

AIR COMMANDO

A Professional Publication by the Air Commando Association
Dedicated to Air Commandos Past, Present & Future

JOURNAL

**ANY TIME
ANY PLACE**

From WWII...till tonight

**Historical Reflections
on Air Commando Theory**

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Summer 2013



Vol 2: Issue 3

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Photo courtesy of USAF



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CHINDIT CHATTER

In October it will be 12 years running America has been at war. Throughout, Special Operations has led the way. And some of the first in (and still there) were warriors from AFSOC. There is no more heavily deployed command in the Air Force than AFSOC. And it naturally follows there are no more heavily tasked units in the nation than some of AFSOC's squadrons. Members with more than 20 deployments are not unusual. True to the "Silent Professional" creed, neither the nation, nor anyone outside the inner circle of AFSOC and its many satisfied customers, have heard a lot about their accomplishments. There have been many and these accomplishments have had a profound impact on the

outcome of innumerable operations. These proud men and women have gone about doing the nation's business with total professional aplomb. This edition of the ACJ is dedicated to these American heroes and their families that have given so much at such a high price. A significant number of AFSOC warriors have paid the supreme sacrifice and have been wounded in action since 9/11. These are the visible tolls. The less visible are the impacts that these losses and injuries have had on innumerable Air Commando families.



In this edition there are some great renditions of Air Commando achievements and the makeup of the Air Commando Ethos. We also have a great article highlighting one of the most altruistic Air Commandos of all time, Major John Grove. He gave a lot and if he were alive today, he would still be finding ways to assist those that have needs greater than his. Indeed, he would be proud that the Air Commando Association has evolved into an organization that has as one of its basic tenets "Helping Air Commandos and their families,

past, present, and future." ACA has been honored to assist many of our warriors and their families in times of unmet needs. Unfortunately, those needs have been many and will continue for the foreseeable future. ACA, through our Foundation, is partnering with our generous membership, the US Special Operations Command Care Coalition, and others, to raise funds to continue to honor those that have needs greater than our own....just as John Grove would have wanted. As you enjoy this edition of ACJ, we ask all to reflect on the tremendous sacrifices that Air Commandos and their families have faced quietly doing the Nation's bidding since WWII. Any time....Any place.



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Simply Spectacular!

Just finished the last page of the Journal dedicated to Pave Lows and admit my irritation/disappointment that there is not more to read. No doubt will get the book.

You...your Team hit this fastball so far that it cannot be bested...tho I know you will try.

ACA may have been a terrific organization remembering the incredible history of Air Force Special Operators principally during the Vietnam time... BUT now it fully embraces the breadth of history of this most important Command and more importantly, the INCREDIBLE AIRMEN who are the human and heroic soul of this organization.
CONGRATULATIONS. WOW!!

Warm Regards, Paul Hester

Must Read

Honestly, if you've not read the ACA quarterly publication, you're missing out. I'd seen a couple of the articles previously but downloaded it and read it cover to cover yesterday... again, a must read. It's amazing to see what Col (Ret) Barnett and the rest of the ACA community have done with this magazine. It combines our history, legacy, and offers particular insights from those there ... at the tip of the spear when it counted. Our AFSOC reputation has been built one mission at a time... anytime...any place... so proud of what the ACA has achieved in this publication and in it's every day contribution to our community. Hooyah!!!

Col (Ret) Ioannis Koskinas

Gianni,

Thanks for the too-kind words. We have a great group of volunteer contributing editors, and Jeanette Moore is phenomenal at designing the magazine.

Dennis Barnett, Editor

Hi Jeanette,

I hope you are doing well and enjoying a pleasant spring in Ft Walton

Beach. You did an outstanding job on the latest edition of the ACJ - just love reading the stories from the luminaries of the Pave community - I don't know why I was included, I am not of their ilk.

As you may imagine, the appearance of my article in the latest ACJ has sparked a few requests for copies from my family. May I please order 6 copies of the Pave issue? If so, please let me know and I will reimburse you for your costs incurred.

Steve Kelly

Steve,

You sell yourself short, that was a great article and added much to the success of the edition. Again, many thanks!

Dennis Barnett, Editor

Persistence and Gunships

The series of recent Gunship articles have been truly fascinating. As Admiral McRaven argues in his book, *SpecOps*, one of SOF's best resources for understanding the future are the truly humbling acts of those who came before us. As Air Commandos, there is much that the past can teach us about the present and the future.

I was fascinated learning about Col Terry's story when I was going through the Gunship schoolhouse, and I believe that the pylon turn, and the persistence it embodies, has always held the potential to fundamentally transform airpower. We spend so much time and effort to drop an IADS, but a very few platforms really have the ability to leverage that airspace control fully into decisive massed effects. There were three key lessons to be taken from Desert Storm - Smart Bombs, Stealth, and the Battle of al-Khafji. Unfortunately, we only learned the first two. But three airplanes destroying a ground division is something entirely beyond CAS - this is vertical dominance, and it is a vision that we still have yet to realize as an Air Force. I'd argue the story of persistence goes from Ho Chi Minh trail, thru al-Khafji and to the emerging SOF/ISR air campaigns of today.

Many currently argue that the

lineage of the Pred/Reaper goes to the Firebee 'drone' because of where the pilot sits. I'd argue that, if you look at effects rather than cosmetics, Pred/Reaper is the ultimate validation of Col Terry's vision - persistent sensor-shooter loops that get deep into the enemy's logistics and almost 'hold' small amounts of ground from the air. Persistence allows us to go from 'hitting DMPs' to 'holding the best acre of the war' from the air through observation and fields of fire. So, what's happening on emerging fronts comes from Col Terry's vision in two ways - both on the theory side with persistence, and on the practical side as the lineage of the sensors on the Pred/Reaper are parallel with Gunship sensors. Therefore, the success of manned and remote Tactical ISR/Strike platforms of today are a strategic vindication of the Gunship and FAC communities of Vietnam.

I feel personally deeply indebted to these pioneers, who fought for these remarkable aircraft. Sneers from doubters turned to respect as these 'slow, ugly' planes built combat records that spoke for themselves. My hope is that we can follow in those footsteps with our own motley craft, and prove once again that devastating combat effects trump prestige and privilege.

Maj Dave Blair

Dear Col Barnett,

ACA member Michael Haas writing to you from Reno, NV, to express my appreciation not only for the fine magazine ACA publishes but for the high quality of staffers needed to

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produce such a fine result. And in reading the Air Commando Journal and in particular some of your historical articles I'm reminded that I too have been fortunate to have had published a number of Air Commando stories (Going back to WWII in book and magazine length articles. So! If perhaps you are looking for contributing writers or have specific subjects you wish researched thence written in story form, I would be pleased if you would keep me mind. It would be my pleasure and honor to return to the Air Commandos a measure of my appreciation of my time with them, in this manner.

Sincerely,
Col (Ret) Michael Haas,
USAF, Reno, NV

Editor Barnett - Sir:

What a terrific Journal. It's proven now, and all professional - the best pub by any Armed Forces combat active-duty & vets organization in the US. I see/read them all.

A short bit more re "Shadow and Stinger," per my letter in ACJ, Vol. 2, Issue 2: There's a 4-min video (high-def) on the website, www.dfcsociety.net<<http://www.dfcsociety.net>> re the AC-119. On that home page at the top, select "Media," then "Videos," and from there scroll down to Video 2. It's a combat incident involving my AC-119G driving off an NVA/VC attack from a firebase in II Corps, Vietnam, 17 Sept 69, despite a seriously "hung flare." My air commando colleague, TSgt Clayton Hedge, 17th SOSq, was also awarded a DFC for that incident. (Why was a nav from a combat station at the front

of the aircraft, and a gunner from mid-section, going back to the extreme rear to solve a hung flare jam? Good question, and no comment. What happens in Spcl Ops msns aboard the plane, provided the msn is well accomplished and more so, is moot and stays on the plane except for briefing COs - in this case at Flight, 17th SOSq, and 14th SOWg levels. Up the line, all were true warriors and grand gentlemen.)

My first DFC was awarded for a sustained 11-hr msn in remote I Corps, flown from Nha Trang - refueling/rearming twice at DaNang, 11-12 May 69. Later on, for work on the ground near Tuy Hoa, received a BSM. Our specialties were extended loiter time in the "Deep Dark," hi-accuracy firepower delivered from extreme low-altitude, hi-intensity flares, and our unique 1.5 mil-candlepower spotlight on the enemy -- all pre-GPS navigation, sans any airborne radar in the G-models nor any video link in either the G or K, but withering fire provided on the crew's judgment in closest coordination with on-ground combat commanders in the bush.

William L. Withuhn, MA, MBA
Curator Emeritus, Smithsonian Institution
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Submissions can be e-mailed to info@aircommando.org or mailed to Hot Wash c/o Air Commando Association, P.O. Box 7, Mary Esther, FL 32569. ACA reserves the right to eliminate those that are not deemed appropriate. However, we will answer each and every input, whether it is placed in this column or not. Thank you in advance for your interest in the Air Commando Journal.



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Historical Reflections



P-51 Mrs. Virginia in flight

on the beginnings of an Air Commando Theory

By Patrick J. Charles

Upon arriving as the 352d Special Operations Group historian, I was thrust into Air Commando history of World War II. The history was both foreign and familiar. On the one hand, I must admit, I knew very little, if anything, of the Air Commandos before assuming my position. On the other, as I began engulfed in the topic, the Air Commando approach to warfare was rather familiar. What do I mean here? As a veteran and historian, I am well aware of the military axiom “adapt and overcome.” And as I began researching the theory behind Air Commando military operations it became clear that the approach not only embodies the maxims of adapting and overcoming, it seeks to build upon it. Perhaps to the casual reader the phrase “any time, any place, anywhere” is just another military motto. It seemingly means the willingness of Air Commandos to commit to any fight, contingency or crisis. However, to the World War II Air Commando and those that have followed in their footsteps, it means much more and adequately reflects the military theory upon which special

operations thrives.

Those familiar with the history of the Air Commandos know that on August 30, 1943, General Henry “Hap” Arnold met with Colonels John R. Alison and Philip G. Cochran for the creation of Project 9—what would later be known as the 1st Air Commando Group. To date, most historians have attributed both the creation of the Air Commandos to British General Orde C. Wingate. The reason for this is on August 17, 1943, at the Quebec Conference, Arnold and General George C. Marshall met with Wingate to discuss the latter’s Long Range Penetration Group (LRPG) theory, which called for the placing of specialized troops behind enemy lines to disrupt communications and sabotage rear installations. In the words of Wingate, such a force would serve an “essential part of a plan of conquest to create a situation leading to the advance of our main forces.”

I maintain no qualms with the historical fact of Wingate’s desire to advance his forces behind enemy lines provided



Anti-aircraft Gun at Broadway (Photo courtesy of Patrick J. Charles)

the ideal mission set to facilitate an Air Commando theory of operations. However, to state that Wingate's LRPG theory influenced the Air Commando concept is historically problematic. More than a year earlier, on May 18, 1942, Major General George C. Kenney was the first to propose what would become an Air Commando theory of operations. Commanding the Fourth Air Force at the time, Kenney wrote to Arnold a proposal for an "Air Blitz Unit" consisting of a P-39 squadron, B-25 squadron, two transport squadrons, an airdrome defense unit, and an aircraft warning unit. The "Air Blitz Unit" was intended to be self-contained force, which could operate in "sparsely settled countries like North Africa, Iran and Iraq." And to secure a runway for incoming aircraft, Kenney proposed "parachuting a small detachment to clear the runway."

Although Kenney intended the "Air Blitz Unit" to operate in open terrain theatres like Africa and the Middle East, he foresaw instances where such a concept could be employed in more dense and less traverse theaters like India. Kenney's idea was simple yet innovative. He thought it was "high time" the Army make its "air units completely air borne," not simply tools to advance ground forces as Tactical Air Commands would employ in the European theatre. In Kenney's mind, the unit's movement would be "the like of which our Air Force has never known, but identical to that which will be encountered in any other part of the world."

When Arnold replied to Kenney's

idea on June 10, 1942, he admitted the "necessity for offensive air forces which are capable of advancing by 'fire and movement' has long presented a problem to me." At that time the Army Air Corps had devised "no effective way of operating without being tied to the concrete and fixed installations of core or lead permanent bases, a condition which effectively limits our ability to take advantage of the characteristic mobility of our weapon." And after studying Kenney's proposal, Arnold pointed out the problem of logistics. It was the "greatest problem" because air transports alone could not provide the "essential gasoline, ammunition and bombs" that a forward deployed air unit would require to be operationally effective.

It is here that a Air Commando concept of glider operations developed, for Arnold proposed it as solution to Kenney's logistic problem, writing the use of "[t]ransport gliders [could prove] capable of carrying these necessary items." Because glider operations were still being "studied and developed," Arnold could not guarantee gliders were the definitive answer. There also remained the problem of allocating aircraft and personnel to form the unit. Despite these problems, Arnold promised Kenney that that his "Air Blitz Unit" proposal would be forwarded and considered.

A week later, Kenney's proposal was received by Lieutenant General Carl A. Spaatz's "Commando division" with Arnold's recommendation that the staff "get busy on this right away." Historian William T. Y'Blood, author of

Air Commandos Against Japan, writes it was at this point that Kenney's proposal "disappeared into bureaucratic limbo," yet "planted the seeds of a special USAAF commando unit." I contend that Y'Blood's account is somewhat misleading. Kenney's proposal did not just "plant the seed," it was officially approved. This is confirmed by a July 17, 1942 press release on the formation of a new "Troop Carrier Command" consisting of an "air commando force." Released by Arnold himself, both the *New York Times* and *Washington Post* quoted the general as follows:

"[T]his air-borne attack force does not give us an instantaneous or cheap solution to our war problem. Its creation is calling for a stupendous effort. The time when it will attain its full power is still a long way off...Glider pilots and air-borne combat troops will be in the forefront of attacks...The importance of these swiftly moving combat teams cannot be overestimated. This will be a self-contained force whose soldiers, equipment and supplies are all transported by air. It will be able and trained to strike the enemy where he is least prepared. Although many details must be kept secret concerning its exact size, composition, tactics, objectives, and when and where it will strike it can now be revealed that in size, equipment and fire power the air-borne army ultimately will exceed anything the world has yet seen."

Seeing that Arnold did not meet with Wingate until over a year later, or with Cochran and Alison until six weeks after the Wingate meeting, it can be stated with certainty that a theory of Air Commando operations preceded both events. In fact, a close look at the plan developed by Cochran and Alison significantly coincides with Kenney's vision and Arnold's addition of glider operations—this similarity being the two plans directly cut against conventional air power doctrine, a period where aircraft were limited to conducting reconnaissance, deploying munitions to predetermined targets, or aiding in the advancement

of ground forces. Never was air power thought to be employed in a manner to disrupt the enemy from within, yet this was the bold and daring theory advanced by a Kenney and Arnold. And there can be little doubt that Arnold shared this earlier Air Commando vision with Alison and Cochran. It was at this juncture that the vision was implemented, modified, and improved by forward thinking officers like Alison and Cochran.

Certainly, one cannot dismiss that Wingate played a role in the creation of the 1st Air Commando Group. For one, the August meeting with Wingate cemented the creation of the Air Commandos. Before the meeting took place, Arnold did not have a projected theatre of operations to deploy the concept. This fact alone must have hindered Arnold in obtaining the necessary approvals to acquire aircraft and begin training. Then there is Wingate's leadership imprint. In a August 1944 article in *National Geographic*, Arnold made sure to credit Wingate for advancing the idea that "well-trained Allied troops could defeat [the Japanese] at their own game [of jungle warfare], provided they were mobile, in sufficient force, and exploited the military value of surprise." In a *New York Times* op-ed immediately following the operation, Alison also credited Wingate's "drive and enthusiasm" as inspiring an air commando force. However, other than providing a military complement to Wingate's Chindits, the Americans developed their own doctrine and operational plans before ever consulting the British General. "We didn't know how he would react to the idea," wrote Alison. He and Cochran felt that if "General Wingate is the genius that everyone says he is, he'll be quick to realize the advantages of this type of warfare," and "[i]f he isn't a genius, then we ought to be able to talk him into it."

Of course, the Americans did not take credit for the idea of placing troops in a position to flank enemy lines. In an April 25, 1944 classified interview, Alison openly conceded that the Air Commando theory of operations was "an old principle of warfare—something like the old cavalry action which had taken

place during the Civil War." The Air Commando concept merely improved upon the principle that "well-led, well-manned troops could engage enemy line of communication troops, and that a small number could go behind the enemy's line and create great destruction, great havoc, and create opportunities for larger forces to advance."

What distinguished the Air Commando concept was its use of air power to accomplish this task. Fighters and bombers were to be employed as "mobile artillery" for ground forces, with the lynchpin of operations being the use of troop transports and light planes to insert and extract supplies or personnel. According to a unpublished working chapter entitled "The Theory and Command and Control of Light Plane Support of Ground Forces," light planes provided ground forces with the "additional mobility" necessary to "evacuate[e] the wounded and ill, replac[e] personnel, perform[] short range reconnaissance, transport[]... supplementary supplies and personnel, and perform[] the mission of long range cavalry." To state it plainly, it was through air superiority that the ground troops would be able wreak havoc upon the enemy, which in turn would aid the main body's advance.

Still, there remained the problem of airfield security. While the creation of forward airfields, behind enemy lines, assisted in the supply and security of Wingate's columns, a system had to be devised to secure the airfields. The idea developed by Air Commando leadership was a leap frog theory that pinpointed alternate landing fields. As stipulated by the unpublished working chapter:

"[When an] alternate landing field is in danger of attack, the entire [Liaison] Squadron with the equipment can evacuate and, hence, frustrate enemy action. In like manner, when the alternate strip is in danger, the Squadron will merely evacuate again to another area. By leap frogging from landing field to landing field, a defense of sorts is practicable."

To be in "danger of attack" did not necessarily mean the enemy was within reach of the airfield. Air Commandos assumed the risk that the "presence of the enemy is seldom sufficient to prohibit operations in an area." Even should the enemy operate "around three sides of a landing strip," the Air Commandos were expected to continue operations "as normal." Thus, evacuation teetered not on the location or size of the enemy, but on whether the enemy was capable of overrunning the airdrome. In such an instance, all "vital equipment and the pilots" were evacuated by air, with the remaining "balance" having to "march" to the alternate location.

Given these facts, it is rather fitting to describe the Air Commando theory of operations as "daring" and a "break-through." In fact, upon learning of Operation Thursday, the *London Times* described the "airborne operation" as an "original and daring conception which promised to change the face of the war" in Burma. The *New York Times* described Operation Thursday as an "aerial break-through" that "menaces" the enemy. Meanwhile, the *Washington Post* concurred when it published two articles describing the military feat. One article found the mission to be "one of the most daring, imaginative and significant



L-5 Sentinel at Broadway (Photo courtesy of Patrick J. Charles)



First P-51 Mustang to Land on Broadway

(Photo courtesy of Patrick J. Charles)

undertaking of the Pacific War,” and the “largest offensive air operation thus far in the whole Pacific War.” And on the front page, the *Washington Post* read, “Jungle-Jumping Commandos Worst Japs in Burma Battle,” and described the operation as applying “leapfrog tactics of amphibious warfare to Burma’s dense terrain.”

Indeed, leapfrog tactics were the key to defensive operations, but it was the imaginative execution of the gliders that placed the Air Commandos in the position to launch such operations. Again, the use of gliders for special operations did not originate with Cochran, Alison or even the imaginative Wingate. Arnold was the first high ranking Allied officer to advance the idea of creating a “self-contained force” where “glider pilots and air-borne combat troops will be in the forefront of attacks.” However, Arnold did not come up with idea for offensive glider operations out of thin air nor was he the only officer to advance it. In 1939, the Germans used cargo gliders for the invasion of Poland. Then on May 10, 1940, German paratrooper successfully used gliders to assault Fort Eben-Emael along the French Maginot line. At the time, Fort Eben-Emael was considered the strongest fortress in the world and the lynchpin of the Belgian line of defense. Should the fort be assailed, military experts calculated the fort could hold off the Germans for thirty days, which would have allowed the French and English to counter. However, with just eleven gliders and seventy-two paratroopers armed with high explosives

the outnumbered Germans were able to surprise the enemy, subdue the fort, and assist in the advancement of the main body. This caused a domino effect leading to the fall of France and the British at Dunkirk.

This course of events caused members of the Army Air Corps to reexamine the use of gliders for offensive operations. On February 25, 1941, Arnold personally directed the initiation of a new glider study outlining military glider characteristics. The result was the procurement of existing gliders for military trials and the development of new glider technology. The unintended result was an intellectual expansion of the operational box. Take for instance a September 10, 1941 gyro-glider memo drafted by Captain Frank Kuwalski, Jr. Presented to Arnold, the memo “strongly stressed” how gliders could provide an “outstanding new development in the theory of warfare; namely, envelopment of the enemy from the air.” Kuwalski added:

“[The use of gliders] will be just

as revolutionary in its affect on warfare of the future as the musket was in the battles against the knights of old. It can be logically predicted that during the present war, and in the years to come, every alert military leader and technician will reach out in all directions for new methods of attack from the air and for new means to accomplish this third dimensional envelopment.”

Indeed, the employment of airborne parachuting troops had already gained universal acceptance, but these troops lacked heavy supporting equipment. World War II technology prevented trucks, vehicles, heavy armament or machine guns, and light tanks from being parachuted into enemy territory. And Kuwalski seems to be the first officer to advance the idea that gliders could be modified and developed to fix this deficiency, thus allowing for an “all out air envelopment.”

Within just a year, the result of this memo and others was the Army Air Corps developed new glider capabilities to include their extraction. It was an advancement kept classified. In fact, when Arnold announced the creation of an “air commando force,” he informed the press that “for military reasons” he could not disclose the process. All he could state is that “United States Army planes, while in flight, have been successful in picking up gliders from the ground.”

In the end, the innovation proved



Glider Being Towed By C-47 (Photo courtesy of Patrick J. Charles)



Gen Henry Arnold Awarding Col Philip G. Cochran Distinguished Service Medal
(Photo courtesy of Patrick J. Charles)

fruitful in planning both insertion and extraction missions, which led to the evacuation of over 700 wounded from February 10 through March 6, 1944. In the words of Arnold, even before this operational success:

“[The Air Commando concept] would not only evacuate all wounded by air; [it] would also replace them with fresh combat troops. Furthermore, none of the soldiers would have to make long marches through the jungle to get inside Burma. They could start fighting in top physical condition.”

Perhaps the best way to describe the Air Commando theory of operations is it sought to expand the operational box. What do I mean here? I mean that sometimes the success of the mission does not just teeter upon adapting and overcoming, but upon innovation or the nontraditional use of existing capabilities to expand mission success. The Air Commando theory envisioned by Kenney, Arnold, Cochran, and Alison was just this. They combined existing military capabilities—paratroopers, fighters, bombers, transports, and gliders—and implemented, modified, and combined them in a manner that expanded operational success. As Alison wrote in his first detailed report following Operation Thursday, “Air Commando is a way of thinking and not a branch of the Air Force.” It was a “method of warfare” that could be “very effectively used against an enemy whose lines of communication are long and difficult.”

The vision undoubtedly led to the operational success of Operation Thursday, which in turn led to the formation of the 2nd Air Commando and 3rd Air Commando Groups. Also, the success of Air Commando operations brought Alison before General Dwight D. Eisenhower, whom sought to conduct similar glider operations for the Normandy invasion. Unfortunately, Allied European operations never mirrored the glider success achieved by the Air Commandos. This may have been due to the Germans’ familiarity with glider operations. It may also be due to the fact that the use of gliders was leaked to the press. On April 25,



Gen John R. Alison (Photo courtesy of Patrick J. Charles)

1944, six weeks prior to D-Day, the *New York Times* reported that the “Allies are prepared to carry out airborne operations on an unprecedented scale,” which included the deployment of “parachutists and glider-troops” that would “not only harass German communications but also establish a front thirty to fifty miles behind the coast.”

The success of Air Commando glider operations inspired more than Allied military leaders and eager Americans receiving frontline reports through the press. Following a speech before the Soaring Society of America by Major Eliot F. Noyes discussing the success of glider operations, the *Science News Letter* published an article highlighting the unknown “tactical possibilities” of gliders. In particular, the Society imagined that gliders could be flown

via “jet-propulsion.” A jet motor would “make it possible for gliders to take off from a level hilltop or from flat ground, and for horizontal flight, where no gain in altitude is required, without automobile, plane, or winch towing, or shock-cord launching.” The Society acknowledged there remained the problem of “additional weight,” but they viewed the idea as a launching point to improve “powered airplanes,” for “the low speed at which a glider flies, the pilot can note many things about the design and construction of the plane which could not be readily discovered in a power plane travelling at high speed.”

In many ways, the creation of the Air Commandos is like that of other military history in that technological advancement always expands the operational box. Few, if any, will disagree that mid-twentieth century improvements in air power paved the way for the formation of an independent airborne force that could effectively engage the enemy on its own turf. Still, advancements in technology result only in a military evolution, not a revolution. The Air Commandos must be historically viewed as the latter given forwarding linking leaders like Kenney and Arnold essentially flipped airpower theory on its head, and hard charging leaders like Cochran, and Alison implemented and modified the theory to make it work. Moreover, their “daring” concept led to a number of operational firsts, including the first composite air unit, first air unit employed with total autonomy, and the first aerial invasion into enemy territory, etc. And today, Air Commandos carry on that revolutionary idea by not only incorporating new technological advancements to complete the mission, but by encouraging and fostering forward thinking leaders of their own.



Patrick J. Charles is the author of numerous articles and books on law and history. He received his J.D. from Cleveland-Marshall College of Law, and his B.A. in History and International Affairs from George Washington University. His writings have been cited by a number of courts, including the United States Supreme Court. Charles currently serves as a historian for Air Force Special Operations Command 352d Special Operations Group at RAF Mildenhall, UK.



Will Thomas has been shooting baskets to raise money for the families of those killed in action since Labor Day weekend 2011.



Editor's Note: Will Thomas' next operation, the 2013 RISE and FIRE Shooting Challenge, calls for him to make 3,300 3-point baskets over Labor Day weekend to heighten awareness concerning the service and sacrifices of the AFSOC community and raise \$30,000+ for the causes and loved ones of the fallen heroes of Extortion 17: Staff Sgt. Andrew Harvell, Tech Sgt. John Brown, and Tech Sgt. Daniel Zerbe. To learn more, and find out how you can join with Will, the ACA Foundation and That Others May Live Foundation in supporting the AFSOC community through Rise and Fire, go to www.ophawkeye.com/rise-and-fire

OPERATION HAWKEYE:

Shooting Hoops to Help the Families of Fallen Heroes

By Dwight Jon Zimmerman



On Aug. 6, 2011, U.S. Special Operations Command (USSOCOM) suffered the worst loss in its history when a CH-47 Chinook, call sign "Extortion 17," flown by an Army Reserve and National Guard crew and containing Army personnel, Navy SEALs and Naval Special Warfare support personnel, Air Force Special Operations Command personnel, Afghan National Army commandos, a civilian Afghan interpreter, and a military working dog, was shot down by RPG fire in the Tangi Valley of Wardak province, Afghanistan. All 38 aboard the helicopter were killed in the shootdown. The helicopter was carrying a quick reaction force, part of a response to reinforce troops under fire.

Will Thomas was a 12-year-old boy playing basketball with his father, Bill, in the McLean, Va., driveway of their home when he heard the news. When he told his father he felt bad about it, his father replied, "So what are you going to do about it?" After some discussion, Will proposed to honor the fallen by shooting 17,000 baskets over the coming Labor Day weekend. His father pledged to donate a penny for each basket to the charity identified for the

fallen. Then, only days before taking up his shooting challenge, Will learned of an extraordinary coincidence: The widow of one of the SEALs killed in the mission, Lt. Cmdr. Jonas B. Kelsall, had grown up in Will's hometown of McLean. This was the origin of Operation Hawkeye, in which young Will shoots baskets in exchange for donations to the families of those killed in action. The name "Hawkeye" is in honor of Hawkeye, a Labrador retriever who became known nationwide as the immensely loyal pet of Jon T. Tumilson of Iowa, another Navy SEAL killed in the Aug. 6 action. The name is also a nod to Will's shooting marksmanship and the protagonist of James Fenimore Cooper's novel, *The Last of the Mohicans*.

Initially, Thomas' shooting goal was 17,000 baskets, and he surpassed it. He made 20,317 midrange baskets in a 50-hour shooting span over that Labor Day weekend in 2011, raising \$50,000 for the families of the Navy SEALs lost on Aug. 6. His 2012 challenge, Rise and Fire, honored all the special operations forces (SOF) aboard the aircraft and called for Will to make 2,600 long-range three-point baskets; he sank 3,317 in 34 hours of shooting, raising tens of thousands more for SOF. Most recently, on Feb. 17, 2013, Will honored fallen U.S. Navy SEAL Chris Kyle with a 17-hour challenge, making 2,017 three-point baskets in 15 hours and raising more than \$19,000 for Kyle's family through the Chris Kyle Memorial Trust.

Will harnesses a strong work ethic and the latest in social media to advance his mission. Operation Hawkeye has a robust Facebook platform (www.facebook.com/OperationHawkeye) as well as a stand-alone website (www.ophawkeyecom). Both these platforms contain information about the mission, related video and other media coverage, a library featuring works by mission team experts, a mail platform through which to express support for SOF families, gear offerings, a memorial to the

fallen, and information on how to donate and offer other forms of support for the cause. The Facebook page features postings on mission developments, highlights ways to honor the fallen and/or support their families and related causes, and generally informs others about the nature of SOF service. As of this writing, the mission's Facebook page followers number more than 28,000 and counting.

Operation Hawkeye is not a nonprofit charity, but financial donations are tax deductible and are distributed to appropriate charitable organizations such as the Navy SEAL Foundation, Brandon Webb's Red Circle Foundation, America's Mighty Warriors, the USSOCOM Care Coalition, and others. In 2012, the SEAL Legacy Foundation awarded Will Thomas the SEAL Unsung Hero Award at a ceremony that also honored businessman and philanthropist T. Boone Pickens.

Operation Hawkeye also engages key elements of the nation's basketball community, ranging from youth and high school athletes and coaches to NBA teams and professionals, as well as organizations such as the Naismith Memorial Basketball Hall of Fame. Thomas' strong work ethic has resulted in partnerships with companies such as Nike. He created a youth-focused paracord bracelet initiative

and will soon launch a national free throw challenge through which individuals and teams across the United States can join with him to raise awareness and funds for SOF.

Contributors can also purchase an Operation Hawkeye patch for \$5, and all proceeds go to support the SEAL families. The three-color PVC patch with Velcro® back features the Operation

"Since they lost somebody that they love, I think they need all the support that they can get."

- Teenager Will Thomas

Hawkeye logo – a stylized image of a boy shooting a basket, inspired by Will's profile. Additional information can be seen at www.uspatriottactical.com/operation-hawkeye-patch.html. Will's father said, "The end-goal is really nothing more – or less – than to show members of the SOF community that we care about them and are grateful for their service and sacrifice, and all are encouraged to express that sentiment in a manner that suits them best."



This article originally appeared in "The Year in Special Operations: 2013-2014 Edition" magazine, and is reprinted here with permission of Fair Count Media Group, www.defensemmedianetwork.com.

Will Thomas makes his 17,000th basket on Labor Day weekend 2011, fulfilling his promise to make 17,000 baskets in honor of the heroes of "Extortion 17."

(Photos courtesy of Operation Hawkeye)



RISE AND FIRE

2013 LABOR DAY WEEKEND SHOOTING CHALLENGE

33 Hours
TO MAKE
3,300 3-Point Baskets
TO RAISE
\$30,000
TO HONOR
3 Heroes



Join us in honoring the AFSOC heroes of Extortion 17 over Labor Day weekend, and support their causes and loved ones with a donation at www.OpHawkeye.com



www.OPHAWKEYE.COM
[f/OPERATIONHAWKEYE](https://www.facebook.com/OPERATIONHAWKEYE)

JOHN GROVE

A LEGEND

"I suspect few heroes ever know the full extent of the good that they do, but I am certain that John shuffled off his mortal coil largely unaware of the true magnitude of his contributions."

As we reflect on our community here, and the larger Community of Airmen we all serve, we should remember the quiet heroism of John Grove and what it represents. For this community served his needs in so many ways over the years, and he saw fit to give back in even greater measure."

– General Norton A. Schwartz (Ret) Chief of Staff, USAF



*Maj John W. Grove
1942 - 2008*

By LtCol (Ret) Felix 'Sam' Sambogna

John Grove was born in New York on November 5, 1942. He grew up poor but had a good family. He worked his way through college and was a graduate of Cornell University. Major Grove retired from the United States Air Force where he served for 22 years, primarily as a renowned special operator and helicopter pilot. He was awarded the Distinguished Flying Cross with two Oak Leaf Clusters, Air Medal with two Bronze Oak Leaf Clusters, Air Force Commendation Medal, the Air Force Achievement Medal, and many other medals and ribbons.

During the Vietnam War, he flew rescue helicopters with the 21st Special Operations Squadron (SOS) located in Thailand, where he consistently

participated in daring missions recovering downed airmen. Later he was assigned to the 20 SOS at Hurlburt Field where he excelled as a Pave Low helicopter pilot.

After retiring from active duty at Hurlburt Field in 1987, Major (ret) Grove dedicated his talents and energies to humanitarian efforts that affected the lives and hearts of people and communities globally. He also remained active and served as the Historian and Scholarship Secretary for the 20th SOS, keeping track of widows and children of unit members who lost lives in the line of duty. He also organized fund-raising events and supported the squadron in many other ways. On October 16, 2008, John was presented the 20th SOS Lifetime Achievement Award for his ceaseless efforts, stemming from a strong desire to assist in need both within and outside

the squadron. In 1996 John was also inducted into the ACA Hall of Fame for his significant and unique contributions to special operations worldwide.

A life member of the Air Commando Association (ACA), he became the Vice President and key player in the McCoskrie Threshold Foundation (MTF), established in 1986 as a 501c(3) Humanitarian Arm of the ACA. John established contacts throughout the United States and solicited donations of clothing, school desks, books, furniture, medical equipment and supplies. He set up storage facilities and then would arrange for shipping containers to be delivered to a loading area. He would organize a "band of volunteers" to assist with the loading. He spearheaded fund drives to cover the cost of storing and shipping these materials. As a result of



John Grove at a past ACA reunion with MGen Marshall B. "Brad" Webb and Mrs Dawna Webb.

John's efforts, members of the ACA donated thousands of dollars in support.

Working with the Okaloosa County Superintendent of Schools, John was able to obtain a large facility in Crestview, FL, to store some of the items. This former school included a loading dock that was very useful to these MTF logistics efforts. Hundreds of school desks, bicycles, and many other items were loaded and shipped repeatedly from this storage area. John would pick up used packing crates from moving and transfer companies in the area and repair them, then pack donated items into these crates for shipment.

John's daily routine included driving around in his truck and trailer to pick up these items. He would even check dumpsters and frequently he would call his friends laughing and excited about his most recent "find" in another heroic dumpster-diving story. He would even pick up unsold donuts from Krispy Kreme in Destin and hand them out to the homeless and facilities that worked with the needy. He used his personal funds to pay for fuel and the storage units. He was very, very generous.

As a result of his and many other volunteers' efforts, millions of pounds of goods were sent to many countries: Honduras, Panama, Thailand, Vietnam, Peru, Haiti, Ecuador, Dominican Republic, Montserrat, Jamaica, and the Republic of Georgia. Here at home, assistance was also provided to families in North Carolina after hurricane Floyd and to families in Alabama after a tornado.

On Sunday, June 9, 2002, a large

moving van, provided by A&A Moving & Storage, rolled out of Fort Walton Beach. For others it may have been a day of rest, but for John Grove it was the final leg of a local marathon effort that filled up a 52-foot-long trailer with household materials and supplies. John knew that 905 Montagnard refugees, gallant warriors who fought alongside our forces in the Vietnam, were inbound to North Carolina. They would be received by the Special Forces Association in Kernersville. John was in contact with retired Green Beret Mike Linnane who spearheaded the project. One blowout and thirty-four hours after departing Fort Walton Beach, John and the driver returned – mission accomplished. This effort provided the gallant Montagnards with furniture, clothing, and many other items needed to start a new life in the USA. After watching the volunteers, mostly retired folks from special operations, former Air Force Special Operations Command Chief Eddie Alicea commented, "what a wonderful way to continue to serve."

In 2006, after a trip to Honduras at his own expense, John helped establish the very first high school in the Mico Quemado mountain region, "Colegio John Grove Fuerzas Vivas". The project started when John's friend Karen Hubbard, founder of Bless the Children (BTC), told him that there was no education available to the children

in this area beyond the 6th grade. John said: "To help these people out of the cycle they are in, generations of poverty, an education is necessary. It is my plan to help with this effort..." Working closely with George Mealer, director of BTC in Honduras, John donated the funds to purchase 1.5 acres of land that provided a coffee crop and a small shack. Working with George, John funded the total project and his vision of helping the children burned brightly.

Beginning with humble facilities, the education of 40 students began. John provided the teacher's salary, textbooks, school supplies, computers and a generator, a motorcycle for the teacher, and lunch for the children. He knew the only way the children could escape poverty was through education and he made it available to them.

Recently, Randy O'Boyle (a retired Pave Low pilot) visited John's school. He related how poor the natives are in that mountainous area. He confirmed that there is no town, just random houses that make up a community with a "village elder" as the spokesman. According to Randy, they understand they need an education to allow healthcare and a better life for their children. The John Grove School is the guiding beacon towards that reality. Randy further stated that some of the children who made it through the school have found jobs and are able to send money to provide opportunity for



John Grove helping build the school with George Mealer and local villagers in Honduras.

others.

While in Honduras, John realized that farm animals were very important to the poor natives. Therefore, he bought a cow and gave it to a local family. He named the cow Doris after his mother. Doris was also a humanitarian, and she assisted John and the MTF many times by coming to Fort Walton Beach with John and sorting clothes and packing. She was a tireless worker, much like her son.

Karen Hubbard wrote the following: John could be rough and tough, but he had a heart of gold to make a difference in the lives of poor children. And, he knew first hand that poor children have to work harder to have opportunities to be someone in life. Once John knew about the poverty level of the children in the Mico Quemado Mountains of Honduras, he was on board to help Bless the Children (BTC) build and support the high school.

Bless the Children, with an office in Clearwater, FL is another humanitarian 501c (3) organization with two outstanding managers, Karen Hubbard and Rebecca Smith. John used their contacts to arrange many shipments overseas. To this day, Karen and Rebecca accept goods the MTF continues to deliver, then coordinate the shipments to many countries.

For 15 years a squadron in the wing at Hurlburt Field supported orphanages in Honduras with a "Christmas Wish" program. Christmas toys and other items were collected, put in individual containers, and delivered by squadron members. John was also a key player in that program by working with the First Sergeants, organizing the gifts, and preparing them for delivery.

On December 17, 2008, John Grove passed away. John was a true hero and he left behind a legacy of service and inspiration for many. For two decades the former Vice President of the MTF devoted his life to both humanitarian aid in his own community and to the improvement of the lives of countless poor children and families internationally. Over 500 friends attended a celebration of life held in the Hurlburt Club. Donations were made to continue support for John's school, and numerous stories were told of his many



John Grove's truck and trailer that he used to tirelessly collect donations.

kind deeds.

John received a full honors burial with horse and caisson and helicopter fly-over at the Arlington Cemetery. His eulogy was delivered by General Norton Schwartz, the Chief of Staff of the Air Force, who presented the flag to John's mother. Senior officers from Hurlburt flew there to attend the services in recognition of his extraordinary humanitarian work - John was truly a legend.

In January 2009, General Norton A. Schwartz attended the Emerald Coast Military Affairs Council which hosted a black-tie dinner in the General's honor. General Schwartz took the opportunity to eulogize John Grove. He said: "Last month the Emerald Coast lost a remarkable humanitarian hero. We should remember the quiet heroism of John Grove. He saw fit to give back. We can all take something from the pile of good deeds he left behind. We cannot take for granted the warriors and soldiers who walk among us." General Schwartz further recognized John by awarding him the CSAF Public Service Award.

John was dedicated to the goal of providing equipment and supplies in support of the U.S. Military Humanitarian Assistance Programs (HAP) and nation-building efforts, thus projecting and representing U.S. forces in the best possible light. He did it well and the good will he promoted among many countries is hard to measure.

After his passing, dozens of volunteers from the MTF and ACA came together to take on the fulfillment of John's material aid efforts. There were close to 30 storage units filled with items John had collected. All were shipped in partnership with BTC to help the poor communities in Honduras,



Jamaica, and Guyana. The packing and loading--without John's guidance--was a significant task, but the volunteers came through. A MTF volunteer, remarked, "Days like today make me proud to be an American, and remind me of the great times and work I had in the USAF."

Current MTF volunteers are continuing John's work. Items are collected and stored free-of-charge in units provided by a local business. Using volunteers' trucks and trailers, items are delivered to BTC in Clearwater, FL, for shipment to needy countries.

To continue this effort and to support John's school in Honduras, donations are needed, and can be made in the following manner:

Mail checks to:

McCoskrie Threshold Foundation
PO Box 67

Mary Esther, FL 32569

or online at www.aircommando.org
(click on donate)

All donations are tax deductible. One hundred percent of the donations to the John Grove School are directed to the school by Bless the Children.



About the Author: LtCol (Ret) Felix 'Sam' Sambogna retired from the USAF after serving 29 years. Sam worked along side John Grove for many years and is currently the MTF Secretary.

Moving a squadron garrison while engaged in combat

*By Col David Vardaman and
Col Sean Farrell (former 16th SOS commander)*



Arrival of the first permanent party AC-130H at Cannon AFB.

(Photo courtesy of Col Sean Farrell)

A case study of the 16th Special Operations Squadron relocation from Hurlburt Field to Cannon AFB in New Mexico while continuing combat deployments.

At its core, this move was about two things (1) The can-do attitude and warrior spirit of the 16 SOS (they never failed in battle and this move was simply another battle for them to excel;) and (2) Leadership 101, defining Commander's Guidance, Building & Executing a Plan, engaging with Higher Headquarters to get support/resources, and then having the flexibility to overcome the challenges laid out in the article such as continuing combat rotations, personnel choosing to retire/separate, moving to a base attuned to supporting smaller fighter aircraft, just to name just a few. This assessment is a great case study for airmen across the Air Force and future leadership at all levels to reflect upon and learn.

-- Col Tony Bauernfeind, 27 SOW Commander

The stress of a combat deployment can be daunting. It can absorb all one's thoughts and emotions, and overwhelm the senses if not properly managed. Success in this endeavor demands an ability to prioritize tasks and adjust to the unexpected while maintaining focus on the task at hand. Uprooting a family during a PCS move carries some of the same characteristics, though the impacts are measured on a different scale. An entire squadron doing both at the same time is rare indeed, if not unheard-of in USAF history. That is, however, exactly what the men and women of the 16th Special Operations Squadron and 16th Aircraft Maintenance Unit accomplished. During 2008 and 2009 the squadron planned and executed relocation of all eight AC-130H aircraft and all ancillary pieces from Hurlburt Field, Florida to Cannon Air Force Base, New Mexico while roughly a third of its available resources were deployed to conduct nightly combat strikes against enemy targets in Operation ENDURING FREEDOM (OEF).

This assessment aims to serve three purposes. First, it serves as a case study of an entire unit facing unique problem and how warfighting principles such as "simplicity" helped

establish a framework for deriving its detailed tasks. Secondly, it should serve as an unofficial primer for any military historian or student exploring this topic in the future. Lastly, in keeping with the SOF truth of "Humans are more important than Hardware", the article recognizes the airmen and families who made the operation successful. Their legacy complements the "can do" attitude of special operations forces and reinforces the warfighting commitment the gunship community has made to our partners on the ground since the day the AC-130 gunship entered the Air Force inventory.

Heritage Means Something

The fixed-wing, side-firing gunship was born in battle through a combination of ingenuity, creativity, and determination. Once it entered into Vietnam on a trial/test basis it never left.¹ The analogy of "building the airplane while flying it" is rather appropriate. The vision and leadership demonstrated at lower levels were key enablers to conquering such a unique challenge and this is well-known in the gunship community. This audacious spirit and culture continues to be passed down between generations of Air Commandos. Thus when the order to relocate the 16th SOS came, the bedrock of talented personnel who could handle a dynamic problem set was already on-hand. Not only would these men and women

build the plan from scratch, they would be the ones actually executing the movements. The SOF truth of “Quality is more important the Quantity” was never more true.

Notification

Within AFSOC the expansion of the Command to its newest base, Cannon, was a much-discussed topic. Hurlburt was a potential single point of failure in an event such as a natural disaster and, besides, AFSOC’s expected growth could not be contained within its boundaries.² Both the Spooky and Spectre gunship squadrons knew of planning excursions that indicated 4th SOS would be the gunship squadron selected to make the relocation, and therefore, the energy of the 16th SOS was not focused on a potential move. That all changed on Friday, September 15, 2006 at 1430 hours. At a Squadron Commander’s Call the unit was officially notified by the Wing Commander that the 16th SOS had been formally selected as the gunship squadron to make the move to Cannon. On the surface the squadron, though collectively surprised, handled the news gracefully, but unit leadership (both officer and enlisted) knew it had to get out in front of expected and impending distractions.

A set of three important guidelines were quickly issued to help maintain unit focus: First, keep improving the squadron at Hurlburt; maintain unit pride and prevent a “renters” mentality. Squadron murals, briefing rooms, snack bar improvements, and gunship gala were thus preserved and maintained as efforts to reinforce esprit de corps. Secondly, keep emphasis on downrange ops, maintaining support to our warfighting partners; safety of crews and ground elements could not be jeopardized during this challenging period. Finally, the unit is “all in” on the move--whether PCSing or not, each person must help the 16th accomplish this mission. NO exceptions--the entire unit would take ownership of the process. Using an extreme sport description, there would be no “Tap Outs,” everyone must keep up the fight. These priorities set the tone and

served as mission enablers. In an immediate correspondence to the entire squadron at home and deployed, the commander succinctly captured the task ahead: “[The move] is what it is...a MISSION...and we will not fail.”³

Hitting The Chalkboard (Initial Planning)

As the pending move quickly approached, the squadron began small-group gatherings for wargaming it. Spectre had 8 aircraft and roughly 160 warfighters that had to relocate. Just looking at the crew complement of 9 aviation specialties created a jigsaw puzzle that could confuse anyone unfamiliar with the gunship community.⁴ And these variables did not include the school-house portion of the 19th SOS that trained and certified all gunship personnel “mission ready”, aircraft maintenance, operations support, or the families associated with each of these components. Not only did these pieces need to be synchronized, but a failure in any of the variables could cause a seizure in the system--and the clock was ticking. The vastness of the problem required the squadron to break “the system” down into digestible pieces. Instituting a “hard crew” concept was introduced in order to consolidate personnel into small groups. While this is a standard procedure when deployed, it is problematic in garrison. Each crew would train, deploy, redeploy, and PCS as a single entity. Along with the eight crews to fly the eight aircraft, the squadron would need partial crews at each of the three locations to serve as planners. These three partial crew elements or detachments would serve critical yet vastly different roles. The downrange element kept persistent combat ops going on a nightly basis. The “Cannon Det,” however, had to start from scratch--bedding down aircraft and crews, establishing AC-130 operational procedures at a location that had probably never seen a gunship, and preparing the schoolhouse training system to keep the crew force production pipeline on track. The “Hurlburt Det” would need to close shop on the historical home of the 16th SOS and to account for property transitioning between locations.

Spectre completes another OEF combat mission while the squadron is relocating to Cannon AFB (circa 2009)
(Photo courtesy of Col Sean Farrell)



To be sure, the Cannon and Hurlburt detachments would be executing an untried and freshly-minted playbook.

It Is More Than Just The Aircraft And Crews

Cannon AFB was historically a fighter base. Regardless of special ops traditions and cultures, there were fundamental operational issues lurking around every corner at Cannon--some expected and some discovered. The squadron learned very quickly how unique the gunship is and how small its community. The differences between gunship and fighter aircraft training operations were literally "night and day" in many cases--runway operations, blacked-out missions using night vision goggles, hot-cargo ammunition uploading for live-fire training missions, airspace takeoff profiles to accommodate the engine-performance-challenged AC-130, range operations for side-firing weapons versus straight runs from fighter aircraft, and inclusion of ground parties all were executed during normal nocturnal training profiles. Gunship operations out of Hurlburt Field had developed over a period of over four decades and 16th SOS needed to implant some form of these tried and tested procedures into Cannon in a matter of months. It took a talented and dedicated cadre of personnel to work through these issues and these Air Commandos really knocked the ball out of the park.

The Blank Check Is Written (Opportunity Knocks)

The rough-draft analysis by the squadron during the early days of the pending move proved to be significant in establishing an operational framework. Normally a squadron is focused on near-term deliverables like the flying schedule, aviator upgrades, and periodic check-rides. Other than management of deployment schedules, longer-term endeavors that are months away are normally planned at higher staff echelons. Certainly most squadrons don't spend time considering moving their entire unit, but the 16th SOS leadership quickly realized it

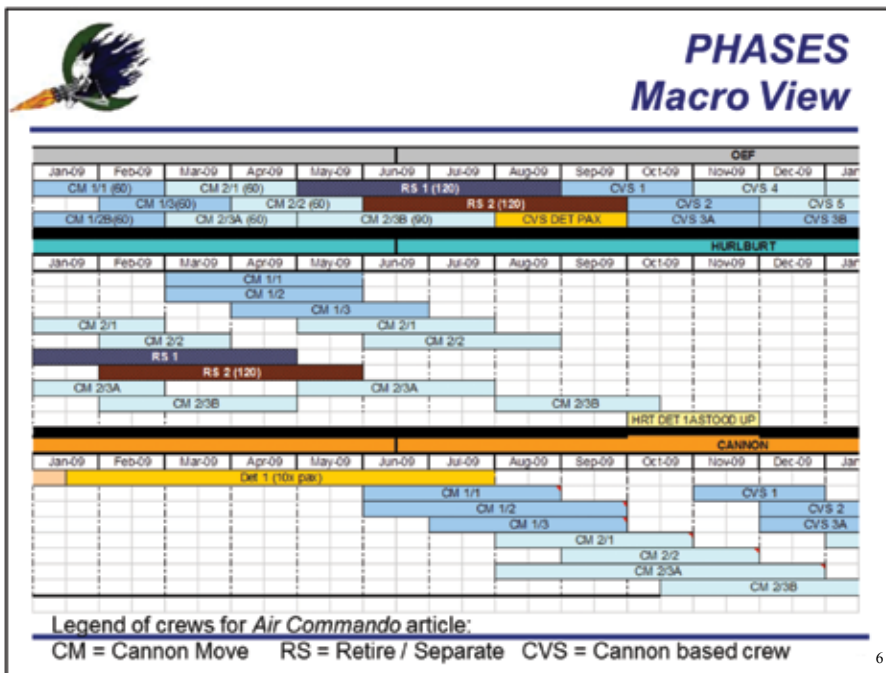
probably had the best understanding of what would be required to make a successful move. Early squadron discussions were unrestrained and attempted to capture every possible element and associated risk regarding the move. Over time these efforts yielded a framework to consult as well as identification of major challenges demanding higher headquarters' support. These planning efforts proved to be a prudent investment.

During a normal day at the office the squadron learned of an impending meeting at AFSOC Headquarters to discuss the site survey⁵ effort for the overall Cannon enterprise. We consulted the Group Commander and he agreed that the squadron ought to participate, so I (Farrell) served as the squadron representative. To our surprise the meeting turned was chaired by the 3-star commander. [To reinforce how impromptu my attendance was, I was sitting in the second-row bleacher seats next to the command Chaplain.] Various briefings were presented, including a small overview of the 16th SOS. Eventually the staff asked me if the squadron had any inputs. Based upon our initial planning I elaborated on some salient points, such as the need to ensure the maintenance piece of the relocation moved in lock-step with the ops piece. When my short comments were complete the general said, "You see, we need to make sure his team has everything they need." That represented a blank check--not only did this authority help tie-in the maintenance and support elements that would move out with the 16th SOS, it also allowed us to coordinate with A1 to build up the squadron to the full levels identified in our manning documents. Without 100% manning it might not have been possible to cover the three locations.

The Challenge – Operations from Three Disparate Locations

As planning progressed the Wing had to make a tough decision that was bound to affect the close air support mission in OEF. Would the 16th SOS reduce its presence downrange? Could another asset backfill the mission? How long would the modified solution be in place? Could the unit conduct the move with no change to its downrange posture--in effect could the 16th operate from three locations simultaneously? Operations on such a large scale would be problematic to say the least. Each location would require the full spectrum for operations--fliers, maintenance, ammunition, and OSS-type support personnel.

The squadron looked back on previous operations to gauge the feasibility of such an undertaking. Recent Operational Readiness Inspections (ORIs) from off-station locations provided a glimpse of some lessons learned for the unit to consider. Then during a two-month period in the summer of 2008 the squadron was able to simultaneously support Operation WILLING SPIRIT (OWS) and OEF while maintaining home-station unit and schoolhouse



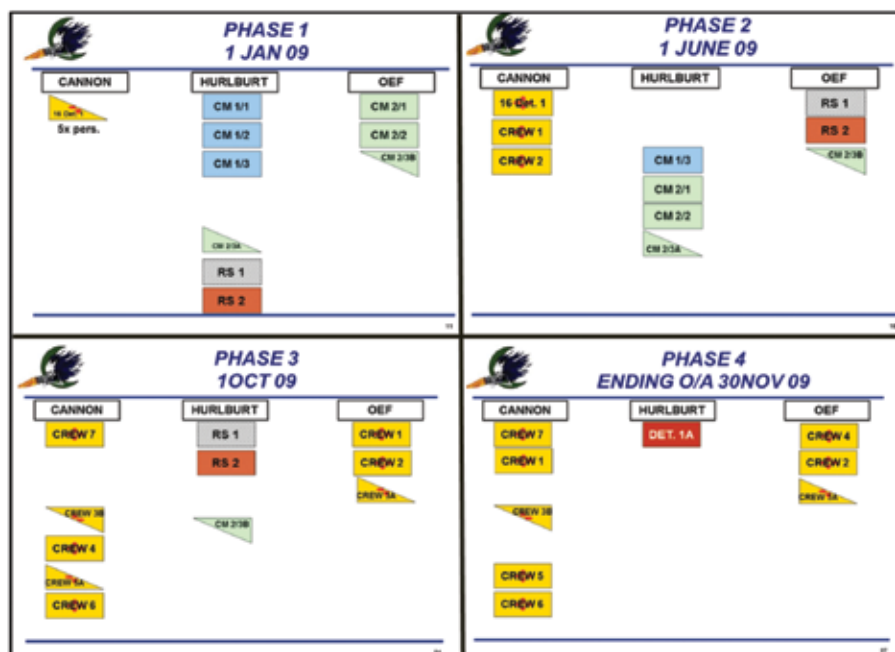
training. This real-world experience proved that the squadron could indeed prosecute its mission from 3 separate bed-down locations; it would not be easy and could not be sustained for long, but recent experience proved it was doable. The squadron required flexibility and a slight reprieve from other higher headquarters taskings (i.e. it couldn't operate from more than three locations), but the Spectre community could do it. Therefore the Wing leadership approved the option of moving the squadron, its associated training system, and the diverse AC-130H support elements, while never skipping a beat with OEF operations, as the way-ahead.

EXECUTION – The Lilly Pad Approach

With the hard-crew concept implemented, the squadron executed relocations in elements of one to two crews. Upon completion of a 60-90 day OEF deployment, each crew would be off-line for 90 days to take post-deployment leave followed by pack-out in Florida, cross-country movement, and unpack at Clovis Air Force Base. The crew would then conduct pre-deployment spin-up at Cannon for 90 days before return downrange. In the figure below “CM 1/1” is a good example. CM 1/1 identifies the crew as Cannon Move Element 1 / Chalk 1. Chalk 2 (Crew #2) would follow along a similar timeline. The CM 1/1 crew would complete its combat deployment on or about 28 February, then spend March through May taking care of family business and PCS-ing from Hurlburt to Cannon, accomplishing flight re-currencies from June through August, then would redeploy to OEF in September as “CVS 1”. That crew would represent a landmark achievement as it would serve as the first Cannon-based AC-130H crew to deploy.



Downrange ops don't miss a beat. (Photo courtesy of Col Sean Farrell)



Summary

The relocation by the 16th SOS from Hurlburt to Cannon was by no means easy. There were simply too many challenges (though successfully overcome) to be properly captured in this condensed case study. Although this assessment is relatively brief, future military planners or decision makers should walk away from it with the following points: First, talented people can accomplish anything. Secondly, unity of effort is paramount in any challenge. And, finally immediately available top-down leadership, with overarching guidance, will go a long way in establishing mission focus.

Additionally it should be reinforced that the relocation of the squadron had no previous template to begin with. However, when following basic planning procedures and establishing a guiding framework, even the most difficult tasks can be overcome. Finally, this assessment serves to recognize the Air Commandos and their families who successfully accomplished this mission. While the focus has been on the 16th SOS, migrating the ops component was only half of the challenge. From maintenance, to ammo, and all of the support agencies, everyone involved proved critical and executed a monumental task with precision and elegance.



About the Author: Col Vardaman is a “Ghostrider” from the AC-130U community of the 4th SOS. He is currently stationed at the Pentagon as part of the HQ USAF Staff.

Col Ferrell is stationed at Cannon AFB serving as the commander of the 27th SOG.

Footnotes:

1. “Development and Employment of Fixed-Wing Gunships”, Jack S. Ballard, Office of Air Force History, US Government Printing Office, 1982.
2. Cannon AFB now has more aircraft assigned than Hurlburt Field
3. 14 Sep 2006 email from SQ/CC (Lt Col Fordyce) to all 16th SOS personnel.
4. Crew complement—pilot, copilot, flight engineer, navigator, fire control officer, electronic warfare officer, load master, sensor operators, and aerial gunners.
5. Known as a Site Activation Task Force (SATAF)
6. 16th SOS draft concept brief slides, March 2008. “CVS” is the aviation identifier for Clovis (Cannon AFB), NM.

A LONG, HARD SUCCESSFUL DAY

“The fall issue of the Air Commando Journal contained an article called Gunship III about the AC-119 gunships used in the Vietnam War. It reminded me of one of the most successful days I had as a Forward Air Controller (FAC) while I was assigned to the 1/9th Air Cavalry Squadron. I had an unusual tour as I was the only FAC assigned to the Helicopter Reconnaissance Squadron and therefore worked with all three of the 1st Air Cavalry Division’s brigades so I worked over the division’s entire area of operations (AO). To do the job I properly I flew helicopters with each troop in each brigade, in addition to the USAF’s North American OV-10 Bronco. I later transferred to Nakon Phanom (NKP) flying over the Ho Chi Minh Trail with the 23rd Tactical Air Support Squadron (TASS).”

By LtCol (Ret) Ray H. Janes

The 12th of May 1969 started out as a really quiet day for me, but it didn’t stay that way for long. I flew a Visual Reconnaissance (VR) mission in the morning and then flew a second one that afternoon when I was called by the Tactical Operations Center (TOC) from 1/9 Infantry to help extract a Long Range Reconnaissance Team that was surrounded by Viet Cong (VC). It was a very hot fight and fortunately I was successful doing what FACs often had to do to get soldiers what was needed for the situation, but that’s another story.

When I landed it was close to sunset and I was surprised when my crew chief signaled me to only shut down the left engine. After I did he climbed up to the cockpit and told me that the 1/9th TOC wanted me to call them on the radio, which was very unusual. I switched frequencies while wiping the sweat from my face and asked they needed. They told me the “Last Light” flight, Army helicopters from the 1st Cav, needed me to help them out. Theirs was the last scheduled flight of the day flown just before sunset to try to locate sites where the VC had set up rockets to fire at the base at night. Night rockets were a regular occurrence because the Division headquarters and the 3rd Brigade were stationed there.

The troopers had found a VC anti-aircraft artillery (AAA) site and had destroyed one gun, but were out of ammunition,

fuel, and ideas. They wondered if I could come and help finish the job. I said I would if they could hang on while I refueled. They agreed since they were close to the base. I signaled my crew chief and told him I needed gas in a hurry. He said he could do that if I would taxi down to the fuel bladder because there was no fuel truck available. I told him to pull the chocks and lead me to it. He jumped in my jeep and led me to the fuel.

When I arrived at the bladder he signaled me to taxi the nose of the bird as close to the bladder as possible and after I did I shut down. While he and another guy climbed up on the wing to refuel the aircraft, I left the cockpit to take care of some personal business and get a big drink of water. Flying the OV-10 was very hot work. I climbed back into the bird just as they finished fueling and got the signal to restart. With both engines running, I attempted to turn away from the fuel bladder, but we were parked so close to the bladder and slightly downhill so that all I was doing was jamming the nose into the bladder. This is not a good thing to do with the engines running, so the crew chief climbed back up to the cockpit and told me to reverse the props and they would try to push the aircraft far enough backwards to allow me to turn away from the fuel bladder. This is another instance where a FAC had to do something in a combat situation that would otherwise have



OV-10 Aircraft (USAF Photo)

been a no-no. Reverse thrust was not to be used to back up the OV-10 because the landing gear was not designed to handle it. We did it anyway.

The ground team straightened the nose wheel and signaled they were ready to push, so I put the engines into reverse thrust and eased the throttles up. I slowly backed up a few feet while they pushed until the crew chief signaled me to reduce the power. We had successfully moved the aircraft far enough from the fuel bladder that I was able to turn and taxi toward the runway.

After takeoff I contacted the Last Light flight and they briefed me on the mission. When I arrived on scene they pointed out the three AAA positions. Each one was the usual circular ditch with the gun mounted in the center so it could fire 360 degrees. The three positions were also situated to allow them to focus all their fires on one target or to cover each other if they were attacked. Last Light pointed out the AAA site they had destroyed and returned to base. I asked the TOC if any gunship helicopters could be scrambled for me to control, but they said it was getting too dark and they had no flares to work with. I then contacted an artillery battery for support, but they said they already had a fire mission. Still, I wheedled a few rounds out of them and they destroyed the second AAA site before they were ordered to fire their previously scheduled fire mission. As it was getting darker and darker, and I was afraid that any strike missions I could get would not have flares, I convinced the battery to keep one illumination round ready as a marker for me. They agreed since they had two other guns to begin firing their mission.

I had been on the radio to the Direct Air Support Center

(DASC) and they told me that there were no fighters available, but if I could wait 20 minutes I could have a Shadow flight. I had to ask what a Shadow was and they told me it was a gunship. Since I had the artillery battery firing for me at that time, I thought I could wait.

The Shadow gunship contacted me and unfortunately I didn't note his complete call sign in my diary. I described the target to him and when he told me he had me in sight, I replied I was putting in a marker, dove toward the target, and fired a rocket. At the same time, I called the artillery to fire their illumination round. The marking rocket and the artillery round went off at about the same time. The Shadow said, "Man! With that firepower you don't need us." I laughed and told him that I had been worried about marking in the darkness. That was when he informed me that he had flares available. What I did not know about gunships! I directed Shadow to the target using the mark I had fired and he told me that he had it from then on.

As I turned for home I saw the stream of fire from his aircraft hitting the AAA sites. That was answered by the VC shooting back at Shadow. The pilot radioed, "Whoa they're really down there aren't they?" I answered, "Yep, and their all yours." He said, "They're dead meat now!" And they were. Shadow called them destroyed as I lined up with the runway for the last time that day. It had been a long day, but it wasn't over yet.

I landed and headed for the hooch to eat out of my stash since the chow halls were closed. I had my meager dinner and headed for a cold, but refreshing shower. I had just settled down to write home when the alert siren sounded. I rushed down into the bunker and listened to the Green Line begin firing. It didn't

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TOP: Most gunships, like this AC-119G, were painted black on the bottom. It made them less visible from the ground at night. (U.S. Air Force photo)

BOTTOM: Capt. William Groves, AC-119 navigator, gets the coordinates of enemy positions from an allied ground commander. With such devastating firepower, accurate positioning was essential. (U.S. Air Force photo)

last too long and I went back, finished my letter, and went to bed.

The next day I learned that six enemy had been killed in the wire. It was the general opinion that they were to have mounted an attack to get the helicopters to scramble so they could be shot down by the anti-aircraft guns that had been mounted outside the camp. Those enemy soldiers evidently had not gotten the word and their efforts were wasted. I don't know if it was true, but the story circulated that the base barber had been one of the attackers killed in the wire and there was a new barber the next time I needed a haircut. If the Shadow crew reads this I want them to know they did more than just destroy a gun, they saved a lot of lives – including mine since I might have been ordered back out to fly that night. We normally didn't work with gunships because they usually dealt directly with the ground troops, but I was sure happy I had the chance to see what they could do. It's no wonder the ground troops loved to watch them work!



About the Author: Lt. Col. Ray Janes, USAF Ret. is a retired Fighter Interceptor pilot who spent his Vietnam tour as a FAC/ALO with the 1/9th Air Cavalry Squadron flying the OV-10 and three different Army Helicopters. Later he transferred to Nakon Phanom RTAFB and flew over the HO Chi Minh Trail. He retired in 1975 and taught English and Journalism for 16 years before retiring finally in 1992 in Denton, TX. Now he volunteers at the Cavanaugh Flight Museum and has written three books about his service career. They are squadron histories about the 94th FIS, 317th FIS in Alaska and his Vietnam Diary of which this story is a part.



IRREGULAR THEN AND NOW

By Stephen Eells

In 2007, HQ AFSOC/A3T, Chief, Operations Training, Col Mark Pruitt, asked me to write this paper to provide today's SOF crews with a view of how forward air controllers (FACs) trained for and executed missions to find, track, and engage an enemy who employed irregular warfare in Vietnam. To provide a comparison to today's fight, this paper describes training and training length; tactics, techniques, and procedures (TTP); equipment; command and control (C2); threat; and capabilities of FACs in 1972.

Atmosphere

The late 1960s and early 1970s were a vastly different time than the 1990s, 2000s, and today. America's very vocal and hostile minority vented their loathing of the conflict inappropriately, casting derision on military members. The nation experienced numerous large protests and demonstrations against the military and the war in Southeast Asia. Jane Fonda visited with the enemy, giving him hope that his stamina could win out against our decaying commitment. The military was populated with draftees, patriotic volunteers, and young men who volunteered to gain more control over their military destinies than draftees. The Air Force had flying squadrons in and around the combat zone and assignment to them was recorded as a permanent change of station (PCS). Continuation training requirements and flight evaluations were waived for combat assignments. During the conflict, over 58,000 American service members were killed, 303,000 were wounded, and 1,600 were registered as missing. Military members, dealing with a feeling of isolation from their communities at home and a significant risk of death or being wounded during the combat tour, lived life as if there was no tomorrow. The military clubs were bulging at the seams, drinking and partying was heavy and continuous, and behavior that would warrant punishment today was condoned, expected, and even supported.



REGULAR WARFARE

AND NOW

“ This is another type of war, new in its intensity, ancient in its origin -- war by guerrillas, subversives, insurgents, assassins, war by ambush instead of by combat; by infiltration, instead of aggression, seeking victory by eroding and exhausting the enemy instead of engaging him.

— President John F. Kennedy, June 6, 1962

”



Top Photo: Steep rocket pass marking a bridge over a stream in the jungle.

(Photo courtesy of Stephen Eells.)

Middle Photo: O-2A fires smoke rocket in Vietnam.

Bottom Photo: A-7 on a low angle bomb run.

(Photo courtesy of Stephen Eells.)





O-2A demonstrating increased drag due to the gear doors during gear extension and retraction. (Photo courtesy of Stephen Eells.)

Preparing Warriors

I reported to Hurlburt Field at the end of Sep 1971. My training included Air-Ground Operation School (AGOS), O-2A initial and mission qualification at Hurlburt, and Jungle Survival training at Clark AB, Philippines, to prepare me for a late November arrival in Vietnam. My class was about 10 first-assignment pilots, one Captain on his second assignment, and me – a second-assignment Lieutenant with about 4 months experience in C-141's. The first step, AGOS, provided us with a myriad of useful information to include command and control (C2) structure applicable to FAC – airborne (FAC-A) and air liaison officers (ALO); tactics, techniques and procedures (TTP), briefing requirements, and rules of engagement (ROE) for directing fighters, naval guns, and field artillery; visual reconnaissance (VR) techniques; ordnance types, capabilities, and fusing; fighter capabilities; and enemy air defense systems and recognition.

With AGOS behind us, overloaded with new knowledge and attitude, we went to Holley Field for “checkout” in the O-2A – irreverently referred to as Oscar Duck, Oscar Deuce, or Oscar Pig. At Holley we found a small civil twin engine aircraft with a design gross weight of 4600 pounds, heavily modified with external rocket pods, armament panel, radio rack, and multiple additional radios flown at a gross weight of 4850 pounds. Training was very basic – learn to takeoff and land, shoot rockets, operate and talk on multiple radios --usually VHF to the Direct Air Support Center (DASC), UHF to the fighters, and FM to the ground party(ies), read a map, look through

binoculars, manage and clear the fighters, control the yoke with your knees, and write with grease pencil all over the windows – most of which had to be accomplished simultaneously.

As qualified O-2A FACs we considered ourselves lethal “weapons” in the US arsenal, ready to take on the Viet Cong (VC) and defend freedom in Southeast Asia (SEA). We went home to our families to say goodbye and then, from various locations, we boarded commercial aircraft to get to Travis AFB, California, to meet our contract flight to Clark Airbase.

“Snake School”, as Jungle Survival was known, was a blur of heat, humidity, boring but informative classes, a jungle exercise with indigenous Nigretos, and an anxiety that if you were shot down you would probably die from snakes long before the Viet Cong got to you (although they assured us this was not true).

Arriving “In Country”

The next stop was Vietnam. It was one hop into Cam Ranh Bay and another to Phan Rang, where we would get our in-country indoctrination. The place was beautiful -- too bad they were having a war there. The sea, beaches, mountainous terrain, and jungle growth were spectacular. Most of the population was very poor, but the people were always smiling and laughing. Maybe a good lesson to learn.

Our stop at Phan Rang was intended to provide a few flights with an IP to “see how it’s done in-country” before we went to our new homes and assignments. The first night in-country was a little uneasy, waiting for the VC to knock down the door or a rocket to come through the roof, but these feelings quickly faded to a more standard feeling that “it always happens to the other guy.”

During the short stay at Phan Rang, we learned our areas of operation contained the VC, North Vietnamese Army (NVA), and later the People’s Republic of China (PRA) Army’s capillaries of resupply and infiltration. Except for the infrequent villages and firebases, anything that moved was suspect. With confirmation that there were no friendly patrols in the area, we had clearance to strike.

My new home was Pleiku AB in the central highlands. I was assigned to the 20th Tactical Air Support Squadron (TASS) Detachment 1 (the squadron was based at DaNang). We were known as the Tigerhound Covey FACs and my call

sign was Covey 525. We shared the base with Vietnamese A-1 and AC-47 units. We had great quarters, everyone had his own room. Unfortunately, these rooms had no air conditioning but it was cool at night. The quarters building could be described as an old one-story motel with a revetment around it and communal bathrooms. The squadron hooch bar was in the back, and there was a tiny BX, all-ranks club, chow hall, primitive fitness center, and squadron headquarters building. We walked everywhere.

Ben Het Firebase is the Central Highlands of South Vietnam. (Photo courtesy of Stephen Eells.)



Preparing for Battle

Mission preparation was a combination of getting briefed and collecting so much gear you could hardly walk to the plane once you suited up. With a map bag the size of a small suitcase full of one-to-50,000 (1/50) and one-to-250K (1/250) scale maps we first went to the intelligence (intel) shop and got briefed. We would get our area assignment; info on recent air strikes; friendly and enemy activity including possible threat locations; requests for reconnaissance and bomb damage assessment (BDA); targets or locations to be struck; fighter aircraft on the air tasking order (ATO) and their loaded ordnance, to include your own fighters; scheduled strikes like B-52 drops called ArcLights; and any other info or requests that were applicable. Notes were taken and maps were marked.

We would check out our “secrets” to authenticate people on the radios and manually encrypt messages for transmission over non-secure radios. We would also get the KY-28 key device to prep our crypto system for transmitting classified information, but using the system proved to be a nightmare. We would then get the weather briefing.

Next we were off to the equipment shop to get our heavy ballistic helmet, survival vest, flack jacket (most of us sat on it), back-pack parachute, .38, M-16 and extra clips, binoculars, and starlight scope if it was a night mission. This was in addition to the other stuff we normally had with us such as water, snacks, grease pencils, and whatever extra survival gear we thought appropriate.

The Vietnam heat and all this stuff made for a sweaty walk to the aircraft, which were parked in their roofless revetments. Roofless was significant because it allowed the sun to bake the Duck while it waited for you to get there, while the revetment walls served to block any breeze. The 150-degree interior (typical for a sunny day) inspired the pilot to get the front engine (the airflow was the O-2A's only air conditioner) started after approximately 7 seconds of sitting in the seat.

The aircraft were loaded with two rocket pods carrying 7 rockets each. Normally the rockets contained white phosphorus for marking targets, but we could also take high explosive (HE) or fleshettes (nails). The O-2A had 2 more hard points used for illumination flares for night ops or whatever was deemed necessary in a given mission.

The heat and altitude also affected takeoff and climb-out. The runway was 9000 feet long, and on a hot day we used most of it. One feature of the O-2A that was evidently overlooked but important to us--relative to over-gross-weight operations, rocket-pod-produced drag, the Vietnam heat, and the higher airfield altitude--was the drag associated with the landing gear doors during gear retraction. After takeoff the pathetic climb rate was insufficient to raise the gear until a pilot had achieved enough altitude to sacrifice climb to get the gear up.

In the Skies of Vietnam

With gear successfully up, I was enroute to my assigned area. It could be the northeast portion of Cambodia or Vietnam north of Pleiku for about 200 miles from the Laotian border to halfway across Vietnam. We usually flew between 1500 and 2500 feet for good VR capability. When we became aware of SA-7 man-portable air defense systems (MANPADS) in

our area, altitude became more significant. Recommended altitudes basically ruined our ability to do VR, so most of us overlooked the recommendations. The general feeling among FACs was that the old Duck didn't produce enough heat for those early versions of the SA-7 to lock onto. The other weapons we encountered in Vietnam and Cambodia were small arms, 12.7mm, 14.5mm, 23mm (twin), 37mm, and I did see one 57mm anti-aircraft gun during the spring offensive. Night flights over Laos were another story, with a much larger menu.

Our mission was to conduct VR; support fire bases and patrols from fire bases; support “non-national” military forces; collect BDA from strikes without FAC control such as Arc Lights; and request and control strikes from fighters and artillery on preplanned and pop-up targets for close air support (CAS) and battlefield air interdiction (BAI). We did VR for, and in conjunction with, ground parties and fire bases and also searched on our own for traces of the enemy. Because we flew



O-2A cockpit. Armament panel in the top middle, gunsight to its left. Missions flown single piloted. (Photo courtesy of Stephen Eells.)

frequently in our own areas we became very familiar with how things should look every day; signs of activity and changes thus became more obvious the more we flew in the same area.

Our missions lasted approximately four hours, which gave us plenty of time to check in with the fire bases to see if they had any intel or targets and then to do our own intel collection if we were not directing strikes. Missions spanned the spectrum from eye-strain and boredom to pandemonium. A good FAC day was the latter.

One day I was about 90 miles north of Pleiku, looking for signs of the black pajama'ed Charlie (VC) when I got a call from the Direct Air Support Center (DASC). I was checking the fords across streams for water pulled up one side indicating recent traffic; soft or damp places on the dirt roads that would show fresh tracks; and edges of the jungle for broken or damaged vegetation. I was using binoculars, which required a

learned talent to transition from normal vision onto the spot you wanted to check out while keeping the aircraft, your head, and the binoculars still enough to provide a good look. Two hands on the binocs helped stabilize them so I was flying with my feet on the rudder pedals and my knees controlling bank with the yoke. Changing bank changed elevator trim requirements so the nose would drop until airspeed increased, which increased elevator trim effectiveness so the nose would come up reducing airspeed, which would decrease trim effectiveness, and so on. Essentially I was porpoising around, essentially jinking – varying altitude and heading to complicate anti-aircraft artillery (AAA) tracking solution. This work was pretty tedious and I was hoping that the DASC had something more interesting for me.

A Mission Unfolds

The DASC called and directed me to come up on secure radio. They said the firebase Ben Het had a team in the jungle and found what was reported to be approximately 50 VC and NVA, vehicles, supplies, and weapons including 12.7/14.5s and maybe 23/2 AAA. I requested lots of general purpose bombs followed by anything incendiary to work the area.

It was standard FAC practice to record this information in grease pencil across the top of the side window. This practice was much easier to do than trying to write on paper, easier to find the info to give to the fighters, and it kept our heads up and out of the cockpit when writing or reading.

The friendly team was undetected and had watched the enemy pull up into the jungle at daybreak. (The enemy moved mostly at night to avoid detection.) The team sent a runner back to the firebase with the information rather than make a radio call and possibly alert the enemy unit that it had been observed. The VC had radios and listened for intel on our freqs. We even talked to them sometimes. So the cat and mouse game began. We knew they were there, but they didn't know that we knew. The DASC gave me coordinates of the target and of the team and said it was working on launching or diverting fighters, then provided a UHF strike frequency.

Ben Het was a Montagnard firebase, which made a difference. Montagnards were courageous fighters and didn't want the communists telling them what to do with their lives. They were very primitive and when we saw them in the town of Pleiku they would be barefoot, in loincloths, and the women bare-breasted, carrying their kids in slings over their shoulders. When the Montagnards said they had a target, they had a target – not necessarily so with the Army of the Republic of Vietnam (ARVN). The firebases run by the ARVN always thought they had enemy on the perimeter, or so it seemed. We blew up a lot of jungle and monkeys because the ARVN thought Charlie was in the jungle whenever they heard a noise.

I was about 40 miles east of Ben Het and headed that way. I had two of the ingredients required for an awesome day – great target and request for support to a great firebase. Most of our targets and strikes were against small numbers of enemy with hand-carried weapons and supplies. In comparison, this mission to Ben Het was great. All I needed now was ordnance and some luck to provide a surprise party for the VC and NVA, who were far easier to kill when they were all clustered

together than after they have fled individually into the jungle.

My mind was starting to race and the Oscar Duck was plugging along at 140 knots. It seemed I would never get there at that speed. The target was about 8 kilometers (klicks) north of the firebase on the east side of a road or trail and a creek. The friendlies were about a klick west-southwest on a knoll. Upon arrival, I would stay over or south of the firebase until I had fighters on station to preserve the surprise party. I pulled on my VHF, UHF, and FM listen buttons and set the volume to medium – VHF for Crown (call sign of the DASC), UHF for fighters and FM for Ben Het. I was not listening to HF – it was noisy, hard to understand, and used almost exclusively as a last-ditch effort to get to the DASC. My transmit waiver switch was set to UHF in the hopes that the next radio call I would get would be a formation of fighters diverted from another, less-important mission. I got the distance (known as DME) and radial off the Pleiku TACAN from my 1/250 map in case the fighters needed it – I was too low to pick it up from my aircraft TACAN radio. I put the 1/250 and the appropriate 1/50 under my right thigh and made a grid on my front window with grease pencil to keep track of my rockets.

As I approached Ben Het, I moved the transmit waiver to FM and gave them the standard call. “Ben Het, Covey 525.”

After a minute or two, “Covey, this Ben Het.”

I wanted to mention the Crown conversation so they would know I knew about the target and wouldn't need to brief me on it, so I responded, “Ben Het, Covey - just talked to Crown, how you doin'?”

They evidently caught on, “Covey, we do fine, how you do?”

“Ben Het, I am just checking in and plan to work to your south unless you have something for me.”

Cat and mouse was still alive and well, “Good Covey, talk to you later.”

I was headed for a loose orbit south of the firebase to wait for fighters. I was familiar with the target area and planned to arrive over it at the same time as the fighters. A quick rocket with the fighters ready to roll in would minimize the time for the enemy to react and maximize the concentration and potential for BDA.

Earn your Pay – Its Crunch Time

I was starting my first lazy left turn south of the firebase when I heard, “Gunfighter 34, check.” His wingman checks in, “Two.”

“Covey 525, this is Gunfighter 34”

I moved my wafer switch, which manually selected another radio, to UHF and responded, “Gunfighter, this is Covey, say ETA and angels.” (ETA is estimated time of arrival and “angels” was jargon for altitude in thousands of feet.)

“Covey, 5 minutes, angels 15, flight of 2 F-4s, 12 MK-82s each - selectable, 20 mike mike, 15 min station time.” (15K feet altitude, 12 500# bombs with the “selectable” ability to choose nose or tail fusing, and 20mm cannon. Nose fuse was used for targets on the surface and tail fuse for those under the surface.)

“Roger Gunfighter, target is 50 VC/NVA, vehicles, weapons, maybe 23/2, supplies, possible small arms and light

automatic weapons fire, target elevation 2300 feet, coordinates Yankee Bravo 7534, friendlies west 1 klick, over.” (Roger is a brevity word for “I understand,” 23/2 was short for ZU 23-2 (23mm twin barrel AAA), YB 7534 was the grid coordinate on a 1/50 map, and klick was jargon for kilometer.)

“Roger Covey, 50 VC vehicles, weapons, supplies, possible small arms and light automatic weapons fire, 23/2, 2300 feet, Yankee Bravo 7534, friendlies west 1 klick.” “Two copies.” (Lead fighter aircraft and each wingman had to acknowledge the receipt of all information that was transmitted from the FAC and necessary for the safe and effective execution of the strike.)

Starting at the top left corner of my side window below the target info, I wrote all the information about the Gunfighter flight, which was required for the post-mission debrief.

“Gunfighter, this is Covey, run-in will be southeast to northwest, don’t overfly the friendlies. I will mark the target and have the friendlies pop a colored smoke, over”

“Roger, Covey, SE to NW, not over friendlies, friendlies with a colored smoke. Two minutes out.” “Two copies.”

I headed north toward the target to set up for my rocket pass and observation position. Proper management and geometry of the FAC’s maneuvers made air strikes smooth and efficient, eliminating the requirement for the fighters to make unnecessary orbits, conserving precious fuel, and getting bombs on target quickly. The requirements included rolling in on the rocket pass when the lead fighter was at about 180 degrees from his roll-in, firing the rocket, pulling up and turning to see where the rocket hit in relation to the target, then getting into position close to the run-in line so you could see that the fighter was pointed at the target before clearing him to drop. The desired closeness to the line was directly proportional to the closeness of the friendlies to the target. This was all done while communicating with the fighters, the ground party, the DASC, and additional fighters.

As I approached the target I confirmed the plot on my 1/50 map corresponded with what I was looking at on the ground. A quick check was all I needed since, again, I had worked this area many times. Additionally, the terrain features--with an open field, trail, and stream--were unique and there were not many places in this jungle that would support cover for a target this large.

“Gunfighter, I want 4 MK-82s per pass with some spread, nose fuse.”

“Roger, 4 per pass, nose. We have Ben Het in sight.” “Two.”

“Covey, we have you in sight, give us a wing rock.” I bank left and right and Gunfighter says, “affirm Covey in sight, we are about three miles north starting our obit. Two, take spacing.” “Two.”

Wafer switch to FM and I call, “Ben Het Alpha, Covey 525, over.” (Ben Het Alpha was the team a klick from the target and eight clicks north of the firebase.)

“Covey 525, Ben Het Alpha, good to have you, got you in sight.” I recognized Alpha as Lieutenant Nguyen, which was not all that descriptive since half of everyone in Vietnam was named Nguyen – but I had the pleasure to work with the LT

before.

“Alpha, Covey, are there any changes to the target or your position?” If the target moved or they moved I needed to know, so that I could get the fighters’ bombs on the enemy and not on the friendlies.

“Covey, no changes since report to DASC.”

“Alpha, have you got colored smokes?”

“Of course Covey.”

“Alpha, request you pop a colored smoke at my command, in a minute or so.”

“Roger, wilco.” (Wilco is brevity for will comply.)

Wafer to UHF and I called, “Gunfighter, Covey, I have you in sight, my 12 o’clock, I’m in to mark.”

“Roger Covey, we have you in sight. Two, arm ‘em up for nose and 4 per pass.” “Two.”

I selected my left rocket pod with a switch on my armament panel, and moved the wafer to FM. The target was pretty much off my nose, so I pulled it up about 30 degrees to trade airspeed for altitude, rolled up to about 90 degrees of bank and pushed bottom rudder. This quickly put me in a nose-low attitude losing minimum altitude while I got my nose on the target and regained coordinated flight. I flipped the pod arm switch on the armament panel, centered the gunsight pipper on the trail mid way along the area where the VC was tucked into the jungle, hit the pickle button, and transmitted, “Alpha, pop your smoke and say color.”

The rocket fired and streaked toward the target. I started my pull up and a hi-yucca maneuver (nose high, wing low, then bottom rudder) so I could see my rocket splash about 50 meters left, or Southwest of the trail, but close to the desired spot from Southeast to Northwest.

“Covey, Alpha, green smoke away.”

“Roger Alpha, tally ho.” Wafer switch to UHF and I call, “Gunfighter, do you see the green smoke?” (Tally ho is brevity for “I have it in sight.”)

“Roger Covey, tally ho green smoke.” “Two.”

“Gunfighter, green smoke is the friendlies, confirm.”

“Roger, Covey, Gunfighter has the friendlies at the green smoke.” “Two.”

Back to the target, “OK Gunfighter from my Willie Pete (white phosphorus smoke from my rocket) go 50 meters NE



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to the trail. From that point I want your bombs in the jungle along the side of the trail walking to the Northwest, over.”

“Tally ho, roger along the Northeast side of the trail to the Northwest from your mark. And Lead is in (maneuvering his aircraft into a dive toward the target to establish appropriate parameters to release bombs) with FAC in sight.”

To minimize the possibility of the fighter colliding with the FAC during run-in and pull-off, the fighter would call whether he had the FAC in sight or not. If he did not, but the FAC had the fighter in sight, safe separation could be maintained. If neither had the other in sight, their positions relative to the target would be rapidly discussed to meet the requirement. The bottom line was that the FAC should always know where the fighter was and work to maintain safe separation. For the first couple of runs with these guys there was plenty of vertical separation. Later, they would get down into “my airspace” and this drill would become more important.

“Roger, Lead, continue.”

Wafer to FM, “Alpha, lead’s in - put your heads down.” Wafer to UHF.

The Lieutenant responds, “Roger Covey.” Which probably meant that the whole team was poised behind their cover with eyes on target, similar to American kids after dark on the fourth of July.

My rocket pass and hi-yucca put me due South of the target headed Southeast, 180 degrees from fighter run in. Lead’s roll in point was at my 10 o’clock high so I made a quick left turn to put myself in good position to assess that he was

headed for the target, not the friendlies.

“Gunfighter Lead, cleared hot.” The fighters were required to be “cleared” by the FAC before releasing the bombs because the FAC had the position and the best situational awareness (SA) to assess that the run-in and ground situation were good for bomb release.

Seconds later, under the stress of pulling G’s, Lead says, “Lead’s off, FAC not in sight.”

“Roger Lead, I have you in sight, at your six, no factor.” (Six is his clock position where I was directly behind him.)

Lead’s bombs came off clean and impacted very close to the desired area. The shock waves from the four bombs raced across the jungle and the clearing. Almost instantaneously there were medium and small secondary explosions near the first two bombs.

I turned more to the North to set up an orbit in the shape of a figure eight, oriented Northeast and Southwest across the run-in track. I would cross the fighter run in track behind them, using the size of the lobes to adjust the timing.

“Lead, good bombs. Two, I want you to drop all four of your bombs short of where Lead’s first bombs hit, still in the jungle next to the trail.”

“Roger Covey, walk mine up to Lead’s, I’m about 15 seconds from roll in.”

As I maneuvered and Two prepared to roll in, I hear on VHF, “Covey 525, Crown over.”

Wafer to VHF, “Crown, Covey 525, standby, strike in progress.” Wafer to

UHF.

“Covey, Gunfighter Two is in, FAC in sight.”

“Two continue.” “Two, cleared hot.”

Four bombs clear.

“Two is off, FAC not in sight.”

“Roger, Two, FAC is clear.”

The first was short of Lead’s but the next three were long and hit where Lead’s landed.

“Covey, Alpha, you and Two were taking small arms and machine gun fire from edge of jungle 100 meters South of bombs.”

Great; if Two dropped where desired we would have silenced the ground fire. 100 meters isn’t very far even with the jungle for protection, and they chose to fight with small arms and machine guns against F-4s with 500 pound bombs instead of disperse into the jungle. They must be up to something big and important OR they realize if they can take me out, the strike will stop – at least temporarily. Either way, taking them out became my number one job. Wafer to FM, “Roger Alpha, thanks for the info.”

Wafer to UHF, “Gunfighter, Covey – Alpha reports small arms and machine gun fire from the edge of the jungle 100 meters South of our Southeastern-most bombs.”

“Covey, Gunfighter – copy ground fire 100 south.” “Two.”

“Two, yours were a little long. Lead, lets continue to work the jungle along the trail to the Southeast of the previous bombs to take out the ground fire and whatever else is in there.”

“Roger, Southeast of previous.”

A-7 post-mission fly-by. Not uncommon when fuel, time, and circumstances permitted. (Photo courtesy of Stephen Eells.)



At the altitude the fighters were dropping and the caliber of weapons the VC were using, Gunfighter was not in much danger. On the other hand, I decided to change my orbit from the figure eight across the run in to a circle or oval Northeast of the it, using the triple-canopy jungle to mask me from the ground fire. I didn't have as good visibility from there, but I did have Alpha watching for me. If we had movement on the trail or more ground fire, Alpha would let me know.

Wafer to VHF, "Crown, Covey 525, over."

"Covey 525, Crown, we have Gunfighter 34 flight and Skeeter 56 flight for you."

"Roger, Crown, I am working Gunfighter now, standing by for Skeeter."

"Roger, Covey, Skeeter is a flight of four A-7s, with MK-82 high-drag and Nape."

I was thinking this is great: "Snake and Nape" or "shake and bake" would do just fine. High-drag bombs, called Snake Eye, have a retarding fin to stabilize the bomb and provide a smooth and consistent arc from aircraft to target – very accurate. Nape, of course, is short for Napalm (a fire bomb) and "shake and bake" was a colloquialism used frequently.

"Thanks Crown, copy all."

"Covey, lead is in, FAC in sight."

Wafer to UHF, "Roger, continue." "Lead, cleared hot."

Four more bombs clear.

"Lead is off, FAC not in sight."

"Roger Lead, FAC is clear."

Must be like golf. When the previous player putts long the tendency is for the next player to putt short. And so it was with lead's bombs. The string was good left and right but a significant gap of 200 meters remained between his last bomb and Two's first bomb—a common problem after the USAF restricted the fighters to altitudes up in the ionosphere.

As I am repositioning I hear, "Skeeter check in." "Two." "Three." "Four."

"Covey 525, this is Skeeter 56, flight of 4 A-7s, approximately 10 minutes out."

"Skeeter 56, Covey 525, I have three more passes with Gunfighter and I will be right with you. Gunfighter is at angels

The author with his aircraft in a revetment at Pleiku before a mission.

(Photo courtesy of Stephen Eells.)



15. Skeeter stay above."

"Skeeter standing by at angels 17."

"Gunfighter Two, I would like your bombs between lead's last bombs and your last bombs – fill the gap."

"Roger Covey, fill the gap and Two is in with FAC in sight."

"Continue." "Cleared hot."

The last four bombs were clear and Two called, "Two is off, FAC not in sight."

"Roger, Two, FAC is clear."

Two pressed below their SA-7 altitude restriction and I am certain it was to restore his dignity after his first pass and to try to impress the Navy A-7s that were up on strike frequency. Hopefully lead would not make an issue of it.

"Two, good bombs right in the gap, with two good secondaries. That should take care of the ground fire."

For the next two passes we worked the same area but farther from the trail. Both Lead and Two were pressing the altitude. This flight had a "can do" attitude and the USAF showed a favorable side to the Navy.

As standard procedure for the preliminary strike results, I briefed Gunfighter as they departed with the details I had on the strike as I wrote them on my window. Target info as previously briefed, time on and off target, 24 MK-82s no duds, two medium secondary

explosions, 3 small secondaries, small arms and machine gun fire, and that Bet Het would be providing more detailed BDA, which would be forwarded through intel channels after Alpha went in to clean up.

Gunfighter dropped from relatively high altitude with steep delivery angles, which was very different than what Skeeter's ordnance required. The A-7s would be low and shallow, providing great accuracy for the Snake Eye and making a big long splash for the Napalm. The Navy and Marines usually operated lower than the USAF anyway, and his different delivery profile would require me to fly a different orbit to stay out of the way but meet my requirement to assess their run in.

I briefed and directed Skeeter with very good results. During the strike, two more flights checked in, the last a flight of 2 Vietnamese A-1s from Pleiku. These guys were great, some with 10,000 flight hours. Many of them could actually hit what they were aiming at, without the help of computerized bombing systems or lasers and guided bombs.

Post Strike

After directing and debriefing the A-1s, with my side window and the top half of the windscreen full of grease pencil markings, four rockets remaining



Squadron patch. (Photo courtesy of Stephen Eells.)

of my 14, and my fuel gauge indicating about an hour remaining, I turned toward Pleiku very happy with the day's mission. Alpha was eager to get to the target and conduct BDA. Ben Het was grateful for our taking out the enemy five clicks from the firebase and not at the wire.

During the trip "home," I needed to transcribe all the info on the windows in grease pencil to paper so I could take it to debrief. The strikes were fresh in my mind so I would start with one, and write as much as I remembered, and then look up and check if I missed anything. This resulted in some periods when I probably spent too much time heads-down and not enough time clearing, but I could hear when Oscar Duck decided to climb or descend and any aircraft in my area had to check in with me. After one such heads-down period I looked up and two A-1s were in close formation with me, one on each wing. Without ordnance and with flaps down they could actually fly as slow as the O-2.

It was Spider 51, the A-1s I had just worked. When they saw me look up they called and said that they would meet me at the Tigerhound bar in about an hour and we would drink "one-on-one" to celebrate the great mission. I said roger and they accelerated toward Pleiku. How they got the idea of one-on-one applied to drinking I have no idea. But I did know when it happened Lead and the FAC would have a beer and we would drink it down together – as in chug. Then the wingman would want to do it. Thank

goodness it was only a two-ship that day. I will never understand how such small, skinny people could drink so much beer.

Other than the formation join up, the trip back was uneventful. Pleiku was not under rocket attack, so I didn't have to land at the village of Kontum on pierced steel planking (PSP) (slipperier than owl snot), and hand pump aviation gas into my O-2.

It had been a great day. I performed visual reconnaissance, targeting (munitions selection), appropriate application of ordnance, air traffic control, ground party coordination, tactical air control, plus managed a stack of fighters, conducted BDA, counseled/placated fighter pilots, strengthened international relations, controlled the aircraft outside technical order (TO--flight manual) boundaries, fired rockets, managed multi-frequency communications, utilized OPSEC/COMSEC, provided HUMINT, applied local area knowledge, etc. Fortunately, I did not have to perform survival techniques, self aid, aircraft battle damage measures, troops in contact techniques, CSAR or Sandy roles for fighters, etc.

It was a day like many, but not like most. Fortunately for me, even on days where ground fire was more intense and measures required to survive were significantly more necessary, I did not become a data point on the wrong side of the statistics – of a squadron of about 60 pilots, in the 365 days I spent assigned to the 20 TASS we lost 15 of our comrades, or 25%. On many missions, I used diving and jinking to avoid fire and returned to base with my share of battle damaged aircraft, but through good choices and lots of luck I was able to enjoy the ride to the USA on the "freedom bird" in a seat, not in a body bag.

The next day provided a hangover (from one-on-one). We also got Alpha's detailed BDA which indicated at least 50 enemy, several vehicles and trailers, ammo, supplies, machine guns, and 23mm AAA. Ben Het added another defeat to the VC and NVA's attempt to take over this remote part of Vietnam.

Evidently the leadership in the North grew tired and angry over these losses and during the next Monsoon

season sent a battalion-minus of NVA and PRC regulars to take Ben Het. The most tragic and painful mission for me during my tour was trying to support Ben Het, Lieutenant Nguyen, and the other courageous Montagnards as the camp fell. The weather was Delta Sierra (dog s---, very bad) and I was getting slammed around as I flew between cloud layers and through clouds and heavy rain. Ben Het requested ordnance on the firebase as the enemy came through the wire but there was no way to get fighters on-target in that weather.

And then there was no response on their frequency. Their radio or antenna could have been knocked out or--as the eternal optimist I was thinking--maybe they escaped into the jungle. The painful reality was probably that they were overtaken or would be shortly.

A couple of days later we got the official word that Ben Het fell. Based on the irritation that Ben Het had caused the North, I am sure there was no mercy demonstrated when the firebase was overrun. This loss was a sharp pain to me but only a prelude the heavy, deep, dull ache of losing 58,000 Americans in this conflict.

Within another year and a half, the mighty giant, the US of A, lost this irregular war – our strategy and plans were not effective against guerrillas, subversives, insurgents, and assassins who ambushed and infiltrated; we lost to a perseverance that eroded and exhausted the will of our nation, and we lost due to politicians constraining and directing the military. Fortunately the lessons learned were not forgotten and have provided significant positive impact on our military and civilian activities over the last decade and a half.



About the Author: Steve Eells retired from active duty USAF in 1993 with nearly 200 combat sorties, 598 combat flight hours, and 4333 military flight hours in the C-141, O-2A, KC-135, and HC-130 (AFSOC and USCG). His 37 military decorations include the Distinguished Flying Cross, seven Air Medals, and the Republic of Vietnam Cross of Gallantry with Silver Star. Steve is currently a USAF civilian and Deputy Chief of Operations Training, HQ AFSOC.




REFLECTIONS OF AN AIR COMMANDO

By CMSgt (Ret) Randy Anderson

Introduction

These are reflections and “ramblings” I have posted as my status on Facebook for the last three years of what it is like for me to be an “Air Commando”. I was asked to document them and share a rare insight into our own Special Operations Community but more importantly I feel an obligation to convey to civilians the message of the “Quiet Professionals” and an inside view of the mission so they can fully appreciate the magnitude of our culture, dedication, sacrifices and the mental toughness of what it takes to be an “Air Commando.” I view any military service as honorable and appreciate the sacrifices made as well and I am grateful for their service, however these writings reflect and document the pride, tenacity, devotion to duty and loyalty of the operators, maintainers, support and the families that truly sets us apart from others within the US military. These vignettes are not necessarily in any chronological order.


Mission

 I walked up to her with a slow stride admiring her as she was over 90 feet of steel and aluminum and I carefully stepped inside and laid my flight gear against the bulkhead towards the front of her with the deepest respect. I admired her, she was magnificent yet temperamental, and bristling with advanced avionics and weapons she was in essence a beast. I would start by courting her and say, “You and I have been together a long time, and I love your makeover from slick to Pave Low, you are so beautiful.”


She was a familiar friend as I walked around and touched her gently and whispered to her and asked, “Are you going to be naughty today or a good girl?” “You are so perfect but I need to check you out.” Climbing up, I dropped all her panels and looked inside and inspected. It was all good, so I closed her panels to make sure they were secure as I stroked her and traced my fingers across her just to reassure.

The MH-53 Pave Low is a beast, and

a thoroughbred and she didn’t take lightly to being abused or humiliated, yet many times she did for the sake of a mission. Nearly every time she would perform flawlessly, but sometimes even thoroughbreds have an off day. So as a precaution we all meticulously investigated and inspected during preflight and implored her to give us an uneventful night. That really didn’t seem to matter, she was her own woman. For over 20 years I would always ask her...”Is this going to be a good night or a bad one?” She remained silent as if it was for her to know and you to find out. If she was in a bad mood we often found out the hard way.


 I used to love flying cross country in an MH53 Pave Low, particularly in a large formation. We flew very low so when we crossed America’s heartland we made an impact and literally touched people’s lives and caused a stir. I loved leaning against my .50 Cal or 7.62mm minigun and watch a farmer on a tractor take his hat off and wave it wildly at us.


Or to fly over a school and watch the kids and teachers jump and down and squeal with delight. They were in awe of what was surely America’s finest. They didn’t realize that an elite force of special operators were overhead. That didn’t matter or shouldn’t have. The difference was we could actually see their faces and they could see ours when we happily waved back.


 Over the years there were many nights we were shot at by small arms, RPGs, AAA etc. Most of the time the threat never even came close, we just nonchalantly continued on our route to do our mission. I respected the fire discipline of our gunners on board. They would report it as we dashed through the night to accomplish our objective and even though they were ready to engage, they would simply just let it go when the threat wasn’t even close to hurting us. Everyone knew it was better to not do anything at all because it gave away our position and possibly compromise the mission. We could have easily cut the

threat into ribbons, but that just wasn't our style. That's what separates a special operator from the conventional forces and I'm proud of that.


The Culture


 In the late 90s, I had the opportunity to meet the most extraordinary man I ever met. He was a Navy aviator assigned to our squadron, the 20th SOS. Because of his linguistic skills, he was sent on a mission to train in Central America. During that mission, he crashed and lost his leg. He limped back home to us, his road to recovery was hard. He still wanted to fly and didn't believe he was done. He came to me and asked respectfully, "MSgt Anderson would you help me show the flight surgeons that I can egress (leave) an aircraft quickly?" I said, "Sure sir, I can do that." So my task was to film him punching out of an MH-53 Pave Low cockpit which he did successfully and then his only requirement was to run a 100 ft. He did but his leg began to twist and turn and it fell off. He sat down on the ramp exhausted. I ran up to him and sat down beside him gunned and said, "That was really cool sir; can we try another shot of you not losing your leg this time?" He grinned and said "Yeah, I can do that." We embraced each other. He went on to make Colonel and had a distinguished career in Special Operations and will forever be the most courageous man I have ever met.


 I remember arriving back at Jacobabad, Pakistan from Kandahar, Afghanistan after 60 grueling days of combat missions every night and living on nothing but Meals Ready Eat (MREs), the squadron had made preparations for our arrival. That night I ate in one sitting; 2 T-bones, 2 baked potatoes, 3 lobster tails, rolls with butter, 2 hefty helpings baked beans and 2 helpings of salad washed down with Jack Daniels (we weren't supposed to have that). At the end, I looked like a rope with a knot tied in it. We were really good at hooking each other up and welcoming each other back from the dark hole. That was the Pave Low legacy in a nutshell - there was always a friendly face waiting on the other side....our brothers.

 It would be 0200 am and I would be packing my gear to deploy and


my oldest daughter Katie would always wake up to join me. She would ask me, "Where are you going Daddy?" I would say "To a distant place," as she would quietly slip her own personal belongings such as bears and toys into my bag. I continued to pack my gear... then she would ask, "To do what?" I said, "To take care of some bad guys doing bad things." She replied, "That's good...isn't it?" I said, "Yes it is." She pondered then said, "Do you feel strong?" I said, "Yes Katie, I do." She said, "Well, I don't feel so strong, Daddy please don't GO!" I gently cradled her cheeks, kissed her and said "I will be home before you know it baby girl." This was played out time after time, yet she still married into it. I'm proud of her and her strength.

 Someone important to me inspired this message. The wives of Special Operators are as important as the operators doing the mission. They have no idea where you are, they have no idea what you are doing, all they know is that it is important. When the plumbing breaks, they deal with it; when the lawnmower breaks, they deal with it. They spend countless hours explaining to the children why you are not there for them and deal with it, yet immediately run to the assistance of other families in times of crisis with the same ferocity and dedication of the mission. Special Operations wives and in some cases now husbands, are my heroes!


 Many people don't understand Special Operations, that's okay, we don't expect them to. I will tell you this, there are men and women willing to risk it all, not for glory, not for medals. They are willing to put it all on the line just for you, 24/7. They don't fret over if it's right or wrong, they don't fret over the ramifications, they just do it because disgrace and failure in the eyes of our country is never an option.

 I pondered at the 27 years of sacrifice and the accolades on my wall that are testimony. Memories flooded my brain and sadly I realized even though I have the fire inside, I'm no longer half the man I used to be and it made me sad. At that precise moment there was a gentle tug on my arm...and a tiny voice pierced the silence. "Daddy can I eat these marshmallows before they go bad?" That


is why I fought for this country.

 Most people think Special Ops is all about taking out the bad guys, it's true we are, but we are also about building communities, helping orphans, and bonding with the people. Giving people a chance with fresh water, food, medical supplies and training so we can gain a level of trust, to teach them to fend for themselves. Not what the country perceives about Special Ops, but in reality, this is what we really are about. It makes America look good and we get to feel good about it in the process.

Redemption and Gratitude

 I'm grateful for the service of all that choose a higher calling, not for profit or wealth, or prestige. They stepped up and answered the call that others would not. They know the word sacrifice and have lived it more than any normal person should have to. God bless all veterans of all services. You have many stories to tell and when no one wants to listen, I'll listen because I can relate.

You paid your price and you paid your dues, I'm grateful to you and your families that suffered and endured. There is nothing happy about Veteran's Day so don't wish it. It is a day of remembrance and thanking those who chose the high road and a day for honoring patriots and great Americans who were willing to risk their lives, so you can have yours.

 In 1996 I was deployed to San Vito, Italy to support operations in Bosnia. I was on what was considered a "hard crew". Hard crew meant you would fly or die with the dice you'd been rolled and didn't have the luxury of swapping out with more capable crew members to create the ultimate "A Team."

That's the way it works in Special Operations you mixed experience with youth but they weren't just any youth, they had earned their way. It was a good system because the under achievers or the inexperienced had the opportunity to raise the bar and many times they surprised us by either meeting or exceeding our expectations. It didn't matter if it was Pilot, Flight Engineer or Gunner, most rose to the occasion and flourished to teach others our path and our ways.

On a bleak, cold and dreary day, our

crew was brought into the TOC, briefed and slated for an immediate mission to recover the possible downing of two French pilots who were unaccounted for. I took notes and immediately went into planning mode; equipment, flight routes, terrain, weather, and threats. I was pumped and ready to execute.

We were released to go back into crew rest and wait for the mission. Then I got an unexpected call from my brother, I thought, how in the world did he possibly find me? He said, "Red Cross, Dad isn't doing well, he's in the hospital." I snickered, "What's wrong with him this time?" My brother replied, "It's serious Randy, can you come home?" I held the phone in stunned silence, and thought about the words and said, "Yes, I suppose so but this had better be real." He quietly replied, "It's real." I hung up the phone trying to comprehend was it worth it, I'd been through this drama with Dad before. I quietly sat down in the barracks hallway alone, I cradled my face and thought over how conflicted I was. Soon my aircraft commander, Captain Brad Webb, approached me and said, "Randy I heard serious things are going on with you, the crew will be fine, you must go home to be with your Dad."

I replied to Captain Webb, "No f**king way sir, I have an obligation to you and the crew." He spoke quietly, yet firmly and said "Randy, you have an obligation to your family and they always come first. You are going home." My shoulders slumped and I said, "Yes sir but the mission, we are on alert, we can't just go changing things around!" Captain Webb looked into my eyes, and said, "We'll make it work Randy; chances are it won't happen anyway." I pounded my fists on the floor thinking of the disappointment of potentially missing the mission of a lifetime. But I listened and agreed with Captain Webb and began to make the preparations to travel back to Tennessee.

I arrived at my destination and hurried to the hospital to find my father dying. I saw the look on his face and the relief in his eyes just one more time. We shared much of ourselves and we talked of everything before he passed. I even sang to him, which he said stop! I smiled and said, "Okay Daddy, I just have one

more song." He weakly smiled back and said, "Sing on Son." I knew in my heart he wasn't going to make it, I went home after hours of being by him and caring for him, I just had to sleep. When I woke in the morning, I received the call he had passed.

I was crushed and heartbroken, yet my first thought was my crew, their lives. One may think that Special Operations would be the primary focus and the mission would be to damn your personal life and to always achieve national objectives and damn the personal costs. Well that is true, however we always found a way to mitigate it where another brother would step up when someone was in need and understood, and after all we are human and regular people. The point is, we never failed our mission, and we always achieved national objectives without fail. For an afterthought, Captain Brad Webb is now Major General Webb and was sitting beside President Obama during the raid to kill Osama Bin Laden.

Our entire Special Operations community is incredibly tight knit and family oriented, we have always worked around issues and problems and we always found a way to make it work. We did that because there were so many of us good enough or better to easily step in where needed. We supported each other and in the end achieved outstanding results, the point was we never complained, we just executed.

Redemption - I rest my chin on my weapon tonight, I did my job I did what's right. I've done wondrous things no one else would do, I paid my price, I paid my dues. My eyes have seen burning cities, atrocities and war, and witnessed things most would deplore. I awake each morning and step to the floor, my conscious is clear, because it was war. It is not your concern I danced with the devil at night, it's not your problem, it's not your fight. I need no showers of accolades, awards or credit, I did it for you America...now I said it. Randy Anderson-2011

A Special Operations, MH-53 Pave Low Lament - The night is dark, the stars are dim, the moon is without face, my mood is grim. Peering through darkness I look into the sky and a demon appears and gazes into my eyes. He

promptly perches beside me and says, "You will fail tonight, you will not win!" I replied, "Yes I will demon, it's not your night and I will fight you forever, with all my might." With an intense face he pressed his against mine, and with peering eyes he uttered, "I have patience, it's just a matter of time." He exclaimed, "You've cheated me quite often my little friend, but your soul is mine and I will be there for the end."

Randy Anderson -2011

Humor

Everyone eventually got labeled with a nickname, a common practice in all the squadrons, either maintenance or operations. The designated name generally would stick with them throughout their careers and the tag was often awarded as a result of a particular event, episode or their own demeanor. Many tried to name themselves to avoid an unpalatable name but it didn't always work that way unless it fit their personality, only then would we make concessions.

Many folk's names were just too hard to pronounce, so we would unceremoniously truncate their names, and they just resigned themselves to the fact that's the way it was going to be forever. Colorful names that in many cases are known throughout the special operations community at large and laughingly enough used by their own spouses to identify their husband! We used nicknames so often, the memory of what their real names were began to blur. Interesting names such as Taco, Paco, Opie, Rainman, Mad Jack, Gordo, Devil Dawg, Meat, BK, Circus Monkey, Turtle, L+11, Pink, Tex, Shooter, Twister, Lefty, Chemo, Pokey, Slo Jo, FLIR Ball and countless others too numerous or inappropriate to mention in this forum, flood to mind.

Ah yes, the famous Round Metallic Object (RMO), the Squadron Coin. Where you to be caught without one in a bar would not only be considered an act of heresy, but outright bad form. The procedure was simple, anyone who initiated a coin check would slap their coin out on a wooden surface in an

continued on page 41

Mission To Haiti

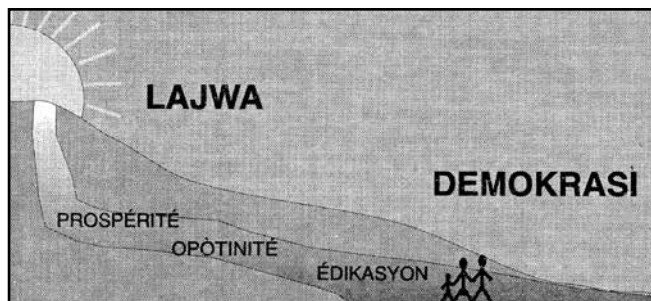
By Maj (Ret) Dave White

On 13 September 1994, as a preparatory event leading up to the planned invasion of Haiti, the 15th Special Operations Squadron was tasked to plan a PSYOPS leaflet drop on Port-Au-Prince. 15 SOS Crew 1 was assigned to the mission, the first combat mission flown by the squadron since reactivation and equipping with the MC-130H Combat Talon II in October 1992.

We planned the mission on 14 September for execution on the night of 15/16 September. We were briefed on the results of the first leaflet mission over Haiti, flown using standard high altitude leaflet drop tactics. We were told that target coverage was not optimum, due to unpredictable winds over the island. We therefore determined that a low altitude airdrop over the city was necessary to insure target saturation, as well as to enhance the psychological effect of the mission. To insure accurate wind information and minimize warning to air defenses, the ingress over the Gulf of Gonave was planned for extreme low altitude, varying from 50 to 200 feet. Two passes over the city were planned, with a drop altitude of 500 feet. The first pass would begin with coast-in just east of the Navy base on the southwest edge of the city, followed by a sweeping turn to the northeast. This would cover the eastern and southern portions of the city. The second pass would begin after completing a wide turn to a westerly heading in the valley northeast of the city. This pass would take us just south of the Port-Au-Prince airport and would provide coverage of the north part of the city. No air threat was expected, as the Haitian air force consisted of a single airworthy Cessna 172. However, small arms and AAA up to 40 mm was expected. All crew members were provided standard side arms, body armor, and survival gear.

On 15 September, we flew to Pope AFB to onload the leaflets and Army personnel, who would assist with the airdrops. Just before takeoff from Hurlburt Field, we were advised that a 40mm anti-aircraft weapon had been positioned to the south of the city on a ridge line. Initially, this appeared to impact our coast-in point and first pass. However, the EWO determined that the probable position of the weapon was such that the gun crew could not depress the barrel sufficiently to accurately target the aircraft until we were at a safe distance. We therefore chose not to alter our target plan. After an uneventful flight to Pope AFB, we arrived and successfully unloaded the leaflets and personnel.

We departed Pope AFB after final mission approval was received. Our plan was mimic a normal C-130 supply flight



**CHÉMIN KI ALÉ LAN OU
FITI KI PROSPÈ KÒMANSE
AVEK DÉMOKRASI.**

to Guantanamo Bay, Cuba, so we flew our IFR clearance on airways southbound. Enroute, we were advised that Haitian air defense units had been cleared to “fire at will” at intruding aircraft. (Later, we heard that another aircraft had already made an appearance over the island. It didn’t drop anything, and nobody ever admitted who it was or what it was doing. It did, however, serve to alert the pertinent AAA gun crews.) We did an in-flight refueling north of Cuba, and IFR was terminated south of Great Inagua. We began our descent on the standard Guantanamo arrival around the east end of Cuba, turning west and descending. We flew the initial part of the Guantanamo arrival for deception purposes, descending to less than 1000 feet. When the EWO advised that we were below radar coverage, we turned hard left onto the easterly ingress route. Inbound to Haiti, and south of Gonave Island, we descended to 50 feet over the water, using our terrain-following systems. We were also wearing our night-vision goggles (NVGs), which prevented a real mess: During the ingress, Ron Lovett, in the copilot seat, suddenly called for an immediate pull-up, which I did without hesitation, to say the least. When I looked up from the TF displays, a large white wooden three-mast sailing ship was directly ahead. The terrain-following system had not seen its non-metallic structure, and Ron’s warning prevented an early end to the mission. I’ve always wondered what the occupants of the ship thought as our blacked-out Herk thundered overhead at less than 200 feet.

Continuing the ingress, we coasted in at 500 feet AGL. We released our first leaflets at this time, with the naval base as the target. This was a late change to the mission, added because we had received an intelligence update that Raoul Cedras, the leader of the military junta, was spending the night at the Navy base for security reasons. We felt that our leaflets would provide an effective psychological blow if in fact he was there, and we changed the drop plan accordingly. We then performed a left turn to the northeast, and flew over the eastern half of the city, dropping leaflets continually. These were targeted for the main downtown areas of Port-Au-Prince, and were dispersed by

the prevailing easterly winds. During this pass, static lines whipped back into the cargo compartment and entangled one of the loadmasters, Rusty Fine. In the process of freeing him, the static lines pulled a set of NVGs off Mike Clevenger's helmet and they departed the aircraft. The goggles fell, apparently harmlessly, into an unknown area of the city.

After crossing the northern outskirts of the city, we flew the short pattern to position for our final run. This was made to cover the north side of the city, particularly the airport area. On this run, we noted the city lights being extinguished, block by block. The loadmasters reported light ground fire from small arms in the area of Port-Au-Prince airport. All the tracers were behind the aircraft, so we took no evasive action. Upon completion of this run, with all boxes expended, we egressed over the gulf on a westbound heading. Time over target was less than ten minutes, although it seemed like more than thirty.

Exiting the gulf, a climb to enroute altitude was initiated and the crew removed their combat equipment in

preparation for the long ride home. To make the second in-flight refueling a bit more interesting, Ron Lovett bet me the price of beers for the crew that I could not complete it without illuminating any intermediate position lights on the receiver director array--not an easy task given the lateness of the hour, the post-airdrop letdown, and the crew's jovial efforts to "assist" with the task at hand. The refueling was completed (I won the bet) and we proceeded to recovery at Hurlburt, having flown 11.4 hours in all. No aircraft damage or crew injuries were sustained. After taking a crew picture and completing a debrief with the intelligence shop, we were released to go home with instructions to return to plan our next mission, expected to take place the night after the upcoming invasion.

Driving home after the 20 hour crew day, I fell sound asleep twice. However, my fatigue disappeared when I got home and turned on CNN to see one of our leaflets lying in a Port-Au-Prince street. The news reported complete coverage of the target areas. It was the only time I ever failed in my career goal of staying off CNN, but I wasn't too upset about it.

Crew 1, 15th Special Operations Squadron (Ranks shown are those on the date of the mission):

Maj Dave White, Aircraft Commander
LtC Ron Lovett, Pilot (15 SOS Commander)
Capt Jim Kellogg, Pilot
Maj Chuck Gantert, Navigator
Capt John VanDerHoven, Navigator
Capt Mike Fallert, Electronic Warfare Officer
MSgt Mike Clevenger, Flight Engineer
SMSgt Dave Sloan, Flight Engineer
CMSgt Taco Sanchez, Loadmaster
MSgt Dave Fredricksen, Loadmaster
Sgt Larry Fine, Loadmaster
MSGT Manuel Ochoa, Direct Support Operator



About the Author: Dave White was a crewdog in the 1st, 8th, and 15th SOS, flying MC-130s until retirement in 1995. To avoid a staff job, he was also Chief Pilot for the Operational Test and Evaluation of the MC-130H at Edwards AFB. He currently flies Boeing 777s when absolutely necessary, and real airplanes (a Piper PA-12 and a Libelle glider) for fun.

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Reflections of an Air Commando *continued from page 39*

open challenge, immediately subjecting you to the infamous Kangaroo Court where all participants are viewed equally unless exposed for their violation. Punishment levied was stiff and the fine was heavy, followed by disdain and disapproval by your peers. It was a hard lesson learned but particularly it was your wallet that felt the most impact.

Years ago I went through USAF Survival School. We were going through the prisoner of war phase. 14 of us were crammed inside a small box and the weight was crushing. We were all trying to not hurt each other. There was a Sgt and his face was pressed close to mine. His name was Dave Long, who eventually became a special operator and still is a very special friend of mine today. His face was pressed against mine. Soon he started to giggle, then he began to laugh causing many of us discomfort because he was a pretty big guy! He looked in my eyes while we were in that cramped pile and said to me, "I could kiss you right now and you couldn't do a thing about it." He was right, my arms and legs were pinned and I was completely immobilized. Our noses were one inch from each other and we both began to laugh. I said, "Dave if you kiss me, I will kill you dead." All of us erupted in laughter which didn't please the instructors.



About the Author: Randy Anderson, CMSgt, USAF retired, MH-53 Flight Engineer.

PISTON STOL AND



Aircraft of the First World War generally had inherently short-takeoff-and-landing capabilities, being lightly loaded to take quickly to the air. Even so, by today's standards, any aircraft of the First World War period was considerably underpowered. (The Morane-Saulnier Type L, for example, had only an 80-hp rotary engine, giving it only a 72 mph top speed). They also had inherently weak structures and the aforementioned limited payload capacity, while their profusion of drag-producing struts and wires—a necessity given their thin wood-and-fabric wings—gave them surprisingly high sink rates and dangerous low-speed departure and stall characteristics. The advent of thick-wing aerodynamics (typified initially by designs from

Anthony Fokker and Hugo Junkers) both improved aircraft performance and permitted internally-braced cantilever wing design which enabled development of streamlined monoplanes with either wood (as favored by Fokker) or metal (as favored by Junkers) structures.

As aircraft design and performance advanced, however, the need to compensate for increased takeoff and landing distances as well as higher takeoff and landing speeds stimulated development of new lift-and-controllability-enhancing devices. Foremost among these were the wing flap, slot, and slat. Wing flaps initially appeared during the First World War on British and French aircraft produced by Thomas Sopwith,

D SOF:



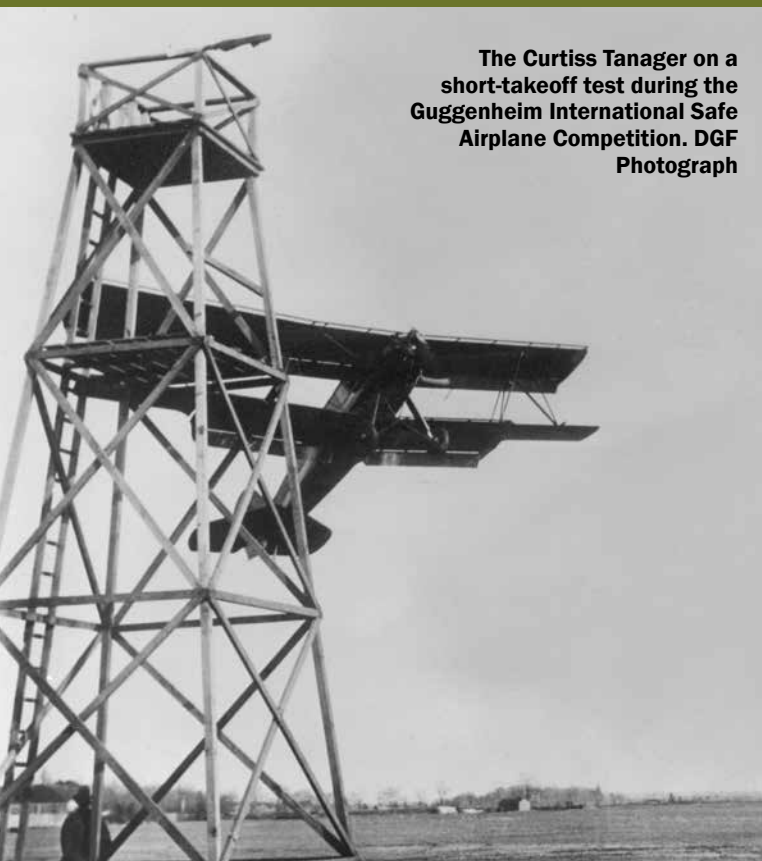
A Morane-Saulnier Type L “parasol” monoplane, the type first used for “Great War” covert air operations. (Photo courtesy of Richard P. Hallion)

Early Experiences in an Evolving and Symbiotic Partnership

By Dr. Richard P. Hallion

Special operations have traditionally required aircraft possessing an ability to operate under austere, even primitive, conditions. Among these requirements has been, typically, the need to take off and land from very short strips or minimally-improved terrain. For this reason, Short-Takeoff-and-Landing (STOL), and Vertical-Takeoff-and-Landing (VTOL) have figured prominently in SOF warfare, even from the earliest days of aviation.

French airmen pioneered aerial special operations during the First World War. Their country was partially occupied by invading German forces and, thus, French military and intelligence authorities needed to establish resistance cells and insert and extract intelligence agents operating behind German lines. As early as November 1914, less than three months after the onset of the war, the French Service Aéronautique (predecessor of today’s French Air Force) began landing agents from the 2e Bureau (the “Second Bureau,” France’s secret intelligence service) behind German lines. Though various aircraft were eventually used, the initial type favored was the two-seat parasol-winged Morane-Saulnier Type L monoplane, a multipurpose aircraft that achieved notable success both as a reconnaissance aircraft, light attack airplane, and even fighter. The first of these “missions spéciales” was flown on November 18, 1914, when Lt. Armand Pinsard of Escadrille MS 23 took off from Amiens, landing an agent behind German lines north of Albert. ■



The Curtiss Tanager on a short-takeoff test during the Guggenheim International Safe Airplane Competition. DGF Photograph

Charles Fairey, and Louis Breguet. By changing the camber of the wing, the flap increased the wing's lifting power, with the tradeoff of imparting greater drag as well. The fixed wing slot, which soon led to the extensible wing slat, was a British-German invention, most closely associated with designs by Frederick Handley Page and Gustav Lachmann (they later combined their efforts). As angle of attack increased, the slot (and more refined slat) controlled the flow of air over a wing, keeping it "attached" to the surface and thus delaying the flow separation that presages a stall, whereby the wing ceases producing lift altogether. The combination of the wing flap and wing slat promised to permit steeper, slower descents and steeper climb-outs. Assisting further were other technical developments such as long-stroke landing gear struts (to permit higher-impact landings), adjustable horizontal stabilizers which (in conjunction with the elevator) enhanced pitch control, and so-called "drooped" ailerons which could complement the lift-enhancing camber-changing flaps.

All of these technological innovations (and subsequent ones such as the controllable-pitch propeller and the advent of higher-performance inline and radial piston engines) would contribute greatly to making the STOL-SOF partnership a success. First, however, a showcase demonstration was necessary.

This occurred finally in 1929-1930, enabled by The Daniel Guggenheim Fund for the Promotion of Aeronautics International Safe Airplane Competition, held at Mitchel Field, Long Island. The Guggenheim Fund, a private philanthropic endeavor established in 1926 by mining magnate Daniel Guggenheim and his naval aviator son Harry, endowed schools of aeronautical engineering across the United States,

established an experimental airway service on the West Coast, and undertook fundamental research on aviation problems, leading, most notably, to invention of the first blind-flying instrumentation and the first successful blind flight (by famed aviator Jimmy Doolittle) on September 24, 1929.

The Guggenheims also wanted to reduce the rising aircraft accident rate caused by low-speed loss of control. Various international experts recommended exploring the technology of the flap and slat, and, also, that of the autogiro, a predecessor of the helicopter. Accordingly, the Fund sponsored a design competition, holding a fly-off among various entrants in 1929. The winner was the Curtiss Tanager, which incorporated a number of the advances discussed previously. The Guggenheim International Safe Airplane Competition, highlighting the value of nascent STOL technology via competing demonstrators, established an international design standard for subsequent production of STOL aircraft designs.

By the mid-1930s, the growing power and reliability of smaller piston engines, coupled with the advent of the controllable-pitch propeller and the Fowler flap (a flap design that, by deploying aft and downwards, increased the area as well as the camber of a wing) meant that STOL aircraft could be designed for more practical application to both civil and military tasks. Two that achieved great success in the SOF role were Germany's inline-engine Fieseler Fi 156 Storch ("Stork"), and Britain's radial-engine Westland Lysander.

Of the two, the Storch is best-known, having served as a ubiquitous battlefield transport for German military leaders and with a variety of air forces and army air arms. Designed by Gerhard Fieseler, a well-known interwar German aerobatic pilot, the tube-and-fabric Storch first flew in 1936. Thanks to full-span slats, flaps, and drooping ailerons, a long-stroke landing gear, adjustable horizontal stabilizer, and a bulged cockpit enabling an observer to look directly downwards, it delivered superlative performance. Such was its utility that it proved far more successful than its more powerful rival, the high-wing Henschel Hs 126. Powered by a 240-hp Argus inline engine, the lightly-loaded Storch could fly at 109 mph, but land so slowly that, given any sort of headwind, it could stop in a space no greater than its own 47-ft wingspan. A total of nearly 2,900 were produced in Germany and Romania, as well as in Czechoslovakia and France while those two nations were occupied by Nazi forces. French models, many produced after the war with radial engines, were manufactured by Morane-Saulnier and known as the Criquet ("Cricket"), and saw extensive use in Indochina.



The stalky Fieseler Storch was, in its time, the finest STOL aircraft in the world.
(Photo courtesy of the National Museum of USAF)

A Fieseler Storch in typically austere conditions.

(Photo courtesy of the National Museum of USAF)



The Storch served as an executive transport for a succession of notable Germany military leaders, including Field Marshals Guderian, Kesselring, and Rommel. Captured examples were reconditioned and then used by the Allies for the same purpose! The Storch is best known for its pivotal role in extracting overthrown Italian dictator Benito Mussolini from captivity, and for the last flight out of Berlin in 1945. Mussolini's government had collapsed in late July 1943, following the Allied invasion of Sicily. Anti-Fascist army officers took him into custody and transported him to an island, and then, fearing he might escape, to the Campo Imperatore, a ski resort located 2000 metres high in the Gran Sasso, a mountainous region in central Italy. Mussolini arrived at the resort-turned-prison at the end of August. German intelligence learned of his location, and Hitler ordered Otto Skorzeny, an Austrian SS officer who served as chief of his special forces, to organize a rescue. Skorzeny assembled a crack team of German paratroopers, undertaking a glider insertion on September 12. When a planned extraction by a helicopter had to be abandoned after the rotorcraft broke down, Skorzeny and Mussolini were then flown out in a Storch, which delivered them to Practica di Mare airfield, from whence the deposed Italian dictator was flown to Munich. In late April 1945, Hanna Reitsch, a fanatical supporter of the Hitler regime, flew a Storch into Berlin, landing in the Tiergarten amid Soviet artillery fire, to deliver Field Marshal Robert Ritter von Greim, the last commander of the Luftwaffe, to meet with Hitler. (They left in a different

airplane afterwards).

Personally demonstrated in America by Fieseler at the 1938 Cleveland Air Races, the Storch inspired a U.S. Army liaison aircraft competition to produce an American equivalent. The competition resulted in the two-seat Stinson O-49 Vigilant (later redesignated the Vultee L-1 Vigilant), which made its first flight in July 1940. Like the Storch, the Vigilant had extraordinary low-speed capabilities. Full-span flaps, slats, and drooping ailerons enabled it to fly as slow as 31 mph. A rugged landing gear absorbed high sink-rate landing loads, and its sloped cockpit panels enhanced the pilot's and observer's ground view. Some were modified with floats, and others were modified for casualty evacuation, but most were used for liaison, artillery observation, general transport, and covert agent insertion and extraction. In 1943, the L-1 was selected for "Project 9" (the then-top secret plan for an aerial invasion of Burma that marked the birth of the Air Commandos) because it could carry up to three stretchers while operating out of rough strips as short as 500 feet long. (Subsequently, because too few L-1s were available, the Project 9 light plane force was augmented by more numerous L-5 Sentinels, though the Sentinel could only carry a single casualty, and needed almost twice the takeoff distance).

Undoubtedly, Britain's ungainly Westland Lysander was the best-known and most significant of Allied STOL aircraft in the Second World War. A high-wing two-place "army cooperation" airplane designed by W.E.W. Petter, the

The Vultee L-1 Vigilant, an excellent STOL general purpose light monoplane, flew on Operation Thursday, the March 1944 Allied air invasion of Burma. (Photo courtesy of the National Museum of USAF)



Lysander had an unusual trapezoidal wing planform which, when viewed from above or below, revealed it to have pronounced taper on its inboard leading edge, a straight inboard trailing edge, and then a straight outboard leading edge and tapered outboard trailing edge. Additionally, the wing had its maximum thickness-chord ratio at mid-span, its inner section being increasingly thin (in a fashion analogous to, but even more than, America's contemporaneous Stinson Reliant) down to the wing-fuselage root. This configuration gave the pilot and observer excellent visibility, but complicated its leading edge slat design which, unlike the Storch and Vigilant, consisted of two sections (an inner and outer) on each wing panel, each operating independently of the other. To alleviate the danger of outer wing panel stall (which could trigger a potentially disastrous departure), the Lysander was designed so that its outer slats deployed before the inner. Like other STOL aircraft, it had a rugged landing gear, an adjustable horizontal stabilizer, as well as generous elevator, rudder and aileron area, ensuring adequate and responsive longitudinal (pitch), lateral (roll), and directional (yaw) control across its entire speed range, from a minimum of 54 mph to a maximum of 224 mph. An 870-hp Bristol Mercury 9-cylinder air-cooled radial engine and a three-blade controllable-pitch propeller gave it the power to carry over 1,900 lbs. of useful load, including two fixed forward-firing .303 cal. Browning machine guns, and (on early aircraft), a single .303 Lewis

machine gun on a flexible mount in the rear cockpit.

A total of 1,425 Lysanders were manufactured in Britain and a further 225 in Canada, and it served with a variety of air forces including, in small numbers, the U.S. Army Air Force. Ironically, though used as an Army battlefield reconnaissance aircraft early in the war, it primarily performed other duties, including air-sea rescue and as a target towing. But it is best remembered as a covert insertion and extraction aircraft, flown by selected Royal Air Force crews to support the activities of the SOE (Special Operations Executive) and French Resistance to fulfill Winston Churchill's order to "Set Europe Ablaze." So-called "Special Duties" Lysanders fitted with a long-range belly tank and left-side ladders affixed inserted 293 Resistance leaders and Allied commandos into France, and extracted a total of 410 résistants

brought out for their own safety, or later reinsertion. Missions were flown from England across the Channel, but also from islands in the Mediterranean (and, later in the war, in the Far East as well).

In the course of these missions, Lysanders operated at night into improvised strips (often no more than clearings or a farmers' fields); guided by torches or hastily lit flare-pots, pilots navigated by compass and stopwatch, and navigated by reflected light from railroads and waterways. The risk to pilots and passengers was extreme, with the German military comprising only one such threat. Of all missions flown, it is estimated that two-thirds were successful--success being defined as agent insertion or extraction, or delivery of special cargo. Rugged Lysanders survived collisions with trees, buildings, and power lines. Pilots successfully coped with glutinous mud while taxiing, takeoff, and landing, and, in one case, with German forces closing in so rapidly than an agent leapt up the ladder, yelling at his pilot to "Get the hell out of here, quick!"

On the Russian front, Soviet airmen employed light aircraft to support partisan operations behind German lines. While none of the aircraft types they employed were, per se, "STOL" designs (as compared to special purpose aircraft such as the slat-and-flap equipped Storch, Vigilant, and Lysander), the Red Air Force made use of light biplanes and monoplanes having good slow-flight capabilities. Chief among these was the Polikarpov

The Westland Lysander, most significant and widely used of all Allied STOL aircraft in the Second World War. (AFHRA Photograph)



The de Havilland of Canada U-6A Beaver, while not extensively used by the USAF, was nevertheless a significant participant in remote and rough-field operations. (Photo courtesy of the National Museum of USAF)



Po-2 biplane, roughly equivalent in performance to the American Stearman PT-17 or the Waco UPF-7, as well as the larger and more powerful Polikarpov R-5, a prewar reconnaissance and light attack biplane. Soviet airmen were tasked to extract wounded or otherwise incapacitated partisans, to insert agents, and to maintain communications. Soviet pilots also dropped agents, saboteurs, and supplies, as did larger Soviet aircraft to include American-built C-47s supplied to Russia under Lend-Lease and the Soviets' own license-built version of the DC-3, the PS-84 (more popularly known as the Lisunov Li-2). In some extreme cases, Soviet airmen dropped agents into snow banks from altitudes as low as thirty feet, the agents being enclosed in hay-filled bags to survive the drop! The Luftwaffe attempted to counter these light aircraft by using light aircraft of its own as night interceptors, but with little success.

Wartime experience with STOL aircraft in conventional and SOF operations stimulated postwar STOL aircraft design, and other general-purpose utility aircraft which, if not quite so STOL-capable as these remarkable machines, were nevertheless very impressive in their own right. Arguably foremost among these was the ubiquitous Canadian de Havilland Beaver which proved a tremendous success both in civil and military service, and which inspired a bigger and heavier successor, the Otter. The Beaver, designated L-20 and then U-6 in American service, served in a variety of roles including light cargo and passenger transport, reconnaissance,

and air rescue, using wheel, float, and ski undercarriages. Powered by the solidly reliable Pratt & Whitney R-985 450-hp radial engine, the Beaver was regarded with great affection and trust by those who flew it and in it.

Among notable postwar designs building upon the experience of earlier aircraft such as the Storch, Vigilant, and Lysander were the Scottish Aviation Pioneer, and its twin-engine successor, the Twin Pioneer. The high-wing Pioneer

bottom of narrow valleys surrounded by steep cliffs. Some measure of the value of the Pioneer is given by the record of just three aircraft which, over one year, flew over 1,000 passengers and delivered 100,000 lbs. of cargo in the course of 1,200 sorties. The bigger and more capable "Twin Pin," which also had three vertical fins and rudders (like the far more graceful Lockheed Constellation), enabled air supply and support operations into areas that could not be serviced by larger Dakota (C-47) and equivalent aircraft, and, as well, was occasionally armed to undertake light strike duties itself. Less successful was the American trimotor Northrop YC-125 Raider, an ambitious assault transport and utility aircraft optimized for Arctic operations to counter Soviet northern forces, but built only in small numbers. The Raider could take off from strips less than 500 feet in length, using JATO assistance rockets, and could land on strips less than 400 feet long, using reversible propellers.

Far more successful was the de Havilland of Canada Caribou, examples



The Northrop YC-125B Raider. (Photo courtesy of the National Museum of USAF)

and Twin Pioneer (the latter known affectionately as the "Twin Pin") served well in counterinsurgency operations in Malaya, the Middle East, and Africa. In the Malayan counterinsurgency, single-engine Pioneers flew transport, casualty evacuation, and garrison supply flights, landing as slowly as 32 mph with full flaps into jungle strips as short as 450 feet, many located at the

of which still serve around the world with various air forces, armies, and air arms as a STOL airlifter. Originally purchased by the U.S. Army and placed in service as the CV-2 in 1962, the Caribou saw its greatest American service with the U.S. Air Force as the C-7A, serving extensively in Southeast Asia as a supply aircraft for remote



The de Havilland of Canada C-7A Caribou became one of the iconic aircraft of Southeast Asian air operations. (Photo courtesy of the National Museum of USAF)

bases and hamlets. Powered by two 1,450-hp Pratt & Whitney R-2000 radial engines, the Caribou was a rugged and adaptable aircraft, its success ensured by its carefully-tailored aerodynamic and structural design.

In America, long-standing interest in STOL aircraft led Professor Otto Koppen of the Massachusetts Institute of Technology and Lynn Bollinger of the Harvard Business School to collaborate on a new design, the Koppen-Bollinger Heliplane, a modification of a

standard Piper Vagabond single-engine high-wing light aircraft. The modified aircraft had full-span trailing edge flaps, leading edge automatic slats, and a special large-diameter broad-chord propeller driven by an 85-hp Continental piston engine. First flown secretly in April 1949, the Heliplane was both stall-and-spin-proof, and could fly as slow as 27 ½ mph, taking off from strips as short as sixty feet (and on only 73 percent power). The Heliplane demonstrator led to a larger



A Helio U-10D Super Courier of the National Museum of the U.S. Air Force.
(Photo courtesy of the National Museum of USAF)





A U-10B Courier in flight. (Photo courtesy of the National Museum of USAF)

and more capable production design, the Helio Courier, powered by a 260-hp Lycoming engine. The success of the Helio Courier led to its further refinement and evolution into the Helio Super Courier, which saw extensive use as the U-10 with the military and civilian air services sponsored by the Central Intelligence Agency, including the well-known Air America, as well as missionary workers flying into austere fields throughout the Third World. The military and the CIA adopted the versatile Helio Courier thanks to the legendary Heinie Aderholt, who recognized its value for COIN and SOF operations. In particular, the U-10 flew extensively with the 5th Air Commando Squadron (later 5th Special Operations Squadron) in Vietnam on a variety

of missions including psychological operations.

Aircraft such as the L-20/U-6 Beaver, the Pioneer, the Twin Pioneer, the Helio Courier, the Swiss Pilatus PC-6 Porter (in its initial inline-piston engine form), and the CV-2/C-7 Caribou represented the pinnacle of piston-engine STOL aircraft design, the legacy of a half-century of aviation development following the first successful flight of the Wright brothers at Kitty Hawk in December 1903.

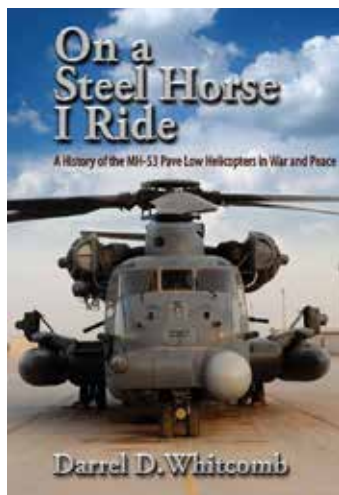
However remarkable their performance, this was but a prequel to that which would be achieved by even more advanced aircraft taking advantage of two other notable mid-century revolutions in aeronautical design: the development of the practical

helicopter; and the powerful turboprop and turboshaft engines, products of the jet revolution birthed in the 1930s. These two developments would advance STOL, VTOL, and SOF to their next stage—but that is another story.



About the Author: Dr Richard P. Hallion was the former Air Force Historian. He has also been the Curator of Space Science and Exploration, National Air and Space Museum, Smithsonian Institution, in Washington, D.C. Dr Hallion recently served as Senior Adviser for Air and Space Issues, Directorate for Security, Counterintelligence and Special Programs Oversight, the Pentagon, Washington, D.C. An accomplished author of numerous books and publications he continues to write and lecture on aviation.

Book Reviews



ON A STEEL HORSE I RIDE: A History of the MH-53 Pave Low Helicopters in War and Peace

By Darrel D. Whitcomb
Air University Press,
Montgomery, AL, 2012,
\$81 or free PDF download
available at aupress.au.af.mil.

Review by Walter J. Boyne

I don't think it's an exaggeration to say that *On a Steel Horse I Ride* is worthy of a Pulitzer Prize based on the depth and breadth of its research, the quality of its writing and the importance of its subject. In 769 fact-filled, emotion-charged pages, Darrel Whitcomb presents the 40-plus-year saga of the Sikorsky MH-53J Pave Low helicopter. Only someone with his combat flying experience and dedicated research capability could have written this book, and only the Air University Press would have had the good sense to publish it in such polished form.

The MH-53J Pave Low is truly a steel horse of legendary might, assigned to the most difficult tasks in combat, and capable of pulling them off time after time, war after war. The ability to do so rests of course upon the air and ground crews that operated them, and their adaptability to new conditions, climates and equipment.

Fielded by the Air Force Special Operations Command, the Pave Low was used by the famous 1st Special Operations Wing, whose motto is "Any Time, Any Place." They were also flown by the 58th SOW and the 352nd and 353rd Special Operations groups in actions around the world.

Whitcomb pulls the reader into the cockpit with him while describing the risky missions that made the Pave Low famous. He also manages to detail the origins of the aircraft, its serial development to meet new combat challenges and its operational history. In lesser hands, the intricate and often bureaucratic background to this development might be boring, but Whitcomb makes it as interesting as the combat action.

The author lays out the life story of the Pave Low and its operators in detail. He supplements this with six information-filled appendices, a useful list of abbreviations, a 24-page bibliography of impressive depth and a detailed index. The book is admirably illustrated with photos emphasizing individual personnel, as well as key locations and aircraft, and buttressed with maps of the theaters in which the Pave Lows flew their missions.

You would be hard-pressed to find a more thoroughly researched, all-encompassing work about an aircraft and its military history. Whitcomb's book ranks with Dennis Jenkins' masterpiece *Space Shuttle: The History of the National Space Transportation System*, and definitely sets the bar much higher for aviation authors.

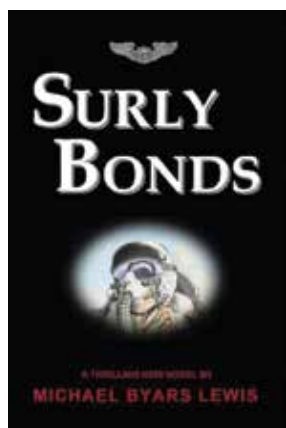
This review originally appeared in the July 2013 issue of Aviation History magazine, and is reprinted here with permission of the Weider History Group. For subscription information, call 800-435-0715 or visit www.historynet.com.

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SURLY BONDS

By Michael Byars Lewis
SATCOM Publishing
(September 8, 2012)
\$13.49 www.amazon.com

Review by Dennis Barnett, Editor in Chief

I don't read a huge amount of novels. However, I must admit that I was and am hooked on Vince Flynn's (may he RIP) and John Grisham's works and I was always anxious to hear that they had published a new thriller. I now have a new author, Mike Lewis, to follow and we have a lot in common as Air Commandos. Mike is a second generation Air Commando whose father was tragically killed in Viet Nam. Mike is still on active duty as a Lt Col and flies the AC 130U model gunship. He has over 5000 hours of flying time. After reading *Surly Bonds* it was hard for me to believe this is his first novel which is garnering many awards.

The book is built around an Air Force Second Lieutenant, Jason Conrad, struggling to make it through Pilot Training. Lewis' recreation of a pilot training scenario at Vance AFB in Enid, OK, was spot on. He gets inside the mind of the young student trying his best to meet the rigors demanded to earn the silver wings. I must admit that this part of the book took me back to my own training and created a visceral reaction to the highs, lows, fears and plethora of emotions that were and are unique to the Air Force pilot training experience.

However, young Conrad is not a typical student. He has things in his own recent and distant past that he is trying to overcome. Yet, he encounters several classmates that have goals to achieve not related to pilot training, some with international implications. Lewis takes you through several twists and turns in the plot as well as the loops, Chandelle's, spins, and barrel rolls of his training. The ending is as surprising as the kick in the backside generated by pushing the throttles to after-burner on your T-38 dollar ride.

If you are a pilot training graduate or would like to get an inside view about what that is like, read *Surly Bonds*. If you like mysteries and thrillers akin to works by Vince Flynn and John Grisham read *Surly Bonds*. If you aren't convinced by my review, go to www.amazon.com/Surly-Bonds-Michael-Byars-Lewis/dp/0615663958 and read all the great reviews there.

REUNIONS

Pararescue Reunion 2014

Albuquerque, New Mexico

September 24-28, 2014

Don't miss this reunion, lots of events and trips planned.
Log onto: www.pjreunion.com for more details and to register.

AC-119 Gunships

San Antonio, Texas

Sept 26-29

Contact Jerry Hester (210) 663-3159
email: hester7.satx@gmail.com

TLCB Annual Reunion 2013

Ft Walton Beach, Florida

October 3-6, 2013

Quality Inn Bayside will be the reunion headquarters this year, so you can stay around and enjoy the ACA Convention/Reunion right afterwards.

2014 FAC "Homecoming" Reunion

Ft Walton Beach, Florida

October 22-26, 2014

Get ready for the second "Mother of all FAC" reunions to be held at Ft Walton Beach, FL, 22-26 Oct. 2014. Start making plans now to attend. This reunion will probably be the largest FAC reunion ever so you don't want to miss it! For more information go to the FAC Assoc.

Website, www.fac-assoc.org, or contact Claude Newland, Rustic 19, at 850-654-2955 or rusic19@cox.net.

The 85+ FACs living in the Ft Walton Beach area are going all out to make this a memorable event. The target is marked. Cleared Hot!

The annual Air Commando Assoc. reunion in Ft Walton Beach is being held the weekend before the FAC reunion in 2014 so you may want to combine the two reunions into one trip.

To submit your organization's reunion information please email the following information to info@aircommando.org

Please make sure your submissions have:

Event date, event time (if applicable), location, sign up information, point of contact information, and a brief description of what it is.



From World War II... until Tonight.

As my brothers and sisters before me, I am proud to step into history as a member of the Air Force Special Operations Command. I will walk with pride with my head held high, my heart and attitude will show my allegiance to God, country and comrades. When unable to walk another step, I will walk another mile. With freedom my goal, I will step into destiny with pride and the Air Force Special Operations Command.



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