Force special operations forces are a part of the joint SOF team. The short-term gains of improved coordination with conventional air forces do not justify separating them from the SOF component.

Crisis Action Planning versus Deliberate Planning

According to joint doctrine, "SOF are involved in all three types of planning processes for joint operations: campaign, deliberate, and crisis action."[8] The last of these planning processes often causes challenges to in-

tegration with theater air component planning. The JFACC develops the joint air operations plan, ensuring that air operations support the JFC's campaign objectives. The process is accomplished through the joint air tasking cycle, with the end result being the ATO. The SOF air component uses a similar process to translate the JSOTF objectives into sorties. The difference between the two processes is in the planning cycle. An ATO uses a 72-hour planning cycle. When SOF missions are engaged in crisis action planning, they rarely can meet the 72-hour ATO cycle requirements. The AOC does make allowances for late inputs into the ATO; but the later the inputs, the more difficult it becomes for the AOC to generate additional sorties. The problem is most serious when these SOF missions require substantial conventional air support.

Balance Operational Security with Planning Considerations

The challenge for SOFs is to balance the need for operational security with the requirement to include conventional air planners in the early phases of mission planning. Many SOF missions are classified and compartmented, meaning only a select few are aware of the mission. Even those who will execute the mission are briefed only when planning is close to completion. For operations within the SOF community, this planning process works well. However, when conventional air support is required, late notifications can result in limited support. The reluctance of SOF planners to include their conventional counterparts in the planning process hinders the JFACC's ability to provide the requested support. Often the requested support only requires SOF planners to give the most basic details of the mission. Other times it may require an in-brief to a special access program for a select few. Limiting the number of planners involved increases security but may jeopardize mission success. The inclusion of a few AOC personnel should not be considered an unacceptable risk to operational security. If the personnel in the AOC can plan highly classified stealth missions and manage other nationally classified assets, they can be trusted with a few details of SOF missions. When coordinating with the AOC for support, earlier is better.

OPCON of Conventional Air Support to the JSOTF?

Another option to solve this problem is to place some conventional air support under control of the JSOTF commander. These air assets would be part of the JSOAC, with the primary mission to support SOF. Placing conventional fighter and bomber aircraft under OPCON of the JSOTF would give SOFs increased flexibility for short-notice missions. Most conventional air planners would scoff at the notion of transferring their air assets under the JSOTF; however, a few aircraft would not be a significant loss in capability for the JFACC. Many will oppose this measure solely because it is in conflict with the doctrine of centralized control of airpower. Additionally, some may argue it is inefficient to ground aircraft for a poten-

tial mission when they could be used to fly sorties for the JFACC. Finally, for certain roles such as electronic warfare, air refueling, and reconnaissance, airframes are too limited to be apportioned to the JSOTF. Thus, SOF planners would still be required to coordinate mission details with the AOC. The counterpoint is that a JSOTF is already assigned aircraft. While it is uncommon to assign fighters and bombers to SOFs, it ought not to be precluded in the future. As for the argument that SOF would make inefficient use of these aircraft, SOF operations during the last two wars (in Afghanistan and Iraq) made extensive use of conventional air to attack targets throughout the war.

This proposal is controversial. Assigning conventional aircraft to the JSOTF would improve the responsiveness of air support but would not entirely limit the requirement of early coordination in the planning process. Additionally, this proposal would meet significant political resistance. Thus the more feasible solution is for SOFs to share details of mission requirements earlier in the planning process.

Operations in Peace versus War

The third major barrier to effective operations of a JSOAC staff is the lack of congruence in the way AFSOC forces operate in peace and in war. The daily peacetime flying operations in AFSOC are not very different from those in a conventional unit. The operational support squadron creates and disseminates the daily flying operations schedule, coordinates ranges and airspace, and is home to a host of other support functions, such as intelligence and weather. An AFSOC operational support squadron is organized according to AFI 38-101, *Air Force Organization*, 1 July 1998.[9] However, an AFSOC OSS has an additional requirement not levied on its conventional counterparts: during combat the OSS establishes a joint special operations air component.[10] Some of the functional duties in the OSS are similar to those performed in a JSOAC; however, the processes and equipment used are not the same, such as the theater ATO cycle and TBMCS.

The merger of peacetime and contingency operations within an OSS will significantly improve AFSOC's ability to conduct combat operations. There are two potential approaches to this solution: (1) Reorganize the OSS to mirror that of a JSOAC; and (2) relieve the OSS from the JSOAC mission and create a separate JSOAC squadron under AFSOC. Before either measure can be evaluated and implemented, joint doctrine must formalize the structure of a JSOAC. Currently, JSOACs are formed on an ad hoc basis, with no standardization or formal training requirements. A formalized structure will transform the JSOAC into a professional organization, enabling AFSOC to effectively organize, train, and equip its forces for its wartime mission.

Proposed Notional JSOAC

Joint doctrine has yet to address the organization and operations of a JSOAC. Currently, the only published guidance is SOCOM Directive Number 525-8, *Joint Special Operations Air Component*, dated 26 January 1999. This directive provides an overview of JSOAC responsibilities and general guidance for key positions within the staff, but it does not specify defined programs.[11] A joint doctrine publication similar to JP 3-05.1, *Joint Tactics, Techniques, and Procedures for Joint Special Operations Task Force Operations*, is required. JP 3-05.1 provides extensive guidance for the establishment, organization, employment, and training of a JSOTF. While this chapter is not intended to fill this doctrinal void, a notional structure is presented.

The proposed notional structure for a JSOAC during combat operations requires approximately 100 personnel and is organized to perform three main tasks derived from the Universal Joint Mission Essential Task List (UJMETL) shown in figure 4.[12] A proposed list of mission essential task lists (METL) for each division is located in appendix B.

Core JSOAC JMETL

Conduct deployment and redeployment

Conduct Joint SOF aviation planning and apportionment

Conduct command and control of joint operations

Figure 4. Proposed JSOAC mission essential task list

The structure of the proposed JSOAC (see fig. 5) is similar to that of an AOC, with operations divided into three divisions: combat operations, combat plans, and air mobility. The combat operations division is the largest, with two AOC teams to monitor and control current operations (missions within 24 hours), an intelligence cell, a weather cell, and an ISR operations cell. The specific tasks of the operations division fall under the main UJMETL for conducting command and control of joint air operations. The combat plans division has three cells: strategy, joint guidance and apportionment, and joint fires. As the name implies, this division is responsible for joint SOF aviation planning and apportionment. The remaining division, air mobility, conducts strategic deployment and redeployment. It consists of an air mobility cell and an air logistics cell.

Air operations in a SOF component and theater air component are very similar. Thus, it makes sense to use an organizational structure for a JSOAC that is similar to an AOC. The proposed notional structure does

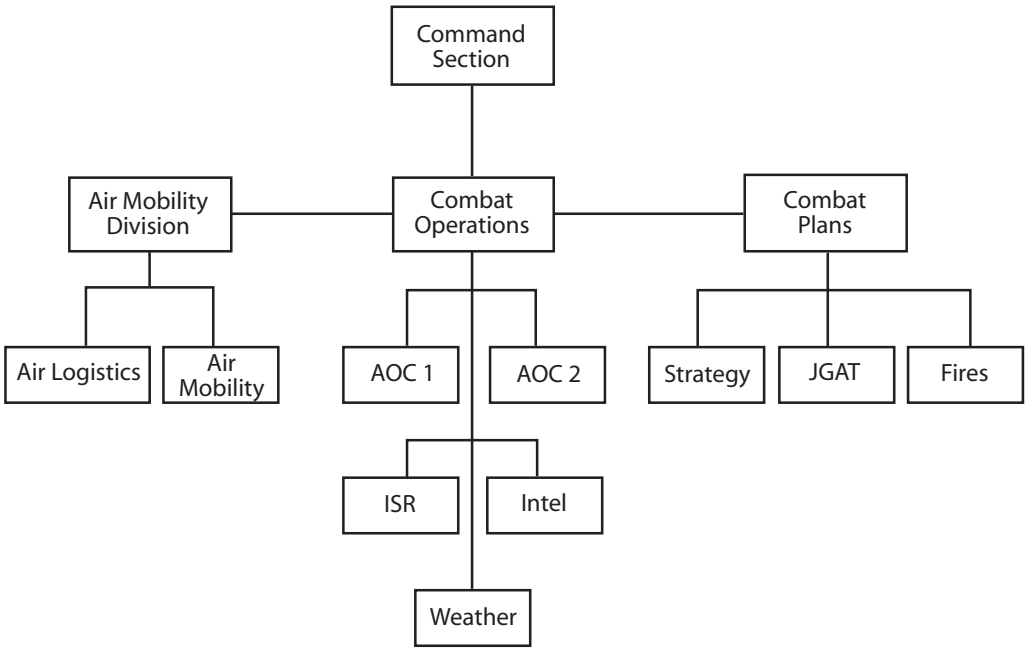


Figure 5. Notional JSOAC organizational structure

not interfere with the JSOAC's ability to work within a JSOTF but does improve coordination with the theater air component. Each division and cell has a counterpart on the JFACC's staff. The similarity of their duties eases the challenges of coordination, while the use of common terms, such as strategy cell and joint guidance, apportionment, and targeting (JGAT) cell, aids in understanding the other's responsibilities in the overall system. The organizational chart in appendix B provides an example of external and internal lines of coordination between a JSOAC and the JFACC's AOC. This proposed JSOAC structure will be used as a model for further proposed measures to improve coordination among air components.

Reorganization of the OSS

If the OSS has different sets of requirements for peacetime and war, then it should be organized to support both missions. With the establishment of a notional JSOAC organizational structure, a model exists for reorganizing an AFSOC OSS to support both peacetime and contingency operations. The example presented is based on the 16th Operational Support Squadron located at Hurlburt Field, Florida. It could, however, be tailored to fit any AFSOC OSS. According to the 16th OSS Standard Operating Procedures, "The OSS provides the 16th SOW with unsurpassed operational support to conduct daily exercise and contingency air operations, anytime any place."[13] The mission statement clearly delineates peacetime and wartime operations, and the OSS must be organized, trained, and equipped to conduct both.

The current structure (see appendix B, fig. A.1.) is similar to most other Air Force support squadrons and has been designed specifically to support peacetime flying operations. The notional JSOAC structure, roughly based on an AOC, has been designed to support contingency flying operations but can easily support peacetime operations as well. Since the Air Force's mission is to "fly and fight," its wartime support requirements must take priority.

Figure 6 depicts a proposed realignment of the 16th OSS. In this realignment, the current capacity to support peacetime operations has not been compromised; however, some additional capability has been added. These organizational changes will actually convert the OSS into a garrison JSOAC. In the reorganization, the squadron processes for supporting flying operations, such as mission scheduling and exercise support, will be adjusted to become more congruent with JSOAC operations.

Under the proposed structure, the OSS will have four divisions: combat operations, combat plans, intelligence, and combat support. Like its counterpart in an AOC, the combat operations division is mainly concerned with those operations within the next 24 hours. During contingencies, personnel from the weapons and tactics cell will augment the combat operations division. The combat plans division is the largest in the squadron, comprised of an exercise plans cell, weapons and tactics cell, airfield operations cell, weather cell, and an air mobility cell. Changes in the scheduling process and the production of an ATO for local flying operations make the peacetime and contingency operations of the plans division very similar. During exercises and contingency operations, the weapons and tactics cell becomes the strategy cell, while the exercise plans cell takes on the duties of guidance and apportionment and JSOAC master air attack

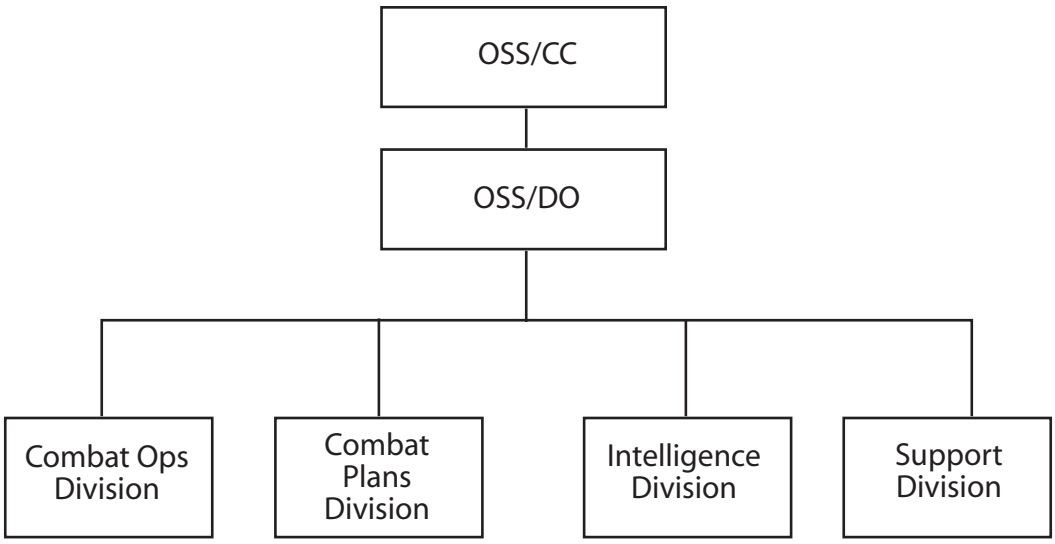


Figure 6. Proposed realignment of OSS

plan development. The plans division will also be responsible for ATO information to the AOC. The intelligence division will function similarly to the current OSS system. Finally, the support division is composed of those sections that conduct administrative duties, aircrew life-support training, and flight medicine.

Reorganization into these four divisions will focus the squadron toward a single objective in its peacetime mission rather than the current organization of nine different flights working independently. The realignment will not drastically change the specific duties of any flight or individual, but by mirroring a JSOAC, the squadron can more easily bring its internal processes into congruence with its wartime mission.

The most significant changes involve the combat plans division. An initial review of the proposed division may appear to be nothing more than just consolidation of four flights (exercise plans, weapons and tactics, airfield ops, and weather) into a division. The chief benefit of this reorganization is that all of these previous flights are now under the supervision of one division chief and can be focused to support the squadron's wartime mission. For example, the duties of the exercise plans cell will now include guidance and apportionment, development of a master air attack plan, and ATO development. These responsibilities will be carried out in both peacetime and contingency operations. The weapons and tactics cell will function as a strategy cell during exercises and contingency operations and will augment combat operations as needed. Currently, weather and airspace management flights tend to perform their peacetime duties with minimal interaction with the other squadron flights, but in a plans division they can be more easily integrated in both exercises and contingencies. By reorganizing into divisions, the capabilities and operational processes within the OSS can be enhanced to support both their peacetime and wartime missions.

Create a Single SOF C2 Squadron?

Rather than reorganize the OSS for both peacetime and war, a permanent JSOAC could be formed to relieve the OSS of these duties. The creation of a full-time professional organization would improve the current ad hoc method of establishing a JSOAC. Following the Air Force model, the JSOAC should become a weapon system. Standardizing the organization structure and formal training requirements will improve the capabilities of SOF C2. By not re-creating the organization for each contingency, a permanent JSOAC will have the continuity to adjust its organizational structure and processes to better support the JSOTF and coordinate with the conventional air component. Establishment of formal qualifications similar to other weapon systems will further professionalize the organization. Education and training may eventually require the creation of a SOF C2 formal training unit; however, courses currently offered through other established schools will meet the short-term requirements. Another long-term benefit for a permanent JSOAC is that it could train as an organiza-

tion. Rather than assigning random personnel to fill the JSOAC role in a C2 exercise, the actual JSOAC unit would participate. This would help build relationships with other C2 organizations, such as the numbered air forces. Free from the duties of an OSS, personnel could continue their education. The establishment of a permanent JSOAC will produce a cadre of SOF C2 experts and significantly improve coordination with the conventional theater air component.

Ideally, a permanent JSOAC would be established in each theater. By residing in-theater, each JSOAC would benefit from continuity of operation and developing relationships with other C2 organizations. When reviewing the potential size of a permanent JSOAC, the concept of multiple JSOACs appears less feasible. The approximate size of a JSOAC, based on the model proposed earlier in this chapter, requires 100 personnel. Additional capacity is required to function as a permanent organization. Using a crew multiplier of 1.5, a permanent JSOAC would require 150 personnel. This number would only give the JSOAC the capability to support and reconstitute forces for a single, protracted major war. To assign a JSOAC to each theater, excluding the US Northern Command, would require a minimum of 600 personnel. Even if the creation of 600 additional billets were authorized and funded, AFSOC could not provide the qualified personnel to serve in these positions. A majority of the positions in a JSOAC are rated officers with a specific SOF background. AFSOC does not have sufficient rated officers for such a requirement.

Another option for a permanent JSOAC is to use the current AFSOC model for the SOLE. AFSOC could create a single robust JSOAC, which is a more efficient use of limited resources. It is unlikely that each theater would simultaneously require a large JSOAC for an extended war. By only producing one JSOAC, AFSOC can achieve the same benefits without having to produce 600 additional positions. The single permanent JSOAC concept would require approximately 250 personnel. This would allow AFSOC to establish a JSOAC in a theater engaged in a major war and provide another JSOAC for a smaller SOF-only contingency while still reserving adequate personnel to reconstitute forces and maintain the health of the organization. This reduced number of personnel is more feasible than the multiple JSOAC concept. However, AFSOC must still face the challenge of a limited pool of rated officers to serve in a JSOAC. To reduce this number of personnel required further, AFSOC could merge the permanent SOLE and a single permanent JSOAC into one SOF C2 squadron.

Currently, the SOLE uses an approximately 50-person element to operate within an AOC during a major war.[14] AFSOC's standing SOLE is growing and was projected to reach 63 personnel assigned by October 2004.[15] The long-term vision is to expand the SOLE into an air operations squadron and eventually into an air operations group (AOG). The additional size of this organization may provide sufficient personnel to meet the AFSOC requirements for a SOLE and JSOAC for theater operations. Both JSOAC and SOLE duties require similar C2 training and a background in SOF

operations. By training the squadron to a common standard, operators will be able to serve in either a SOLE or JSOAC. This added flexibility will reduce the personnel required by each organization. An AOG of 300 personnel could meet the requirements to establish a SOLE and a JSOAC for a major regional conflict, provide an additional C2 element for a minor conflict, and have personnel in reserve to reconstitute forces for extended operations. Eventually, 100 of these personnel will already reside in the AOG, leaving AFSOC with the challenge of providing an additional 200 personnel. This represents a net saving of 50 people from the total individual organization requirements. AFSOC can further reduce the personnel requirements by accepting less capability. By augmenting the administrative personnel and less-critical JSOAC operator positions from the OSSs, an AOG could reduce the permanent positions to 150. This would only give AFSOC the ability to respond to a major regional conflict and a minor contingency with no additional personnel in reserve.

Despite the benefits of a single permanent SOF C2 organization, AFSOC is not in a position to create such a unit in the near future. The constant limiting factor is the small number of rated officers. Many of the flying squadrons are still not at 100 percent of allocated crew members. Until this situation is resolved, options are limited. This problem will take years to solve.

This section presented two options to improve coordination with the conventional theater air component by correcting deficiencies in the AFSOC C2 organizational structure. Both the reorganization of the OSS and the establishment of a SOF C2 squadron address the main issue of the problem. AFSOC is organized for peacetime operations—not war. While the SOF C2 squadron has the most potential to develop a professional C2 organization and improve theater coordination, this solution cannot be implemented in the near future. Perhaps with additional resources and a concerted effort over the next five years, AFSOC can start to approach the required rated-officer strength to implement this measure. This leaves reorganization of the OSS as the most feasible and suitable measure under current constraints.

Conclusion

Joint SOF doctrine relating to the control of airpower is congruent with Air Force doctrine, which emphasizes centralized control. Organized within a JSOTF, a JSOAC serves as the SOF air component just as the AOC serves as the theater air component. A JSOAC is responsible for planning and executing SOF air operations while ensuring effective coordination, resolution of conflicts, and integration with conventional air operations. The congruence of this air doctrine diverges when multiple JSOTFs are established within the theater and each is apportioned its own SOF air assets. Under such an organization, multiple JSOACs are established (one per JSOTF), and the benefits of centralized control are negated. If SOF air

assets were unlimited, such an organization would not be a problem; however, the reality of limited resources makes these assets far too valuable to divide. Regardless of how many JSOTFs are established, the SOF air component should be organized under a single JSOAC.

The nature of SOF missions often requires short-notice or crisis-action planning. While this serves the SOF requirements, it is not always easily incorporated into the theater air component ATO cycle. Problems arise when SOF missions require additional conventional air support but the AOC is not notified in time to be included in the planning cycle. To merge requirements of these incompatible mission-planning timelines, SOF planners must include the AOC early in the planning of potential missions. This may involve briefing additional personnel on classified material, something SOF has been opposed to in the past. However, if SOF forces expect to receive the required support for their missions, they must find a balance between operational security and mission effectiveness. For those times when mission requirements do not permit prescheduled support for SOF operations, the AOC retains some flexibility. The flexibility of the AOC should not be used as an excuse to avoid integrated planning. Early notification to the AOC of potential mission requirements will result in more capable support.

Finally, if AFSOC is to improve intertheater coordination, it should adjust its peacetime organizational structure to mirror that of its wartime mission. Currently, the OSS has both peacetime and contingency missions but only a peacetime organization. A realignment of the OSS to function more like an AOC or JSOAC will significantly improve the ability of personnel to serve on a JSOAC. In the long term, however, additional assets are required to provide SOF air units a more robust capability to integrate effectively with theater air assets. When these assets are made available, a SOF command and control squadron should be established.

When implemented independently, each of the proposed measures in this chapter will improve coordination between the SOF and theater air components; however, these measures are all related and connected. The creation of joint doctrine for JSOAC operations will formalize the structure and procedures through which SOF air forces interact with conventional air forces. This structure, roughly based on an AOC, will provide AFSOC a model to reorganize its OSS to meet peacetime requirements and prepare for its wartime mission. During a contingency or major war, the establishment of a single JSOAC will reduce the friction of coordination between theater components. This reduced friction will advance communication between the JSOAC and AOC, improving the ability of SOF to share mission details and gain greater assurance of conventional air support. These three proposals, when implemented concurrently, will provide the necessary organization of forces to improve coordination operations between the JSOAC and AOC.

Notes

1. JP 3-05.1, x.
2. Gen Chuck Horner, USAF, retired, interview by author, 3 May 2003.
3. Horner, interview.
4. JP 3-05, viii.
5. Horner, interview.
6. Susan L. Marquis, *Unconventional Warfare: Rebuilding U.S. Special Operations Forces* (Washington, DC: Brookings Institution Press, 1997), 33.
7. JP 3-05, viii.
8. Ibid., IV-1.
9. Air Force Instruction (AFI) 38-101, *Air Force Organization*, 1 July 1998, 21.
10. AFSOC Mission Essential Task Lists, HQ AFSOC, 1998.
11. SOCOM Directive Number 525-8, *Joint Special Operations Air Component*, 26 January 1999, 4.
12. Chairman of the Joint Chiefs of Staff Directive (CJCSD) 3004.04C, *Universal Joint Task List*, 1 July 2002.
13. 16 OSS Standard Operating Procedure, June 2001.
14. AFSOC Command Briefing, *Special Operations Liaison Element Operations in OEF*, 21 July 2002.
15. Lt Col Warren Franklin (AFSOC SOLE deputy director), interview by author, 7 May 2003.

Chapter 4

Personnel and Training

In no other profession are the penalties for employing untrained personnel so appalling or so irrevocable as in the military.

—General of the Army Douglas MacArthur

Today the Air Force considers the AOC a weapon system. This weapon system has a support structure within a NAF to standardize training, qualifications, and operations within a theater. Unlike other Air Force major commands, AFSOC's limited number of wings and groups does not warrant a NAF. Thus, AFSOC must detail personnel from the groups and squadrons to provide the necessary expertise to supply a JSOAC battle staff. This puts a significant burden on these organizations because they must train their personnel to conduct operations at both the tactical and operational levels of war.

The previous chapter advocated the reorganization of the OSS to prepare AFSOC to respond to contingencies or war with a properly organized and structured C2. Before recommendations can be made on the level of training required for personnel serving in an OSS, qualifications should be established for those serving in a JSOAC. When these requirements are established, other supporting measures can be addressed.

JSOAC Qualifications

In addition to a more formalized structure, a JSOAC requires personnel with an in-depth knowledge of SOF operations at both the tactical and operational levels, as well as a thorough understanding of AOC operations. Qualifications similar to those of an AOC should be established as a prerequisite to serving on a JSOAC staff. For example, a mission planner requires an understanding of the tactical capabilities and limitations of various SOF air assets, the organizational structure and mission requirements of the forces being supported, and how to coordinate with the AOC for additional air support to execute the mission. Most mission planners acquire the tactical level of knowledge through experience in their primary weapon systems and participation in multiple joint SOF exercises. However, these tactical experts lack a background in C2 of air operations. The most logical place to receive AOC training is at the same school as the conventional air force, the Command and Control Warrior School, located at Hurlburt Field, Florida. The Warrior School offers a tailored curriculum in AOC operations for each level of duty, from system administrators to strategists to senior commanders.[1] The Joint Special Operations University, also located at

Hurlburt Field, offers a core curriculum directed at C2 of SOF air operations, including courses in both JSOAC and SOLE operations.[2]

Despite the availability of courses and the hundreds of Air Force graduates each year, there is no guarantee that those serving on a JSOAC will have attended any of these schools.[3] There are many explanations for this lack of synchronization between the schools and the staff. Air Force SOFs are organized for garrison operations rather than war, and experience with theater C2 is not required to conduct operations at home station. Perhaps more importantly, only vague qualification requirements to serve on a JSOAC staff have been established.[4]

According to AFI 13-1AOC, volume 1, *Ground Environment Training—Aerospace Operations Center*, 1 November 2002, it takes both duty-position-specific training at the Warrior School and practical experience to be qualified to serve in an AOC.[5] Additionally, the AOC has an evaluation program that requires continuation training similar to that used to qualify aircrew members. Using the Air Force program as a guide, JSOAC staff requirements should include formal training in AOC operations at the Warrior School, formal training in JSOAC and SOLE operations, and practical experience through participation in a joint training exercise. After meeting these requirements, a qualified evaluator would observe the individual operating in a training environment and make the final qualification judgment.

Formal Training

Determining the appropriate amount of training necessary for JSOAC certification depends on the duties performed by the individual. As in any staff, not every position requires the same knowledge level to be effective. For example, most support functions in a JSOAC do not require tactical knowledge of SOF operations. Support personnel do, however, require an understanding of the processes used within the staff itself. Consideration must also be given to the amount of time an individual will be in a job. It makes no sense to have a six-month training program for individuals who will only be in the organization for one year. Taking these factors into account, a two-track system of qualification seems logical.

Based on the notional JSOAC structure proposed in chapter 3, a distinction can be made between operations and support personnel. An operations track would be designed for those personnel assigned to positions within the combat operations division, combat plans division, and air mobility division requiring a working knowledge of AOC operations and a detailed knowledge of SOF operations. A support track would require appropriate training in JSOAC operations and staff processes for those who serve in functions such as administration, personnel, or medical support. The AOC requirement of evaluations and proficiency training is not recommended. The small size of the SOF force structure makes these requirements incompatible with the sizable investment in manpower and time required to conduct this phase of qualification.

To create a qualified force, AFSOC has several options. A model similar to that of the AOC's formal training unit could be used to develop a SOF C2 FTU. By formalizing the training requirements within an FTU, AFSOC could ensure specific SOF C2 requirements are standardized across the command. Another option is for AFSOC to send its personnel to schools that already teach a curriculum meeting these requirements. Both options have merit. Many officers, such as Lt Gen Michael Short (USAF, retired), the JFACC for Operation Allied Force, believe an FTU is the answer. Their argument is that command and control of airpower is complex and requires a professional organization of qualified personnel, like any other Air Force weapon system.[6] If such a proposal were pursued, it would take at least three to five years to find or build additional facilities, develop the curriculum, hire additional instructors, and procure the additional funding before graduating the first student. The counterargument to the establishment of a SOF-specific FTU is that the small size of AFSOC does not warrant the establishment of a new FTU. Many of the courses that would eventually be offered through a SOF C2 FTU already exist at other schools, allowing AFSOC to qualify its personnel without duplication of effort.

In fact, much of the required training for both an operations track and a support track does exist at both the JSOU and the Warrior School. For both tracks, personnel will require specific instruction on JSOAC operations. Such training is currently available at the JSOU. Both SOLE and JSOAC courses have well-developed curricula that are continuously updated to ensure they meet AFSOC requirements.[7] For those in the operations track requiring some degree of AOC training, the Warrior School offers a variety of classes covering all levels of AOC operations.

The use of established courses to qualify personnel to serve on a JSOAC staff would result in an increase in the volume of training at the JSOU and the Warrior School. In terms of total numbers, the JSOU would have to contend with the largest increase in students. It is important to remember that this is not an Air Force–only school. The JSOAC is a joint organization, and the JSOU has the responsibility to educate the entire SOF community. Currently, the school teaches SOLE and JSOAC operations throughout the SOF community, training approximately 3,000 personnel annually. According to Mr. Hal McNair, instructor and subject matter expert for both SOLE and JSOAC courses, the university should have no difficulty meeting any future increase in AFSOC requirements for either course, despite their current high volume of students. Additionally, the university is anticipating the need for additional capacity with plans to merge both the SOLE and JSOAC courses into a single five-day course, cutting the total training time in half.[8] Merging the two courses will enable the faculty to meet growing demands for the immediate future, but the increase in students may eventually require an increase in faculty. As with any organization, an increase in personnel will require additional funding. Relative to other expenses within SOCOM, funding for additional capacity at the JSOU would be small and make this option feasible.

The ability of the Warrior School to adapt to an increase in student capacity may not be as certain. The school currently teaches individual courses for different duties and levels of responsibility in an AOC. This format is currently undergoing significant change. To meet the needs of the Air Force and requirements of the AOCs, the school is transitioning to an FTU structure. While this will enable it to train more effectively and educate war fighters in air and space C2 systems at the operational level of war, it may limit the availability of the proposed required courses to AFSOC personnel.[9] Under the new FTU structure, the former Joint Aerospace Command and Control Course will be replaced with a more extensive operator training course as part of the overall AOC qualification. The result will be a longer course offered fewer times a year. The limited capacity makes this otherwise desirable course infeasible as a potential requirement for everyone in the JSOAC operations track. The new FTU will offer an introductory AOC course that should easily meet the additional capacity required by the designation of a JSOAC qualification. The short five-day course, Falconer 101, offers a great deal of flexibility but can only cover a limited amount of material. Another course offered at the Warrior School that must be considered is the Command and Control Warrior Advanced Course (C2WAC). This course also has a limited availability. It is designed for majors or lieutenant colonels assigned to positions in an AOC requiring a higher level of training.[10]

The multiple courses offered at these two schools provide a cost-effective alternative to creating a new SOF C2 FTU that could be implemented almost immediately. Using this model, the qualifications within the operations track must be further defined. The limited number of positions available in the Warrior School Operator Training Course dictates that only key functions within the three divisions—operations, plans, and mobility—would require this level of training. All others in the operator track would be limited to the Falconer 101 course. Because of the higher level of responsibility of the division chiefs, these positions should require the C2WAC course. Each position in the JSOAC should have a corresponding qualification requirement based on either operation or support duties.

The establishment of a JSOAC qualification brings an additional requirement to track those personnel who are qualified. The Air Force uses various methods of tracking personnel qualifications, from Air Force specialty codes, as in weapon systems, to unit-level databases, such as that used in the AFSOC SOLE. Initial tracking of JSOAC qualifications will be relatively simple and can be performed at each individual OSS. As the OSSs experience the normal turnover of personnel, this task becomes increasingly complicated. For example, how does an OSS at Hurlburt know the qualification of incoming personnel that may have been previously qualified in an OSS at one of the other groups? This problem calls for centralized tracking. But what level of centralized tracking is required? Should it be at the MAJCOM or at the Air Force Personnel Center? In this instance, the small size of AFSOC is beneficial. The limited number of per-

sonnel who will require tracking (most likely less than 1,000) makes this an easy task for the AFSOC staff while still providing the centralized tracking needed to assist the squadrons. A listing of proposed requirements for JSOAC qualification is located in appendix C.

OSS Personnel Strength

As recommended in the previous chapter, a realignment of the OSS would improve the ability of the wings and groups to conduct operations in combat as well as in peace. To meet both the peacetime role of an OSS and the combat role of a JSOAC, the OSS will require a modest increase in manpower. During a contingency, the squadron will still have peacetime responsibilities. Unless the entire operations group has deployed, the flying squadrons supported by an OSS still require peacetime support functions. Additionally, in an extended contingency or war, the JSOAC staff will have to be reconstituted. Even during peacetime operations, the OSS has a high percentage of personnel on temporary duty due to exercises, planning conferences, and other required duties. The qualification prerequisites established for OSS/JSOAC duty will place an additional burden on the squadron due to a significant percentage of personnel in training. The squadron's ability to operate will be influenced by processes and organizations over which it has no control. Additional manpower will be required for the OSS to meet these additional requirements of peacetime and contingency roles and still remain qualified.

Determining the specific increase necessary in squadron manning would require a detailed manpower analysis beyond the scope of this study; however, some assumptions can be made to provide an educated estimate. With the designation of the Special Operations Command as a combatant command in the global war on terrorism, its budget has increased significantly. SOCOM will grow by an additional 2,500 personnel in the next few years. With the increase in budget and personnel, it is reasonable to expect some additional manpower authorizations to ensure AFSOC can meet its wartime requirements.[11] Many positions in the OSS, such as those in operations, require an extensive tactical background in SOF operations as well as qualification in SOF aircraft. These personnel must be hired from the flying squadrons in AFSOC and cannot be mass-produced, regardless of how many authorized positions are unfilled in the OSS. Any increase in manpower would have to find a balance between these factors.

Using the AFSOC OSS mission essential task list (fig. 7) as a guide will aid in determining the required increase in personnel strength. The following four implied tasks can be derived from these squadron METLs:

1. Establish and staff a JSOAC.
2. Maintain the ability to reconstitute the JSOAC staff in order to conduct continuous operations over an extended time.

3. Maintain a limited garrison support capability.
4. Continue to accommodate the normal rate of personnel turnover.

AFSOC OSS Mission Essential Task List

Maintain deployable special operations air component staff element.
Provide fully qualified personnel for Joint Forces Air Component Command Joint Task Force liason duty.
Plan and execute contingency mobilization.

Figure 7. AFSOC OSS mission essential task list

Using the 16th OSS at Hurlburt Field as an example, a 15 percent increase in squadron strength should provide sufficient personnel to meet these four implied tasks. Currently, the 16th OSS has approximately 220 personnel. A 15 percent increase in squadron size would add 33 personnel, bringing the total number to 253 (fig. 8). This analysis has some obvious limitations. First, it does not address the requirements for specific duty positions. Second, it does not account for the smaller size of the overseas groups within AFSOC. Finally, the analysis assumes that qualified personnel from the various aircraft within AFSOC are available to fill these positions. These factors would all be considered in a detailed manpower analysis, but using the METLs and implied tasks will aid in finding a target number for the purpose of this study. SOCOM's increased budget should allow up to a 20 percent increase in personnel.[12] The other limitation, qualified crewmembers to serve in the OSS, is more difficult to measure. The operational flying squadrons could probably provide a 10 percent increase in personnel to the OSS, but a 20 percent increase is most likely an unrealistic number to expect. The answer is somewhere between these two figures, at 15 percent.

Additional Measures and Considerations

Any requirements, such as those proposed for JSOAC qualification, established for higher echelons of command will have significant effects on those organizations that must provide the support to enable such proposals. Further analysis is required to evaluate the feasibility of supporting the proposals in this chapter. This section covers the additional measures and considerations for these proposals.

Establish and staff a JSOAC	**100**
Maintain the ability to reconstitute the force and maintain limited in-garrison support functions	**100**
Personnel in training	**10**
Miscellaneous: Leave or other off-station duty	**43**
Total	**253**

Figure 8. Personnel requirements based on METLs

Operational Squadron Manning

The greatest barrier to providing a well-trained and organized JSOAC is the availability of personnel with the requisite tactical background in SOF operations. As noted earlier, these individuals come from the operational flying squadrons of both AFSOC and Army SOF aviation, and it takes years to groom and develop them. If squadrons cannot meet their combat requirements due to a lack of trained personnel, there will be no one to send to the OSS or to a JSOAC. The obvious solution is for the Air Force to provide sufficient personnel to keep the squadron close to 100 percent of authorized personnel allocations. The issue of squadron manning is complex and requires a dedicated study. The issue must be raised, but detailed solutions are beyond the scope of this study.

Position Identifiers

In addition to the proposed two-track syllabus for providing qualified JSOAC staff, certain key positions will require specialized training—the JSOAC commander, deputy commander, and director of the JSOAC AOC. These positions encompass the top echelon of the JSOAC and require an additional level of awareness of the issues involved in theater air component operations. The additional responsibilities of these positions will require completion of the Combined Air Operations Senior Staff Course, offered at the Warrior School.

These JSOAC leadership positions must be identified and matched against specific duty positions in peacetime operations at home station. For example, the operations group commander may be designated to serve as the JSOAC commander, and the OSS squadron commander may be designated as the JSOAC AOC director. The link between their peacetime command positions and contingency duty positions implies which JSOAC qualification requirements are a prerequisite to serve in their peacetime positions. The benefit of matching these contingency positions against peacetime duties ensures that proper qualifications are maintained and establishes a clear chain of command before the onset of a contingency.

Augmentees from other Theaters

Despite measures to provide sufficient qualified personnel to serve on a JSOAC staff, multiple contingencies or a major regional conflict could stretch the organization beyond its capacity. A universal structure for JSOAC organizations and the standardization of qualifications will enable AFSOC to use personnel from one theater to support requirements in another. Each JSOAC will develop its own standard operating procedures based on the current theater geopolitical situation, but differences are likely to be minor and should not prohibit substituting personnel. For example, if events dictated additional support to Pacific Command, either the 16th Special Operations Wing (SOW) or the 352nd Special Operations Group (SOG) could be tasked to provide additional support. Theater substitution has been used in the past, and the standardized C2 structure and qualifications will make this a more effective option.

Conclusion

AFSOC does not have a NAF to provide the qualified personnel to staff an AOC, thus personnel required to support a JSOAC must be furnished from within the command's wings and groups. This chapter focused on personnel and training measures to prepare an OSS for its dual-role mission. Using the Air Force FTU for AOCs as a model, the chapter proposed various levels of qualification to serve on a JSOAC staff. These levels of qualification are linked to peacetime counterpart positions in the OSS. To tailor the qualifications, a two-track system consisting of operations and support tracks was proposed. Each track will cover SOF C2 education, while the operations track will also include instruction on AOC operations. In addition to the OSS duties matched against JSOAC positions, key leadership positions, such as the JSOAC commander, should also be linked to a garrison command position.

The OSS must be large enough to support both peacetime and contingency operations simultaneously while maintaining the ability to reconstitute its forces during extended operations. To meet the squadron METLs and implied tasks, the OSS will require an increase in personnel strength. The study proposed a 15 percent increase in personnel—a compromise between the additional personnel allocations SOCOM may potentially support and the ability of the operational squadrons to provide personnel with the prerequisite tactical background in SOF operations. Since this percentage is based on feasibility assumptions, this author acknowledges that a more detailed manpower study is required.

Notes

1. For more information on the Command and Control Warrior School, visit their Web site at http://www2.acc.af.mil/afc2tig.

2. For more information on the Joint Special Operations University, visit their Web site at http://www.hurlburt.af.mil/tenant/jsou.

3. The JSOU conducts command and control courses for approximately 3,000 students a year. Courses are offered on the campus at Hurlburt Field, FL, as well as at overseas units, PME schools, and any SOF unit requiring a large class. This number includes students from all four services in active duty and reserve units. Mr. Hal McNair (JSOU), interview by author, 22 March 2003.

4. SOCOM Directive 525-8 establishes minimum training requirements for the four key personnel (group commander, vice commander, operations group commander, and logistics group commander) but states all other duty positions "should" have some basic level of practical experience through exercises or contingencies. This leaves a majority of the duty positions in a JSOAC without any specific required training for qualification to serve in a JSOAC. SOCOM Directive 525-8, appendix B.

5. AFI 13-1AOC, vol. 1, *Ground Environment Training—Aerospace Operations Center*, 1 November 2002, 8–11.

6. Lt Gen Michael Short (USAF, retired), interview by author, 25 February 2003.

7. McNair, interview.

8. Ibid.

9. Lt Col Mike Rollison (commander, Command and Control Warrior School), interview by author, 23 March 2003.

10. "The C2WAC is the cornerstone course of the CSAF's operational warfighter initiative. This course is designed to prepare selected Air Force officers for duties requiring advanced knowledge, skills, and abilities in the command and control (C2) processes. . . . The goal is to produce operational level warfighter experts, making them the operational equivalent to the weapons and tactics instructors produced at the USAF weapons school." Message, AFC2TIG, Hurlburt Field, FL. Subject: Course Announcement and Nominations for the February 20, 2001 Command and Control Warrior Advanced Course Selection Board.

11. Anne Plummer, "SOCOM's Envisioned Role Takes Shape with Hefty Budget Increase," *Inside the Pentagon*, Current News Service, http://ebird.dtic.mil/Apr2003/s20030403171251.html (accessed 3 April 2003).

12. Ibid.

Chapter 5

Command and Control Equipment

Command, control, communications, and computer (C4) support to SOF must be global, secure, and jointly interoperable. SOF C4 systems must offer seamless connectivity from the lowest to the highest levels.

—Joint Publication 3-05
Doctrine for Joint Special Operations

Our armed forces operate within a command and control infrastructure based on digital computer systems that connect the entire battlefield—from sensors to shooters to senior commanders. The amount of information available to operations centers is staggering, but to operate effectively within this C2 system requires an understanding of multiple hardware and software systems. Complicating this proficiency requirement is the rapid pace of technological change that demands constant retraining of personnel.

This chapter addresses several equipment issues that hinder coordination between special operations air forces and conventional air forces in theater operations. One challenge facing AFSOC is the difference between systems used to control peacetime operations and those used during actual hostilities. The theater battle management core system is the main link between a JSOAC and an AOC for ATO coordination. Previous operations have included many personnel who had no experience with this system until they arrived at a JSAOC staff. Other issues arise due to incompatibility of different off-the-shelf software systems. When operations centers select software, such as collaborative tools for networking communications, they often base their selection on internal requirements without ensuring interoperability with other C2 centers. The choice of software is only a symptom of the problem. What is lacking is a standard set of requirements for hardware and software systems. Rather than reducing the "fog of war," the lack of equipment interoperability between operations centers adds to it. According to Lt Gen Michael Short (USAF, retired), "Technology has the ability to help or hurt us. We must do everything we can to reduce the fog of war in the AOC."[1] This chapter proposes measures that will aid in allowing personnel to use the technology more effectively, thus improving coordination between SOF and conventional air operations centers.

Theater Battle Management Core System

Chapters 3 and 4 discussed the disparity between combat and peacetime operations. Another area where the operational processes differ is the computer systems and programs used to exercise control of flying operations. The management of peacetime flying operations in AFSOC lacks standard-

ization. Each squadron, group, and wing uses a different set of programs. Most use Microsoft Windows–based software programs, such as Access and Excel, to schedule sorties and track crew members' training and qualifications. These programs are used independently with no ability to connect to a central higher headquarters database. At the operations group level, the OSS manages the daily flying operations, using similar programs but an entirely different database. At the wings and AFSOC, the trend is the same. Operations are managed by independent systems with little or no connectivity to the command levels below them. Not only is this system inefficient, considering the advanced networking applications available today; it is also nothing like the system used during combat operations.

Air operations within a theater are controlled through a centralized, networked system. The current computer system used is the theater battle management core system. The system provides those involved in air operations with connections to the AOC. Through the TBMCS, the AOC produces a daily management tool called an air tasking order. The ATO is a tool to manage daily flying operations and airspace issues of both air and ground forces. The TBMCS is the theater standard for all air operations; SOF air is no exception. The theater JSOAC is responsible for uploading all SOF air operations, which, in turn, are listed on the ATO.

The TBMCS allows true, centralized control of airpower within a theater and provides the ability to resolve conflicts and manage thousands of sorties per day. There are, however, some disadvantages to the system. Despite a graphic user interface that looks like a Microsoft Windows operating system, it is not as easy to learn. The TBMCS is not intuitive; it is a complex system requiring formal training. Despite these negative aspects, the system has proven effective in controlling the large air campaigns of Operations Enduring Freedom and Iraqi Freedom.

A Microsoft Windows–based C2 system used to manage AFSOC garrison flight operations would have difficulty meeting the requirements to manage theater air operations. On the other hand, a current theater system, the TBMCS, could be implemented for C2 of AFSOC air operations during peacetime. From a macro point of view, it would be more efficient to have a single core operating system to manage all air operations regardless of location or type of operation being conducted. This rationale is no different from that used by commanders at the tactical level when emphasizing the need for realistic training. Tactical forces will fight in war as they train in peace. This is also true for those at the operational level of war. For this reason, AFSOC should invest the time and money to purchase a version of the TBMCS to manage peacetime operations.

The TBMCS should be fielded at every level of command, from the squadrons to AFSOC, including Air National Guard and Air Reserve units. In addition to performing the same operations as earlier systems, it would benefit all levels of command by networking the system throughout all of AFSOC. Just having the equipment is not sufficient to ensure peacetime processes and operations would mirror those during war. AFSOC should

take the next step: operate from a daily ATO. An ATO could be produced and used at the groups and wings to manage daily flying operations. Such a process would improve AFSOC's ability to conduct C2 of all operations. The entire command would be operating from a single, centralized ATO while individual units conduct decentralized execution of their specific missions. No doubt this would be a major endeavor for AFSOC; some argue that the challenges are too difficult to overcome, while others support the idea based on the merger of peacetime and contingency operations.

There are three areas in which implementing the TBMCS throughout the command and operating from a daily ATO would benefit AFSOC. First, personnel throughout the command would become proficient in the use of this challenging system. As the system receives new software upgrades, personnel would be able keep up with the changes. Under current practice, years may pass after individuals are trained before they are required to operate the TBMCS. During this period, numerous software updates could change the system significantly, requiring additional training. Additionally, if personnel in AFSOC are using the system on a daily basis, their experiences have the potential to drive the software changes. The second area in which AFSOC will benefit is in the ability of wings and groups to conduct C2 of their operations. Currently, data for flying operations is entered into multiple databases from the wing to the squadron. Often these programs rely on one or two computer experts per squadron to write an Excel spreadsheet or Access database program to track flying hours and aircraft availability. With a networked system like the TBMCS, individuals could spend less time with data entry and more time on operational duties. Because of the composite structure of the AFSOC force, wing planners would benefit from a centralized system. Finally, AFSOC would benefit by training as they fight at the operational level of war. Having the equivalent equipment and producing a daily ATO will enable AFSOC personnel to operate in peacetime as they will when assigned to a JSOAC.

Just as there are benefits to adopting these measures, there are also challenges. First, to field the entire command with TBMCS terminals will require significant funding. This would easily add up to a multimillion-dollar investment for initial implementation, with additional funding required for equipment and software upgrades each year. Along with procurement of the equipment, AFSOC must hire additional system administrators to keep the network operating. Implementation may also be delayed based on suppliers' ability to provide equipment. These are all significant logistical challenges, but with sufficient money, planning, and senior leader support, they can be overcome. In fact, funding may be the least of the challenges; recent increases in the SOCOM budget have specifically targeted C2 system upgrades.[2]

The issue of equipment will not be as difficult as that of initial training. The transition to a TBMCS system will require many personnel to become qualified operators in a short amount of time. The Warrior School teaches the official Operators Course for the TBMCS but would not have the ad-

ditional capacity to train a large initial cadre. Other temporary measures may be needed for the transition phase—conducting courses at the units prior to upgrades; sending only a few personnel to the Warrior School and using them to conduct internal unit training; or phasing the transition over time rather than trying to train the entire force at once. These measures will reduce the turbulence of implementing the TBMCS.

Software Incompatibility

Technology has improved the ability to control information operations on a large scale. Many common commercial software applications are available at relatively low cost, which can be used to improve the management of large volumes of information within operations centers. Communication and information sharing throughout the battlefield can reduce the fog of war. Despite the benefits, the incompatibility of different versions of software and types of equipment can have the opposite effect, actually increasing the "fog." Incompatibility of equipment within the armed forces is nothing new. Even today, despite the emphasis on joint operations, the services still procure radios that cannot communicate with one another. The use of commercial software applications is continuing this trend.

The relatively low cost of technology allows smaller units to solve communication and information-sharing problems without the need for a large, bureaucratic procurement. Additionally, technology advancement often outpaces the procurement system's ability to buy up-to-date software. This flexibility provides a quick, low-cost solution to unit C2 internal problems. The disadvantage of this flexibility is that individual units evolve standard operating procedures based on equipment and software that are incompatible with other services. When these units conduct joint operations, their previous solutions become new problems.

One example of this incompatibility was the selection of collaborative tools within different operations centers during OEF. Collaborative tools allow geographically separated organizations to work together through a secure Internet connection. In theater command and control, these tools allow dispersed staffs to coordinate operations across the theater simultaneously. Difficulties in OEF arose because of a lack of standardized collaborative tools. The software of choice at the AOC was InfoWorkSpace, while most SOF organizations chose to use Microsoft NetMeeting. There is support for both systems as the most appropriate software for C2 operations, but the systems are incompatible. This incompatibility prevented SOF from coordinating mission details with conventional operators. As a result, the SOLE staff had to work on both systems and serve as a bridge between planning efforts.[3] The issue is not which software is better, but rather the need for a standardized set of requirements to ensure that the short-term benefits of quick technological solutions do not become long-term problems.

The issue is larger than just the type of software used; it is an issue of joint interoperability. The problem for the JSOAC is that as part of the JSOTF battle staff, it must have compatible software to conduct operations. The detailed coordination required with the theater air component requires that the JSOAC also have computers and software that are compatible with the AOC. The JSOAC is caught in the middle of a planning dilemma.

There are two options for the JSOAC. First, it can continue the status quo and use the SOLE as the intermediary to assist in planning coordination. The other solution is for the JSOAC to add AOC-compatible planning software to the current set of tools used. Neither measure is ideal, but unless the JSOAC can persuade the entire SOF community to convert to compatible software, compatibility will continue to be a problem. Of the two options, the latter is the better solution. The additional manpower within a JSOAC and the need for timely coordination with the AOC support this option over the status quo. This may require the JSOAC to adapt to internal and external processes for coordination.

Conclusion

Armed forces must train in peace as they intend to fight in war. This imperative implies that similar equipment and processes be used in peacetime operations and in combat operations. It is unreasonable to expect operators at the tactical level to train on one weapon system, knowing they will be fighting with another. However, this is precisely what happens at the operational level of war in a SOF air component operation center. AFSOC currently uses different systems (both equipment and procedures) to command SOF air operations during peacetime and combat. A conversion to the TBMCS for peacetime command throughout AFSOC will correct this C2 dichotomy. The implementation of the TBMCS for garrison operations will have many challenges, the most significant being the procurement of equipment and the training of personnel. But these challenges can be overcome with funding, time, and leadership.

Notes

1. Lt Gen Michael Short (USAF, retired), interview by author, 25 February 2003.
2. Anne Plummer, "SOCOM's Envisioned Role Takes Shape with Hefty Budget Increase," *Inside the Pentagon*, Current News Service, 3 April 2003, http://ebird.dtic.mil/Apr2003/s20030403171251.html.
3. Lt Col Bill Cumler (AFSOC SOLE/ADO), interview by author, 16 January 2003.

Chapter 6

Conclusions

Special operations encompass the use of small units in direct or indirect military action that are focused on strategic or operational objectives. They require units with combinations of specialized personnel, equipment, training, or tactics that exceed the routine capabilities of conventional military forces.

—USSOCOM Publication 1
Special Operations in Peace and War

From their initial conception in 1942 to the highly trained force of today, SOF air forces have emphasized integration with the other SOF components to create an effective joint fighting force. No other nation has as wide a range of capabilities as USSOCOM. The next step in the continuing effort to become a more effective force is to improve coordination of SOF with other theater components. This is especially important for the SOF air component. The nature of air operations requires SOF airpower to coordinate closely with its conventional counterpart. This chapter synthesizes historical lessons and proposed measures to improve coordination between the SOF air component and the conventional air component in theater operations.

Lessons

Operation Thursday, the Son Tay Raid, and Desert Storm embrace three significant periods of SOF air integration with a theater air component. Created by Gen Hap Arnold, the 1st Air Commando Group became the first SOF air component. It was assigned to assist Brig Orde Wingate's expedition into Burma. On 5 March 1944 the Air Commandos led an aerial invasion of Burma, code-named Operation Thursday. Less than three decades later, a special operations task force, Ivory Coast, launched a daring rescue mission, flying into the high-threat environment of the North Vietnamese air defenses to a small POW camp 23 miles from Hanoi. The tactical success of this high-risk mission was due in part to a well-coordinated and integrated plan with conventional theater air forces. In Operation Desert Storm, SOF forces once again found themselves facing the challenges of operating in a theater where the senior commanders did not fully understand their capabilities or doctrine. All three cases hold valuable lessons for improved integration and coordination between the SOF air and theater air components.

SOF Must Integrate into Theater Operations

According to USSOCOM Publication 1, *Special Operations in Peace and War*, "In war, SOF conduct operational and strategic missions that directly or indirectly support the joint force commander's campaign plan."[1] To be fully integrated into the theater campaign plan, SOF must integrate and coordinate with the other theater components. This is especially true of the air component. In air operations, more so than land or sea, the SOF air component requires direct support from the theater air component.

Because SOFs do not command all the resources required to conduct air operations—such as airspace and theater ISR, which fall under the purview of the JFACC—they must coordinate their activities with the theater air component. Close coordination with the larger, conventional counterpart ensures that additional conventional air assets will be available when needed to support SOF missions. For example, during the planning of the Son Tay Raid, General Manor made numerous visits to Southeast Asia. He realized early on that mission success would require conventional air support and a robust C2 communications network. His coordination efforts ensured that the required support was available. Alternatively, SOF may have excess capacity in its organic air assets and temporarily provide them to the JFACC to support conventional operations. In another example of air component coordination, Colonel Cochran, commander of the 1st Air Commando Group, used his fighter and transport squadrons to fly additional missions to assist theater operations. Despite his tasking to use his forces to support only General Wingate's operation, he provided his excess capacity to support other theater objectives.

Centralized Control of SOF Air Assets

Centralized control of airpower is a fundamental tenet of Air Force doctrine. SOF air operations are no different. These units are usually tasked to provide support for a specific mission. Dividing SOF aviation units among the theater to support various conventional components, each desiring their support, diminishes their capabilities. This was a recurring problem for Colonel Cochran and his 1st Air Commando Group. Upon arrival in the China-Burma-India theater with fresh airmen and aircraft, Cochran had to fight numerous attempts to divide his forces among the land and air components. When attempts to disperse the composite group failed, General Stilwell, commander of US forces in China, Burma, and India, insisted the Air Commandos be organized under his command. Cochran argued that his primary mission was to support General Wingate's expedition as part of the overall invasion of Burma and that he could only accomplish this as an independent unit. Fortunately for Cochran, his orders to remain independent came from General Arnold, and the Air Commandos continued to report directly to the theater commander, Admiral Mountbatten.

In Desert Storm, SOFs were not as successful at retaining control over all their forces. Both the AC-130s and EC-130s were placed under operational control of the theater air component. From a SOF point of view, this command relationship was awkward and disjointed and led to inappropriate missions for the gunships. Control of SOF assets has been an issue in the past and will most likely continue to be so in the future.

SOF Cannot Plan in a Vacuum

Joint Publication 3-05, *Doctrine for Joint Special Operations*, states, "Special Operations are inherently joint. Although they may be conducted as a single-Service operation, they routinely require joint support and coordination."[2] This is especially true when air support is required. Mission success may depend on support from conventional aircraft such as fighters, bombers, or even ISR assets. For these missions, conventional operators must be brought into the planning process early, regardless of the classification or sensitivity of the mission. SOFs must find an acceptable balance between operational security and the necessity to include those outside the organization in the planning process. Few missions will have a greater sensitivity than that of Operation Kingpin, the Son Tay Raid. Even with the high level of secrecy, General Manor was able to brief numerous key personnel throughout the Pacific Command. In fact, the mission required far more conventional support aircraft than those used on the raid, including F-105 Wild Weasels, F-4Ds, and over 60 aircraft from CTF 77. To coordinate for such a robust support package, General Manor had to involve these units and commanders in the planning process.

Proposed Measures

Proposed measures for improving coordination between the SOF air component and the conventional theater component are divided into three categories: doctrine, training and personnel, and equipment. Doctrine examines centralized control of SOF air assets and the requirement to standardize the JSOAC organization. Training and personnel measures encompass the imperative to establish a set of requirements for qualification to serve on a JSOAC staff and the required increase of personnel necessary to implement these measures. Proposals for equipment focus on the various C2 systems used within AFSOC and the requirement to standardize peacetime operations with combat operations. The proposed measures can be implemented individually but are interlinked and will have the greatest impact if they are implemented together as a coordinated effort.

Doctrine

Form Only One JSOAC per Contingency. Joint SOF doctrine regarding the centralized control of airpower is no different from Air Force doc-

trine. The SOF air component is small in terms of both aircrew and aircraft. Due to the small size of AFSOC, it does not have a NAF or the additional personnel to comprise an air component staff. This requires AFSOC to use personnel from the groups and wings to fill positions on a JSOAC, compounding the challenges of the small force structure. The establishment of multiple JSOTFs during combat, each with its own assigned air assets, requires the establishment of multiple JSOACs. This duplication of effort is an inefficient use of an already small force and violates the principle of centralized control of airpower. Even with the establishment of multiple JSOTFs, a single, robust JSOAC can perform all C2 and planning functions. It can also retain enough personnel in reserve to reconstitute the force during a prolonged conflict.

Balance Operational Security with Planning Considerations. SOFs conduct both crisis action and deliberate planning, based on their mission. The time line of crisis action planning does not synchronize with the air component's ATO cycle. This fact, combined with SOF's reluctance to share details of mission planning in the early stages with anyone outside their organization because of operational security and the sensitive nature of their missions, results in poor planning for conventional air support. SOFs must include conventional planners earlier in the process to ensure the required support is available when needed.

Establish Doctrine for JSOAC Operations. A major barrier to effective operations of a JSOAC staff is the lack of congruence between how AFSOC forces operate in peace and war. The peacetime organization of an AFSOC OSS is not designed to meet its wartime requirement of establishing a JSOAC. Indeed, joint doctrine has yet to address JSOAC operations. The establishment of doctrine similar to JP 3-05.1, *Joint Tactics, Techniques, and Procedures for Joint Special Operations Task Force Operations*, and a notional JSOAC structure would provide a model for AFSOC's OSSs. A notional JSOAC structure was presented in chapter 3 (fig. 5).

Realign the OSS. Using the proposed JSOAC structure as a guide, the OSS can be realigned to merge both the peacetime and contingency missions. Figure 6 depicted a proposed realignment of the 16th OSS. In this realignment, none of the current capacity to support peacetime operations has been compromised, but some additional capability has been added. Organized as a garrison JSOAC, the squadron can train and operate the same METLs required for JSOAC operations.

Training and Personnel

Establish JSOAC Qualifications. In addition to standardization of the JSOAC structure, qualifications to serve on the staff should also be established. The proposed qualifications outlined at appendix C are based on two different tracks: the operations track and the support track. As personnel are assigned to the OSS, their duty position will decide which track and level of training is required. Establishment of a formal training unit

for JSOAC qualification will not be necessary. The required training is available through the Joint Special Operations University and the Command and Control Warrior School.

Increase OSS Squadron Strength by 15 Percent. The realignment of the squadron and the addition of JSOAC training requirements will challenge the squadron to meet both peacetime and contingency requirements. A 15 percent increase in personnel strength should enable the squadron to establish a JSOAC, conduct limited in-garrison operations, and continue to send personnel to qualification training.

Link Key Positions to JSOAC Duties. Key leadership positions in a JSOAC should be linked to their counterparts in the groups and wings of AFSOC, just as the positions in the reorganized OSS correspond to their duties in a JSOAC. Key positions include, but are not limited to, the commander and director of staff. Formalizing these duties is the final step in professionalizing the JSOAC as an organization. These key positions also require additional training based on their level of interaction with the AOC and JSOTF staff. The additional responsibilities of these positions will require completion of the Combined Air Operations Senior Staff Course, offered at the Warrior School.

Equipment

Use TBMCS for Peacetime C2. AFSOC currently uses multiple systems for in-garrison C2, none of which are used during C2 of theater operations. This disparity between peacetime and wartime systems results in a decreased ability for SOF airmen to operate in-theater. The problem is exacerbated by the complexity of the theater C2 system, the TBMCS. AFSOC does not expect aircrew members to train on and operate one aircraft type in peacetime and change to a new one in combat. This example may seem slightly exaggerated, but AFSOC is asking those at the operational level of war to use a new and unfamiliar system in a JSOAC. The proposed solution to this C2 equipment issue is to procure the TBMCS for the entire command from AFSOC down to the squadron level. Such an implementation of equipment must overcome many logistical obstacles, but the standardization of C2 systems will improve the ability to operate in-theater during a contingency or war.

Operate from a daily AFSOC ATO. When the TBMCS system has been installed throughout the command, AFSOC should take the next step: conduct all operations from a daily ATO. If this system can be used by an AOC to conduct combat operations of over 2,000 sorties a day, it can easily handle AFSOC's peacetime C2 requirements. The additional benefits from being networked throughout the command will aid operators, planners, and commanders at every level. Like the installation of the equipment, conversion to new C2 procedures will have significant logistical challenges. These challenges can be overcome with time, resources, and

leadership. This final proposal will merge AFSOC's peacetime operations with its wartime mission.

Conclusion

AFSOC currently has a large disparity between its organization, training, and equipment used in peacetime operations and its wartime mission. This lack of standardization hinders operations in a JSOAC and further hinders its coordination with the theater air component. As the air component of SOF, mission accomplishment often depends on coordination with its larger conventional counterpart. By standardizing the JSOAC organization, AFSOC can better organize peacetime operations to conduct its wartime mission. The establishment of formal requirements to serve on a JSOAC staff at all levels will transform the SOF air component to a more professional organization. Finally, standardizing the equipment and procedures used in theater operations with those in garrison will benefit both operations in times of peace and war. These proposed measures implemented individually or in combination will significantly improve AFSOC's combat capability.

Notes

1. US Special Operations Command Publication 1, *Special Operations in Peace and War*, 25 January 1996, v.
2. Joint Publication 3-05, *Doctrine for Joint Special Operations*, 17 April 1998, I-2.

Appendix A

Organization Charts

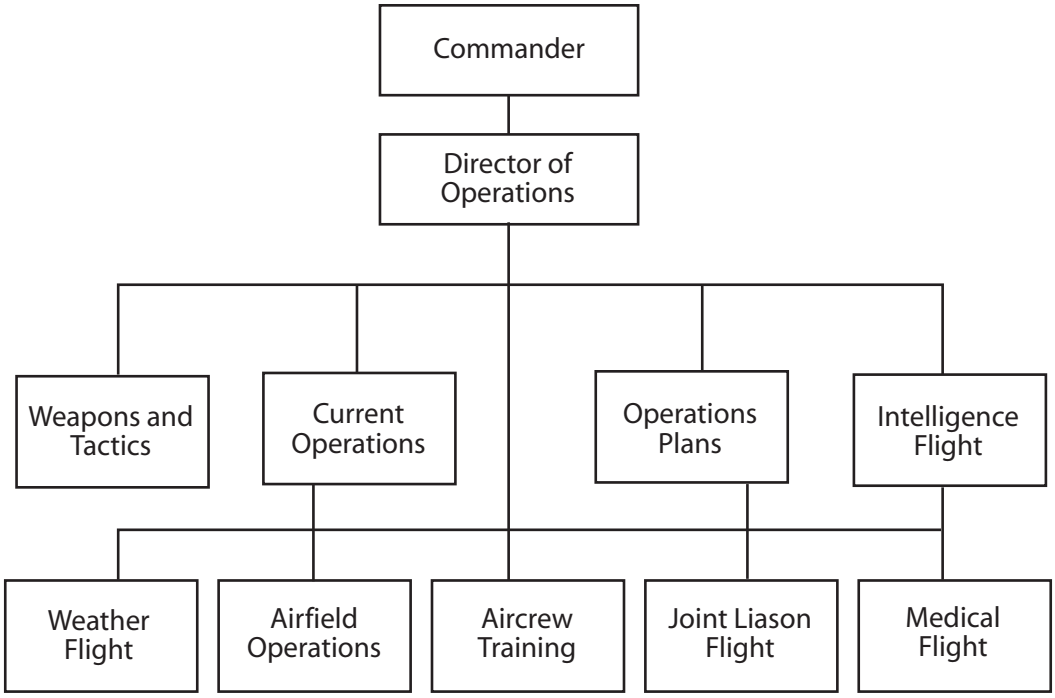
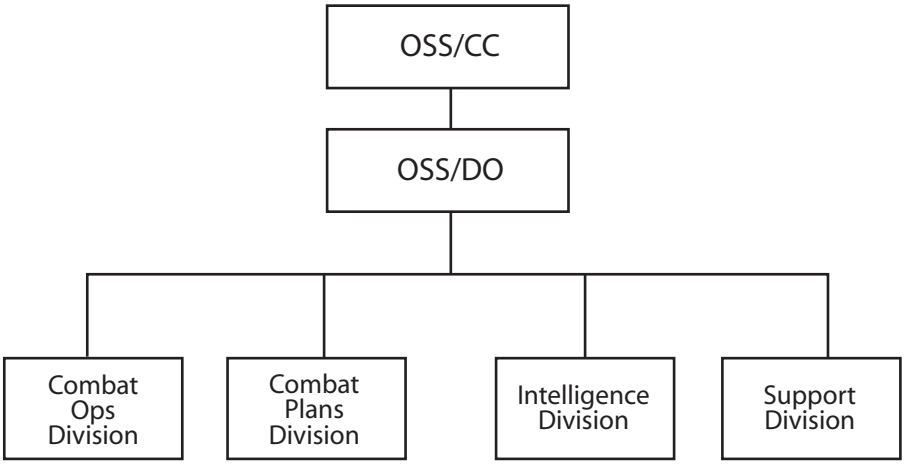


Figure A.1. Standard AFSOC operational support squadron (Air Force Instruction 38-101, *Manpower and Organization*, 1 July 1998, 21.)



Position/Division	In-Garrison duties	JSOAC duties
OSS/CC	Commander	Battle staff director
OSS/DO	Operations officer	Director, Combat Operations
Combat Operations Division	Current operations	Current operations Tactics support Intelligence support Weather support Joint liaison flight
Combat Plans Division	Exercise plans Weapons and Tactics Weather flight Airfield operations Life support	Strategy cell ATO inputs to AOC Intelligence support Air mobility cell Space liaison officer Airspace management Weather
Intelligence Division	Intelligence	Support plans and operations
Support Division	Administration staff Aircrew training Joint liaison flight Flight medicine	Administration/personnel support for contingency operations Flight medicine

Figure A.2. Proposed AFSOC OSS reorganization and duties

Appendix B

JSOAC METLs

The proposed METLs in appendix B are derived from the Chairman of the Joint Chiefs of Staff's UJMETL listing in CJCSI 3500.04C. Each of the three main METLs corresponds to a division in the proposed notional JSOAC. They are presented here to further specify each division's responsibilities.

Conduct Deployment and Redeployment

(Air Mobility Division)

Determine Air Transportation Resources

Determine air transportation and support availability
Coordinate and match air transportation resources and requirements
Determine possible closure times
Coordinate en route support and clearances
Determine impact of climate and geography on deployment

Conduct Air Deployment and Redeployment

Conduct terminal air operations
Move forces from point of embarkation to point of debarkation
Conduct redeployment of personnel and equipment
Coordinate global strategic refueling

Coordinate/Conduct Intratheater Strategic Air Deployment

Process air requests for forces to be deployed
Coordinate theater reception staging and onward movement
Conduct intratheater air deployment of forces
Provide C2 and monitoring of deployment and redeployment
Coordinate/provide intratheater refueling
Reestablish and coordinate air distribution of supplies in joint operations area (JOA)
Coordinate/establish airspace control measures

Conduct Operational Air Movement

Formulate request for strategic air deployment in JOA
Conduct intratheater air deployment/redeployment of forces in JOA

Synchronize Supply of Fuel in JOA for Aircraft

Manage Air Logistics Support in JOA

Conduct Joint SOF Aviation Planning and Apportionment
(Combat Plans Division)

Assess Operational Air Situation

Prepare Joint Air Operations Plans and Orders
- Conduct air mission analysis
- Issue planning guidance
- Develop/analyze air courses of action
- Coordinate/select air course of action

Conduct Joint Force Targeting
- Establish joint force targeting guidance
- Apportion joint operational firepower resources
- Develop high-payoff and high-value targets
- Assess reattack requirement
- Employ fire support coordination measures

Attack Operational Targets
- Provide close air support integration for surface forces
- Attack aircraft and missiles
- Suppress enemy air defenses
- Interdict operational forces/targets
- Synchronize operational firepower

Employ Firepower
- Process targets
- Request joint fire support
- Engage targets
- Conduct joint fire support
- Conduct joint interdiction operations
- Conduct joint suppression of enemy air defenses
- Strategic attack

Conduct Command and Control of Joint SOF Air Operations
(Combat Operations Division)

Acquire and Communicate Operational Air Information

Command and Control Subordinate Air Units
- Approve plans and issue orders
- Synchronize and integrate air operations
- Coordinate and integrate JFACC support
- Conduct rehearsals

Establish, Organize, and Operate a Joint SOF Air Operations Center
- Integrate liaison officers into joint force air component command

Direct Air Intelligence Activities
Determine and prioritize air priority intelligence requirements
Prepare air intelligence collection plan

Direct Meteorology and Oceanography (METOC) Operations
Analyze METOC impacts on operational mission profiles
Coordinate, plan, and execute weather operations

Recollect and Share Operational Information
Collect information/intelligence on air situation
Collect, assess, and disseminate METOC information
Collect targeting information

Prepare Air Intelligence Products

Disseminate and Integrate Air Intelligence

Deploy/Conduct Maneuver
Conduct tactical airlift operations
Conduct shipboard helicopter deck operations
Conduct joint air assault operations
Conduct joint airborne operations
Conduct joint air refueling operations
Conduct joint forward area refueling operations
Conduct CSAR, PR, and CASEVAC

Appendix C

JSOAC Qualification Requirements

Operations Track

Level I: Minimum qualification for operations track

Falconer 101
Joint Special Operations Air Component Course
Special Operations Liaison Element Course
Participate in a joint SOF exercise as a member of a JSOAC staff

Level II: Key functional positions within a JSOAC

Warrior FTU Operators Course
Joint Special Operations Air Component Course
Special Operations Liaison Element Course
Participate in a joint SOF exercise as a member of a JSOAC staff

Level III: Division chiefs and senior officers

Warrior School Advanced C2 Course (C2WAC)
Joint Special Operations Air Component Course
Special Operations Liaison Element Course
Participate in a joint SOF exercise as a member of a JSOAC staff

Support Track

Joint Special Operations Air Component Course
Special Operations Liaison Element Course
Participate in a joint SOF exercise as a member of a JSOAC staff

Abbreviations

ADCON	administrative control
AFCENT	Air Forces Central Command
AFI	Air Force instruction
AFSOC	Air Force Special Operations Command
AFSOF	Air Force special operations forces
AOC	air operations center
ATO	air tasking order
C2	command and control
C2WAC	Command and Control Warrior Advanced Course
C2WS	Command and Control Warrior School
CAF	combat air forces
CENTAF	Central Command Air Forces
CENTCOM	Central Command
CINC	commander in chief
CINCPAC	Commander in chief Pacific
CTF 77	Carrier Task Force 77
DIRMOBFOR	director mobility forces
FTU	formal training unit
ISR	intelligence, surveillance, and reconnaissance
JCTG	joint contingency task group
JFACC	joint force air component commander
JGAT	joint guidance, apportionment, and targeting
JMETL	joint mission essential task list
JSOAC	Joint Special Operations Air Component
JSOTF	joint special operations task force
JSOU	Joint Special Operations University
LRP	long range penetration
METL	mission essential task list
MAJCOM	major command
NAF	numbered air force
OPCON	operational control
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
OSS	Operational Support Squadron
SOCCENT	Special Operations Command Central
SOLE	special operations liaison element
SOF	special operations forces
TAOC	tactical air operations center
TACON	tactical control
TBMCS	theater battle management core system
USSOCOM	United States Special Operations Command

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