The AC-47 wing of the AC-119 Gunship Association

For several years we have enjoyed the company of many AC-47 personnel & their families who have been coming to the AC-119 reunions. Late in 2007 several AC-47 personnel requested to join the AC-119 Gunship Association. At the October 2007 annual business meeting the vote was unanimous to let *anyone* associated with the AC-47 gunship become members of the AC-119 Gunship Association. We officially welcome our AC-47 gunship brothers into the fold & look forward to seeing more of them at future reunions.

THE LEGENDARY AC-47: ***Prelude to the AC-119G Shadow, AC-119K Stinger, & AC-130 Spectre gunships***

The legendary 'AC-47 gunship' affectionately known as Spooky, Puff, or Puff the Magic Dragon breathes its fire breath on the hapless enemy below.

'Puff' Spooks the Enemy *A history of the AC-47 gunship*

The Stage is Set

By the time the first Air Commandos arrived in South Vietnam in late 1961, Vietcong forces operating throughout the country had seized the initiative everywhere. In the process, they had demonstrated their contempt for South Vietnam's poorly trained & small air force by striking their targets even in broad daylight, contrary to traditional guerrilla tactics. Remote government outposts routinely fell to attacking Vietcong forces, as did outgunned pro-government villages whose elected officials frequently suffered follow on atrocities at the hands of their 'liberators.'

The government's widespread introduction in 1962 of reliable, two-way radios to these isolated outposts & villages provided a much improved Vietnamese Air Force (VNAF) response, albeit one still limited to daylight-only operations as the fledgling VNAF had no night attack capability. The Vietcong responded to this government tactic with a switch to night attacks, & the dismal rate of government losses soon resumed. Looking to the recently arrived Air Commandos for help, the VNAF soon learned the Farm Gate contingent also had no night attack capability.

What the Air Commandos did have, however, was a small number of C-47 & (later) C-123 tactical transports & a license to use their imagination. If the Air Commandos couldn't yet effectively defend hamlets under siege at night, they could at least use one of their transports to circle above a beleaguered outpost & drop illumination flares, exposing the attacking Vietcong to the defending troops. This was done, at first with 50,000-candlepower & later with three-million candlepower flares.

The results obtained by these 'flareship' tactics exceeded all expectations. To everyone's relief (everyone except the Vietcong, at least), the flares frequently had a spoiling effect on the attack, with the Vietcong sometimes withdrawing simply upon hearing a flareship approach. In November 1963, when widespread Vietcong attacks attempted to exploit the confusion generated by the military overthrow of Vietnam's president, the C-47s & C-123s dropped over 7,000 flares in night defensive operations. According to a Newsweek magazine article of the day, the flares terminated Vietcong attacks nearly 70 percent of the time. But in response to the flareships, the adaptable Vietcong soon learned that they could simply outwait the flareship's fuel endurance before resuming the attack. In 1963, the limited number of transports/flareships available precluded all-night coverage over a single outpost, even one under attack.

With the United States becoming increasingly embroiled in the rapidly escalating conflict in South Vietnam, the need arose for a more effective weapon system for use in defending the strategic hamlets & small forts throughout the countryside. A Tactical Air Command panel was set up to study & evaluate the problems involved in these 'limited wars' that raged around the hamlets. Suggestions received from throughout the armed forces were evaluated by the Limited War Committee. One of the suggestions came from Lt.Col. Gilmour C. MacDonald regarding the use of lateral, or a side-firing weapons system from an aircraft.

Mind you, the side-firing weapons concept has been with us for many years. It is based on an airborne maneuver called the pylon turn whereby the aircraft is placed in a left bank & flies a circular pattern around a fixed reference point. The term pylon turn is derived from the racing plane era & the pylon they sped around. As early as 1927 an Army pilot attempted to sell the side-firing concept to the Air Corps by fixing a side-firing .30 calibre machine gun to the wing of his DH-4 biplane. Tests were successful as he scored several hits on a ground target. The concept was brought up again in 1939, but as with earlier tests, the Army brass did not buy it.

Lt. Col. MacDonald had submitted a similar proposal back in 1942 (then a 1st Lt.) for mounting a .50 calibre machine gun to fire laterally for use against enemy submarines. Later, in 1945, he proposed mounting a bazooka in observation aircraft which would fire laterally on tanks & troops from a banked turn. He 'proposed that a fixed machine gun mounted transversely in an aircraft flying a banked circle could keep (an enemy) under continuous fire if necessary.' Once again, the proposals were shelved. In September 1961, MacDonald again sent in his proposal for a side-firing weapons system mounted in a light aircraft & 'flying a banked circle, (could) keep the gun pointed continuously at a target.' For the third time his proposal failed to arouse any interest from the brass.

From Mail to Miniguns

Enter Mr. Ralph E. Flexman, an Assistant Chief Engineer with Bell Aerosystems Company. He had been studying the problems involved in 'limited wars' & counter-insurgency operations. By fate, in late 1961, Flexman & Lt Col. MacDonald met during an Air Force Reserve tour of duty at Eglin AFB, Florida. At some point during the brainstorming session on December 13, 1961, the topic of side-firing weapons systems was discussed. MacDonald related all his previous proposals & their rejections, & added a tale about a South American missionary pilot, Nate Saint, lowering mail & supplies to remote villages on a rope dangling from the aircraft while flying a tight pylon turn. The results had been amazingly accurate & it tied in with his thoughts of the side-firing weapons system. From these discussions, & later discussions with other Bell engineers, Flexman wrote a proposal on December 27, 1962 that would evolve into the gunship aircraft.

Flexman's proposal offered several advantages over standard forward-firing armament. First, an aircraft equipped with forward-firing guns could lose sight of the target between the time of initial sighting & the firing run. Losing sight of a target was even more a possibility between a first attack & a second due to the time lost in pullout, turn-around & repositioning for the second pass. With side-firing aircraft the pilot simply had to roll into the pylon turn which brought the guns to bear immediately. Flexman proposed that 'lateral fire from a low-flying, slow speed aircraft could provide wider coverage & high angle of fire capable of pinning down enemy troops'. The concept had three major questionable areas: ballistics of the projectiles & their dispersion; ability of the pilot to aim the lateral-firing weapon & hold the target; & the reaction time necessary to change from the straight-&-level flight to the firing attitude in a 'pylon turn'.

In early 1963 Flexman contacted Capt. John Simons, a research psychologist stationed at Wright-Patterson AFB, proposing a possible test program to evaluate the side-firing gunship concept. After several phone calls Simons was sold on the idea. In April 1963 Capt. Simons forwarded Flexman's proposal to several research offices at Wright-Patterson. The answers came back like they were xeroxed - too many problems. One of Capt. Simons' superiors even sent the proposal to two other Aeronautical Systems Division (ASD) weapons boards. Both rejected the idea as 'technically unsound' due to the ballistics questions. Undaunted, Capt. Simons attempted to get the US Army Laboratory at Ft. Rucker to determine the dispersal pattern from a side-firing weapon. This effort was halted when his superiors told him that dabbling in weapon trajectories was stretching his duties as a research psychologist a bit far.

Project Tailchaser is Born

Capt. Simons persisted with his study & in May 1963 submitted still another proposal for a test of the side-firing principle - this time to the flight test section of ASD. Simons sought & obtained under the table approval to fly a few preliminary tests in conjunction with his other duties. **Project Tailchaser** was born. The next couple of

months saw much flying in a T-28 & C-131 aircraft using various grease pencil marks on the canopy side window as a rudimentary gunsight. No weapons were installed. These tests proved that an aircraft could track area targets, point targets & line targets while in the pylon turn. Capt. Simons marveled at the ease with which a target could be acquired & held in the sight.

The next step was the mounting of a gunsight in the left canopy window of the C-131. A series of cameras mounted in the cargo area would take the place of actual armament. Unfortunately flight testing of the concept was delayed indefinitely due to a lack of priority for the project. In July 1963 official approval came from ASD, but only for a lateral sighting project - no use of weapons was approved. The flight test plan called for 300 testing hours spread over a one-year period. Now, a lack of funds for the project kept it on the ground & except for two preliminary procedure check-flights, the project was grounded for a full seven months.

The summer of 1964 finally saw a few test flights actually get off the ground. Unfortunately, other duties would now force Capt. Simons to relinquish control of Project Tailchaser to Ist Lt. Edwin Sasaki. The post of project test pilot was eventually handed over to an ex-fighter pilot just back from a fact-finding tour of South Vietnam - Capt. Ron Terry. Terry had been in South Vietnam studying limited war principles, weaponry used & weaponry needed. He was the proverbial right man in the right place, at the right time, for the right job. Capt. Terry immediately drafted a scenario, based on his South Vietnam experience, utilizing a side-firing weapon system in the defense of a small fort or hamlet. ASD's Limited War Office bought it & promised support for the project.

Project Gunship I

In August 1964, the Limited War Office approved flight tests for an armed C-131 (No. 53-820) 'to determine the feasibility of firing guns with the (then proven) lateral sighting system.' Capt. Terry ferried the C-131 to Eglin AFB where a fairly new weapon, the 7.62mm General Electric SUU-IIA/A Gatling gun pod, was being tested. They had been designed for use in the standard forward firing mode such as under the wing of an A-I Skyraider or a helicopter. The SUU-II A/A had a two-speed motor drive capable of delivering 3,000 or 6,000rpm (rounds per minute), depending on the need. One of these weapons was bolted into a make-shift mount, which was then bolted into the starboard cargo door of the C-131.

The Dragons Teeth *- The legendary 'Spooky gunship' being loaded with its 'Dragon's teeth.' The Dragons miniguns with thousands of rounds 7.62 ammunition will breath fire on the unsuspecting Viet Cong. (USAF photo)*

The first live-firing tests took place in late summer 1964. The results were astonishing! Flying over Eglin's Water Range at altitudes of from 500 to 3,000 feet, & with a 'slant range' from 1,750 to 9,000 feet, the (A) C-131 scored 25 hits on a ten foot rubber raft, & 75 hits on a fifty foot raft. All this with only a one second burst. On Eglin's land range, twenty-five mannequins were set up in various positions & scattered over 3/4 of an acre. After one three second burst, ASD personnel counted 19 mannequins 'hit', with ten of them considered 'killed'. The skeptics were all very, very quiet. Lt. Col. MacDonald & Capt. Simons' idea had come to fruition. ASD now assumed control, with full funding & priority, of the program - now called **Project Gunship I**.

Terry & the Pirates

In September 1964 further tests of the side-firing system, mounted in a C-47 aircraft, were carried out at Eglin. The results were everything hoped for. It was now time to test the system under combat conditions. In the fall of 1964, Captain Terry, together with several other members of the project team, & four SUU-IIA/A Minigun pods, were sent to South Vietnam for combat evaluation & testing. *(Yes Virginia, the cartoon strip Terry & the Pirates was modeled after these guys)*

Capt. Terry arrived at Bien Hoa in October 1964 & immediately checked the maintenance records of the C-47 section of the Ist Air Commando Squadron. He picked out a fairly low-time aircraft which was delivering

supplies & mail out of Nha Trang. The aircraft, C-47 No. 43-48579, was ferried back to Bien Hoa where Terry & his crew mounted three of the GE Minigun pods in the cargo compartment. Two were mounted in the last two windows on the port side, while the third would fire out the open cargo door. A Mark 20 Mod 4 gunsight, the same as used in A-IE Skyraider fighter-bombers, was mounted in the left cockpit window. A trigger button, which could fire all three guns individually or simultaneously, was mounted on the pilot's control wheel.
Each of Spooky's three 7.62mm miniguns could selectively fire either 50 or 100 rounds per second! Cruising in an overhead orbit at 120 knots air speed at an altitude of 3,000 feet, the AC-47 could put a high explosive or glowing red incendiary bullet into every square yard of a football field-sized target in three seconds.' And, as long as its 45-flare & 24,000-round basic load of ammunition held out, it could do this intermittently while loitering over the target for hours. In addition to the minigun installation, the forward cargo hold was modified to hold 24,000 rounds of 7.62mm ammunition & forty-five 200,000 candlepower flares, which would be tossed out the open cargo door. Extra equipment included a VHF & UHF radio, an FM Command radio for use between the aircraft & troops on the ground, plus the usual TACAN, Liaison & IFF equipment.
Two aircraft crews were formed under the command of Capt. Jack Harvey & Capt. Lee Johnson. Harvey had been the Aircraft Commander when 579 was hauling mail at Nha Trang. The crews consisted of an aircraft commander/pilot, co-pilot, navigator, three airmen who would serve as gun mechanics, & a South Vietnamese interpreter/observer for communicating with the ARVN troops. Terry thoroughly briefed the two crews on the side-firing concept & all the problems & advantages associated with it. Capt. Harvey thought it was the most ridiculous idea he'd ever heard, but he was also very tired of being shot at in an unarmed C-47 & literally jumped at the chance to be able to fire back. December 15 marked the first of several successful day missions for Capt. Harvey as aircraft commander. Eight days later the first night mission had a double success. The first part of the sortie was flown at Thanh Yend in the Mekong River Delta, where the FC-47 dropped 17 flares & expended 4,500 rounds of ammunition, causing the Viet Cong to break off their assault. Then it was sent to Trung hung, where, under a barrage of 4,500 rounds of ammunition, the Viet Cong again were forced to leave. With both crews thoroughly briefed, & several missions already under their belts, Capt. Terry returned to ConUS in early 1965. He took with him much valuable information that would be helpful in a new project, **Project Gunship II** - the AC-130 program.
The aircraft had now been officially designated FC-47 - Fighter/Cargo-47. An immediate cry went up from the fighter pilots who resented calling a rusty old C-47 a fighter - no matter what type of weapons it carried. Capt. Harvey relates that 'You could hear their teeth grinding at 100 yards whenever someone mentioned the FC-47'. Eventually the fighter pilots screamed long enough & loud enough to the right people so that Air Force revived the old designation of Attack. The cargo plane turned fighter was now an AC-47.

Okay, Spooky it Is! The name Spooky originated in early 1966 after the first AC-47 squadron, the 4th Air Commando Squadron (ACS), had become operational. Remember that up until mid-1965 there was only the one FC-47 Puff. As such, organizational requirements were at a minimum. One afternoon the 4th ACSq operations shack received a call from 7th Air Force Headquarters wanting to know what the call sign was for AC-47 aircraft. The 4th ACSq had none! Two 4th officers, both exfighter jocks, looked at each other with one exclaiming *'What! Give that damn spooky Gooney Bird a tactical call sign? I'll kiss your ass!'* On the other end of the line came the reply *'Ok, Spooky it is!'* At least that's the way they tell it in the Officer's Club.
With only one aircraft operational in late 1964 & early 1965, the ground situations & the growing legend of the aircraft put a great demand on the aircraft & crews. First they'd fly all night near a hotspot in the Delta, next night maybe a hamlet near Nha Trang, then a couple of nights around Da Nang. It was incredible that the men & machine kept going. Only extremely bad weather grounded old Spooky. Finally in Spring 1965 another set of minigun pods was flown in & mounted in another aircraft. Meanwhile, a contract went out to Air International in Miami to begin reworking a batch of C-47s into production AC-47s. Headquarters USAF ordered TAC to establish an FC-47 squadron. Training Detachment 8, 1st Air Commando Wing (ACW), was subsequently established at Forbes AFB, Kansas, to organize what would soon become the 4th Air Commando Squadron. In Operation Big Shoot, the 4th ACS grew to

20 AC-47s (16 plus four for command support & attrition). At the same time the 4th Air Commando Squadron (ACS) started training on AC-47 operations at Forbes AFB, Kansas - without any actual aircraft.

What! No Miniguns?

The 7th Air Force wanted more Spookies. So did every ground commander in South Vietnam. The response was to take four more mail-carriers off the DaNang to Clark run & rework them into gunship configurations. One slight problem arose - there were no minigun pods for arming the new ships. Air Force crews then engineered a set of ten .30 calibre machine guns, Type M-2 Browning air-cooled, into mounts firing out various holes cut in the left fuselage. Three aircraft deployed to Vietnam & the fourth went to the 4th ACS at Forbes as a trainer. The .30 calibre gun installation was not nearly as effective as the minigun pod. For one thing, ten .30 calibre guns all together put out only 6,000 rounds per minute - the same as one minigun pod! They also suffered from constant jamming & airborne maintenance problems, which were compounded by the use of ammunition left over from World War ll & Korea! These aircraft filled a gap for a short time but they were rapidly phased out as minigun-equipped production aircraft became available.

The 4th ACS deployed from Forbes AFB to South Vietnam in Autumn 1965 with Air International built production AC-47s & immediately began operations. The aircraft they relieved, No. I & 2 Puff plus the three .30 calibre armed machines, were rotated back to Clark AB to be refitted with miniguns & camouflage paint. The 4th ACS, based at Nha Trang, sent flights of three aircraft & five or six crews to DaNang, Pleiku, Bien Hoa, & Binh Thuy. One flight was retained at Nha Trang. They became part of the 14th Special Operations Wing (SOW), & were popularily known as The Antique Wing since they flew only 'outmoded' propeller-driven aircraft - A-lEs, C/AC/EC-47s, U-10s, etc.

The Legend Begins

So impressive were the Spooky aircraft in action that they were named after ‘Puff the Magic Dragon,’ Capt. Harvey tells the tale of how the aircraft received the name Puff. Harvey had the aircraft in operation defending one of the many small hamlets in the Mekong River Delta area one night. One of the people inside the hamlet fortifications was a reporter from Stars & Stripes. Upon witnessing the wrath that the AC-47 brought down on the VC attackers that night, he reported that the visual effect of the tracers, one in every five rounds or twenty per second, gave the appearance of a dragon's breath. He also tied the roar of the guns, reverberating from the open cargo bay, into his description. Upon reading the account in the Stars & Stripes, the CO of the Ist Air Commando Squadron exclaimed *'Well, I'll be damned! Puff, The Magic Dragon!* from a child's song popularized in the US by the trio Peter, Paul & Mary. Needless to say, lyrics were often changed at the whim of the AC-47 gunship crews.

‘Puff the magic Dragon,
A bird of days long gone,
Came to fly the evening sky,
In a land called Vietnam’ (**Note:** If you know the rest of the words please send them to us)

The two pilots later had the crew chief or loadmaster, paint the name ‘Puff’ on the nose of the aircraft & used it as their call sign. The press soon picked this up & began referring to all AC-47s as Puff. The Vietnamese, being a superstitous people, took the name literally. Captured VC documents later told of orders not to attack the dragon as weapons are useless & it will only infuriate him.

Puff the Magic Dragon breathes on Saigon *- A time delay photo of a Spooky gunship at work on the outskirts of Saigon provides a vivid display for one of it's nicknames: Puff the Magic Dragon. The tracers raining down from the night sky represent only one of every five bullets fired from the gunships miniguns (USAF photo)*

Seen from a distance, these Dragonships seemed to roar as they spat a never-ending stream of bright red tracer rounds from the mouth of the miniguns to the ground below. If the show was spectacular, the results were deadly. On 8 February 1965, a Spooky flying over the Bong Son area of Vietnam's Central Highlands demonstrated both capabilities in the process of blunting a Vietcong offensive. For over four hours, it fired 20,500 rounds into a Vietcong hilltop position, killing an estimated 300 Vietcong troops.'

Poor Charlie!

As in every army in every country, there's always somebody who doesn't get the word. A year later, a Vietcong company attacking a 32 man Vietnamese Popular Forces (VPF) outpost shouted to the defenders through their loudspeaker, *'We are not afraid of your firepower!'* Shortly thereafter, the first of four AC-47s that would be taking turns over the camp that night began dropping & shooting a combined total of 75 flares & 48,800 minigun rounds into the hapless Vietcong, then at first light called in two F-100 jet fighters for napalm strikes. Apparently reconsidering their boast, the surviving Vietcong (often referred to by American GI's as Charlie) broke off their attack. Available reports do not mention whether they took their loudspeaker with them.

Gunship duty was extremely dangerous. The slow & low flying Spookies seemed to always put themselves in a position for all the world to shoot at them. Although the odds were often unfavorable, they never once deterred from their primary role of saving our guys on the ground. That fact was made deadly clear when one of the gunships fought in one of the most harrowing battles of the war.

Valor In Two Dimensions

On March 9, 1966, one of the 4th's gunships, *Spooky 70 (seven-zero)*joined with the A-1 Skyraiders of the 1st Air Commando Squadron to support yet another endangered Special Forces outpost. One of the Skyraider pilots emerged from the battle with the Medal of Honor. The AC-47 aircrew met with a different fate. The site was the A Shau Special Forces camp, barely two miles from the Laotian border & under heavy attack by 2000 North Vietnamese regulars. The defenders, 20 U.S Special Forces troops & 375 South Vietnamese soldiers, were surrounded & forced to retreat to a bunker at the northeast corner of the outpost.

Air support & probably air evacuation were needed desperately--a difficult operation under ideal conditions of terrain & weather. But conditions were far from ideal.

The camp was in a mile-wide valley surrounded by mountains. There was a 400-foot ceiling & a steady rain of mortar, rocket, & automatic weapons fire that tore up the landing strip & pinned the defenders in their bunker. They were in imminent danger of being overrun.

At 11:20 on the morning of March 9, Capt. Willard Collins & his AC-47 gunship crew, who had flown a mission the previous night, were rousted from their beds & dispatched from Da Nang to support the A Shau garrison. In the right seat of Spooky 70 was 1st Lt. Delbert Peterson. Other members of the crew were 1st Lt. J.L. Meek, navigator; SSgt. J.G. Brown, flight engineer; & SSgts. J. Turner & R.E. Foster, who manned the 7.62mm rapid-fire miniguns.

Collins & Peterson made two unsuccessful attempts to get under the clouds. Finally, leaving the safety of altitude, they broke through a hole & the cloud deck. Flying at treetop height, they located the outpost, & made a firing pass with its three minigins spitting 18,000 rounds a minute along the camp's perimeter. The vulnerable old AC-47, designed in the 1930s as a commercial airliner, took hits from ground fire as it lumbered through the narrow valley, flying close to the ground rather than at the normal gunship altitude of 3,000 feet.

Flying low & slow - After pinpointing it's target a low & slow flying Spooky gunship makes a firing pass at an enemy position (USAF photo)

Any element of surprise that may have existed was gone when Collins maneuvered Spooky 70 into position for a second pass through the gauntlet of fire. As they approached the bunker, both the tenacious AC-47 crew & the now thoroughly alerted North Vietnamese were firing thousands of rounds at each other at point blank

range. The Air Comando's luck couldn't possibly hold out in such impossible conditions. It didn't. Suddenly, the right engine was hit hard from enemy rifle & machine gun fire literally tearing the engine from its mounts. Collins had no more than regained control when the left engine was knocked out.

With superb airmanship, he & Peterson brought down the bullet-riddled gunship for a crash landing on a mountain slope. All members of the crew survived with minor injuries except Sergeant Foster, whose legs were broken by the impact. Collins & Peterson knew an enemy attack was inevitable. Since Foster could not be moved, they set up a defense at the site, rather than leaving the injured gunner & moving to more favorable terrain.

The crew, confident that a rescue helicopter would answer their call for help, repulsed the first attack, which came 15 minutes after they hit the ground. Minutes later, a second attack was turned back, but Collins & Foster were killed in the firefight. With only four men left to defend a 360-degree perimeter, the chance of holding out until that chopper came in looked pretty bleak.

The USAF helicopter attempting the emergency extraction of the four surviving crewmen came under heavy ground fire itself on its final approach. Worse yet, the sound of the approaching chopper provoked a final assault on the trapped Americans. Muzzle flashes from a heavy machine gun that had been moved to within yards of the torn-up gunship were clearly visible to Lieutenant Peterson, now in command of the crew. Pinned down by the enemy gunfire, exhausted, & with time running out, the members of Spooky 70 awaited their fate. If the gun were not silenced, the chopper would likely be downed before it could rescue the four airmen.

Del Peterson knew it was up to him. At that moment, the Spooky co-pilot broke cover to charge the oncoming enemy. Spraying bullets from his M-16 rifle, he charged the gun, which went silent as the helicopter dropped down to pick up Meek, Brown, & Turner, leaving Peterson, whose fate was not known, & the two dead men behind. Having sacrificed his life to ensure the successful extraction of the last three survivors, Peterson was carried on Air Force rolls as missing in action until February 1978, when his status was changed to killed in action. During that period, he was promoted to major. Both he & Collins were awarded the Air Force Cross posthumously.

That mission was one of the few instances in the Vietnam War when both pilots of an aircraft were awarded the nation's second-highest decoration for valor. It was the only one in which the awards were made for extraordinary heroism in both air & ground combat. The self-sacrifice of those two men to save other members of the crew did, indeed, ‘reflect the highest credit upon them & the United States Air Force.’

The day after this incident, Maj. Bernard Fisher, 1st Air Commando Squadron pilot, pulled off one of the class acts of the entire war, landing his two-seat Skyraider on the littered A Shau airstrip in a hail of enemy fire to extract another Air Commando downed moments earlier in his Skyraider. A Shau fell later that day. Two years would pass before the Americans returned to the deadly A Shau valley.

With the type of mission they flew it is no wonder that the 4th had the highest loss rate in South Vietnam. First they were flying aircraft usually older than the average pilot. The aircraft were always over gross weight & tail heavy. They were being flown by pilots with little or no flight time in propeller aircraft, let alone 'tail-draggers'. Add to this the night mission danger of in-flight collision, ground fire (friendly & otherwise), vertigo & the Vietnamese weather, one can readily appreciate the high loss rate.

By June 1966, four AC-47 Dragonships had been lost in combat. In addition to the A Shau loss, three others had gone down due to ground fire over Laos as they attempted to interdict the flow of war supplies down the Ho Chi Minh Trail in the face of the most formidable antiaircraft defenses they would ever encounter. It's one thing to fly an armed, very slow, unsophisticated Spooky over hostile targets in South Vietnam where you might run into some heavy machine gun fire from Charlie. It was quite another when you sent this same aircraft into a totally hostile area studded with 37 & 57mm anti-aircraft guns, some of which were radar-guided. Spooky was a sitting duck in this environment. Following the losses in Laos, the gunships were called back to Vietnam, where they would remain until their return to Laos in 1969. Interdiction of 'the Trail' would be left to A-26 & B-57 night intruder aircraft pending the arrival of the AC-130 & AC-119Ks.

Spooky often worked in conjunction with other aircraft types. Due to its great 'loiter time', Spooky would often fly flare missions or be an airborne Forward Air Controller (FAC) for fighter-types or B-57s. Using AC-47 flaredrops, A-IE & Sleepytime FAC 0-2 aircraft could pinpoint a target easily. C-123 Moonshine & Candlestick flareships also worked as FAC for both Spooky & the other types. Spooky also worked with Navy Black Pony OV-10s in patrolling the canals & waterways in the Mekong Delta region.

The Saving of Spooky 71 (seven-one)

In 1968, on one of these supposedly routine AC-47 gunship missions, the heroic actions of a young airman earned him the Medal of Honor, making him the only Air Force enlisted man to be so honored during the Vietnam conflict.

Heroism knows neither age nor rank. During World War II & Vietnam, five airmen earned the Medal of Honor. Junior among them was 23-year-old Airman First Class John L. Levitow, loadmaster on an AC-47 gunship, *Spooky 71*. On the night of February 24, 1968 Spooky seven-one went to the aid of besieged troops at Long Binh Army Base a few miles northeast of Saigon. It was John Levitow's 181st combat sortie.

Defending camps was a gunships speciality, & on operational missions, Loadmaster Levitow was responsible, among other duties, for setting the ejection & ignition controls of the Mark-24 magnesium flares carried by USAF gunships in Southeast Asia. The flares provided illumination for troops on the ground, for the gunship's pilot to aim his three side-firing 7.62mm Miniguns, & for fighters that might be called in to help suppress enemy fire. Once the controls were set, the Mark-24, packed in a three-foot long metal tube weighing about 27 pounds, was passed to a gunner who triggered the arming mechanism & who tossed the tube out the plane's cargo door. Ten seconds after release, an explosive charge opened the flares parachute, & in another 10 seconds the magnesium ignited, generating a light of 2,000,000 candlepower. At 4,000 degrees Fahrenheit, the flare could burm through metal. The Mark-24 was not to be treated casually. Improperly handled, it could be painfully lethal.

On that February night, Spooky 71 had been in the air for four & a half hours flying combat patrol over Tan Son Nhut Air Base, when Maj. Keneth Carpenter, the aircraft commander, was directed to an area south of the Army base where enemy morrtars were laying down a heavy barrage. As the plane arrived at its target area, the Ac-47's multibarreled miniguns soon knocked out two of the mortar positions attacking Long Binh. As the gunship pummeled the mortars, Levitow set the ejection & ignition timers on the gunship's MK-24, two-million-candlepower magnesium flare & handed it to Amn. Ellis Owen, whose finger was through the safety pin ring preparatory to tossing the flare through the door at Carpenter's command.

Suddenly Spooky 71 was rocked by a tremendous blast. Against odds of at least one in a million, an enemy 82mm mortar round exploded inside the gunship's right wing, shredding the paper-thin fusalage with thousands of fragments & lethal shards of hot metal. All five crew members in the rear of the plane were hurled to the floor, bleeding from shrapnel wounds. Spooky 71 fell into a steep, descending turn to the right, momentarily out of control. The flare, torn from Owen's hands by the blast, rolled around the aircraft floor fully armed amidst several thousand rounds of live anmunition for the Miniguns.

Through a haze of pain & shock, Levitow, with more than 40 shrapnel wounds in his legs, side, & back, saw one of the crew lying perilously close to the open cargo door. As he dragged the wounded man to safety, Levitow spied the armed, smoking flare rolling eratically around the cargo compartment. How long had it been since the safety pin was pulled inadvertently--five seconds? Fifteen seconds? Levitow had no way of knowing. He did know that the timing mechanism could have been damaged, which might result in premature ignition. In a matter of seconds the flare would ignite, its intense heat turning the stricken gunship into an inferno.

Weakened from pain & loss of blood, & partially paralyzed by his wounds, Levitow tried vainly to pick up the flare, which was already spewing highly toxic smoke throughout the cabin. The plane was still in a 30-degree bank. Seconds ticked by. Finally, as he watched the flare skidding around on the floor, he threw himself on the flare, dragged it to the open door, a trail of blood marking his path, & pushed it out just as it ignited in a white-hot ball of flame. Levitow then lapsed into unconsciousness.

Carpenter managed to regain control of the gunship, its wings & fuselage riddled by 3,500 shrapnel holes, one of them three feet in diameter. Ambulances & a medical evacuation helicopter were waiting on the flight line at Bien Hoa, Spooky 71's home base, when the battered plane landed with its five injured crewmen--two of them, including John Levitow, seriously wounded. Levitow was flown to a hospital in Japan. After he recovered, he flew 20 more combat missions before returning to the States to complete his enlistment as a C-141 loadmaster at Norton AFB, Calif.

On Armed Forces Day, May 14, 1970, President Nixon presented the Medal of Honor to Levitow in a ceremony at the White House. The young airman's heroism in the night sky over Vietnam had added another chapter to the saga of valor that is a vital element of the Air Force gunship heritage.

Don't Shoot! I'm Only Bullshitting

One of the more enjoyable missions was when Spooky was assigned to work with a C-47 psywar aircraft – *Gabby* to her friends & unofficially a Bullshit Bomber. It was a standard C-47 with a large speaker mounted in the cargo door & an ARVN troop constantly rejoicing over the mike about the benefits of the South Vietnamese government. Gabby would orbit at about 3500 feet in a pylon turn & begin talking to the 'little guys on the ground' -always imploring them not to fire upon the speaker aircraft or great trouble would befall them. Unbeknownst to the black pajama crowd, Spooky was also orbiting above them, at 3,000 feet & about 1/4 turn behind Gabby. Sure enough, the black pajama boys would begin firing on Gabby & the mighty wrath of Spooky would fall upon them. Whereupon Gabby would retort *'See, I told you so'*.

The Dragon's breath! *The fire from the muzzle, plus the eerie growl caused by resonance inside the empty cargo compartment, caused the superstitious Vietnamese people, both North & South, to imagine a dragon in the air earning the AC-47 nicknames such as 'Puff' & 'Dragonship.' (USAF photo)*

No Frills Airline

The AC-47 was an extraordinarily simple aircraft to operate. In all other aspects save the armament, she was just an overloaded DC-3/C-47, with very similar flight characteristics. But when you were 'on station' & sighted the target, a pilot had his hands full. Remember, this is an unsophisticated Gooney Bird - no fire control computers or infra-red devices. Not even a Night Observation Sight. The only fire control devices on board were:

(a) A good pair of eyes

(b) A quick mind to calculate the correct amount of 'Kentucky Windage'

(c) A steady pair of sweaty palms.

The aircraft would orbit near a suspected trouble spot & wait for a call for help. Once received, the AC-47 would rush to the scene like a police patrol car. After locating the target the pilot would fly parallel to the target until it appeared 100' aft of his position, or roughly when the target passed between the left prop hub & the top of the engine cowl. At this stage the pilot must mentally compute the 'slant range' - the distance between the gun muzzle & the target. This 'slant range' is what determines the amount of bank the aircraft needs to bring the guns 'on target'. Generally the shorter the slant range, the greater the amount of bank needed. Other variables to consider in this version of 'Kentucky Windage' include the following:

Airspeed - each knot of wind will displace the projectile 1.69 feet per second of bullet travel.

Gun Recoil - As the guns are fired it causes the aft fuselage to swing to the right, which cause the bullets to fall short & to the rear of the target.

Saturation Factor - how many bullets in a prescribed target area.

Example - a four second burst from one minigun, at a slant range of 4500 feet, will put 400 bullets in a circle 31.5 feet in diameter.

Once the target has been acquired, & the aircraft moved until the target is at the appropriate 100 degree position in relation to the gunsight, & all the 'Kentucky Windage' variables have been figured out, then the pilot can roll the aircraft into the proper amount of left bank & begin a firing pass. It is incorrect to perceive that a firing run is a perfect circle as each time the guns are fired the pilot must reacquire the target position due to the recoil action. So the actual firing pass will be an arc, then straight, an arc, then straight, & so on.

Now that we can fly it & fire the weapons with some degree of accuracy, let's talk about the problems involved in target identification & clearance to fire in the actual war zones of South Vietnam. From Captain Rick Ott, an AC-47 pilot flying out of Binh Thuy AB in the Delta:

‘There were usually three aircraft assigned to each detachment, or flight. One would fly airborne alert from dusk to midnight. The second aircraft would sit five minute ground alert at Binh Thuy. At midnight they would reverse roles. The third aircraft filled in.’

‘Out of Binh Thuy you flew airborne alert up & down the Mekong River waiting for 7th AF or IV Corps Headquarters to inform you of a trouble spot. Let's say the VC were attacking a small fort or hamlet somehwere in the Delta region. Your navigator would give you a heading to bring you over the target area. Once you located the target area you had to discern the good guys from the bad guys from an altitude of, usually, 3500 feet, & at night. And leave us not forget that the bad guys wore black pajamas! If the troops in contact (TICs) were American or English-speaking, the pilot would begin to converse with the ground FAC on the FM radio net. If ARVN troops were involved, we always had a South Vietnamese interpreter on board to do the talking.’

‘We would inform them we were 'Spooky 81(eight-one) overhead with flares & miniguns. Please mark your position & the position of the VC'. This could be done in many ways such as a fire arrow that pointed in the direction of the VC (like the one seen in the movie ‘The Green Berets). Also a burst of tracer fire might be fired in Charlie's direction. Once the 'friendlies' were pinpointed, the pilot would call for flares. Now began the hard part - getting clearance to fire.’

‘Anytime an AC-47, or any other aircraft, fired its weapons, it needed clearance to fire. In the Delta region it meant an OK from 'Pawnee Control' (GCI at Bien Hoa), an OK from 7th AF, an OK from the regional US Army Commander, regional ARVN commander, & so on down the line including the mayor or chiefton of the hamlet you were defending. What happened if the local chief was off visiting his mother-in-law in the next village? We simply orbited overhead dropping flares while someone went after the chief or whomever's OK was needed. Meanwhile, the good guys were getting their tails shot off & there was nothing we could do about it. The only time you were cleared to fire without permission was when an aircraft was receiving fire from the target area. If the situation on the ground got very desperate, one of two things might occur -the good guys would fire a burst near the Spooky & say it was Charlie; or the pilot would 'imagine' he was being fired upon!’

You always had a weapon at the ready. When Spooky made his appearance, the smart bad guys would break off their attack, usually trying to out-wait the gunship. If they didn't break off, & were caught in the open, they quickly joined their ancestors. One AC-47 pilot caught an entire VC battalion in the open up near Nha Trang & decimated them. The morning body count was over 400.’

Just Another Day at the Office

During USAF AC-47 operations between late 1964 & early 1969, over 6000 hamlets, forts & firebases came under the protective fire of Spooky not one fell while the aircraft was overhead. The effectiveness & versatility of the AC-47 can best be shown by this mission report from Capt Ott:

‘Pawnee Target Control had sent us to aid an ARVN Popular Force unit with two American advisors that had been ambushed just southwest of Binh Thuy. The patrol was pinned down & spread across a rice paddy. The top American advisor couldn't regroup & was not sure of his casualty status.

He was marking his position with a flashlight, which was extremely hard to see from 3000 feet. We were in contact by FM radio & he gave us a rough bearing on the VC position. As I dropped my first flares the VC broke off their attack in the hopes that we would withdraw. The time was 1 a.m.

I hosed the area that the advisor pinpointed as the VC strongpoint. Every ten or fifteen minutes I would drop another flare. I used no set pattern so the VC couldn't calculate it & take advantage of timing. I also fired some short bursts both by flarelight & in the dark. At times I wondered if the VC were still there as they did not attack again all night. About 5 a.m. I had my answer.

The VC attacked the ARVN position around 5 a.m. & luckily I had enough ammo left to force his withdrawal. It would be their last attack as dawn was coming & the VC had to change into white pajamas so they could work at the nearest good guy outpost. I remained on station until 0630 coordinating Medivac & 'Dust-Off' helicopters. I had about 2000 rounds (about 7 seconds worth) & no flares left.

It had been our second sortie that night as we had flown the dusk-midnight shift over another hamlet. On that mission I had dropped 24 flares & fired 5000 rounds in support of a fighter strike. Later we dropped another 14 flares & fired 16,000 rounds on a TIC support mission. About midnight we returned to Binh Thuy to rearm & refuel for the second shift. The other two airborne alert birds were supporting other targets so we flew both shifts. When the night ended we had flown 9 hours, dropped 83 flares, & fired 42,000 rounds. It was typical of

Spooky missions in the Delta region. During May 1969, my crew got in over 100 combat hours, dropping 750 flares, & firing over 500,000 rounds. Again, this was close to the norm for most Spookies.'

In January 1968, a second AC-47 unit, the 14th Air Commando Squadron (redesignated 3 Air Commando Squadron that May), was formed at Nha Trang as part of the 14th Air Command Wing. The superb work of the two AC-47 squadrons, each with 16 AC-47s flown by air crews younger than the aircraft they flew, was undoubtedly a key contributor to the award of the Presidential Unit Citation to the 14th Air Commando Wing in June 1968. Recognition from the Republic of South Vietnam came the following year, when the 14th Special Operation Wing was awarded the Vietnamese Cross of Gallantry with Palm, the first time the Vietnamese government had so honored a USAF unit.

Vietnamization Begins

As the US accelerated the transfer of its equipment to the South Vietnamese government in the fall of 1969 in a program referred to as 'Vietnamization,' the gunship squadrons began transferring their AC-47 aircraft to the VNAF. Like the Phoenix rising from the ashes to fly again, 16 of the Dragonships from the 3d & 4th SOS were resurrected in 1969 as the VNAF's 817th Combat Squadron, popularly known as the 'Fire Dragons.' The new squadron's performance awed USAF evaluators, one of whom was moved to report, 'This squadron is better than any USAF AC-47 squadron that was ever over here.'

Jack S. Ballard's *The United States Air Force in Southeast Asia: Development & Employment of Fixed-Wing Gunships, 1962-1972* is the definitive book on USAF gunship operations in Southeast Asia. In this book, Ballard explains the superlatives given to the Fire Dragons by USAF observers. While the average American AC-47 pilot accrued 800 combat hours during his one-year tour in Vietnam, the Vietnamese gunship pilots began their AC-47 duty having already accumulated 6,000 to 12,000 hours in the C-47. And, the Vietnamese pilots never rotated out of combat duty. If not killed or crippled in combat, they only got better & better at their deadly business. And, perhaps naturally, the Vietnamese pilots seemed to have a better knack for picking out terrain & enemy assault formations at night than did their USAF counterparts. Within six months of the activation of the 817th, the squadron was flying AC-47s in all four military regions of South Vietnam. Acting as forward air controllers on occasion, the Fire Dragons quickly discovered that the highly experienced Vietnamese gunship pilots knew their business. And in addition to the Fire Dragons, there were still other Asian pilots in Indochina capable of flying the AC-47 with deadly effect against North Vietnamese. A final twist was in store for the old gunships, however, as the VNAF transferred four of their newly acquired AC-47s to the Royal Laotian Air Force during this period.

Hot Guns for the RLAF

While the AC-47s were no strangers to combat, they had in 1966 & again in 1967 been flown by the Air Commandos in support of Laotian & Hmong army forces. The concept of incorporating a gunship within the Royal Laotian Air Force was an increasingly desirable option, given the timing & momentum of the Nixon administration's Vietnamization process. The ability of the Laotian Air Force to fight with or even maintain the AC-47 remained an open question, at least in October 1969, when the first RLAF AC-47 went into action. The return of the AC-47 proved considerably more successful as the gunships were selectively used in support of Gen. Vang Pao's forces in northern Laos, away from the Ho Chi Minh Trail.

In their first action, the RLAF crew held the triggers down until the minigun melted. The reports don't indicate what, if any thing, they hit, but the bundles of brass shell casings available for sale downtown was noted-not an auspicious beginning! Nevertheless, the RLAF/AC 47 conversion continued with the result that by the following January the RLAF boasted 13 AC-47s And to the surprise of many, the RLAF gunship crews learned the art of gunship fighting sooner than expected. And it was none too soon.

In December 1969, Gen Vang Pao's guerrilla army of Hmong tribesmen was finishing a beleagured year in which its forces were being steadily ground down by a much larger & better armed North Vietnamese Army. Despite these setbacks, the general still responded with a firm 'no' to the idea of RLAF-flown AC-47s supporting his mountain tribesmen. Long-standing animosities between the Hmong & the lowland Lao had built an instinctive distrust over the possibility of an accidental or even intentional use of the gunships against the Hmong themselves. Events proved that the general couldn't have been more wrong. When deteriorating weather & other USAF priorities left no alternative, Gen Vang Pao reluctantly took his first taste of RLAF gunship support. Much to his surprise & his troops' grattitude, the Laotian-flown Dragonships came to the rescue again & again over the

following months of 1970. Numerous Lima Sites were successfully defended & hundreds of Hmong casualties were avoided as the RLAF fought hard in the final years on behalf of the Hmong army.

The End of an Era

In 1969, the AC-47 was phased out in favor of their larger, more sophisticated brothers - the AC-130 Spectre , AC-119G Shadow & AC-119K Stinger. Eighteen AC-47s were turned over to the VNAF. At least eleven went to the Royal Lao Air Force. And several found their way into service with both the Thai & Cambodian Air Forces. The AC-47's remarkable record of over 6000 hamlets defended - none lost, speaks for itself. But the greatest compliment always came from the ground troops Spooky defended. The last message on the FM net was always the same - *Thanks Spooky! We wouldn't be here now without you.*

A Rest for the Gooney *- A legendary Gooney Bird turned gunship, this AC-47 awaits nightfall on the Bien Hoa ramp (USAF photo)*

The venerable old Gooney Bird, already an aviation legend long before it's gunship role, had earned yet another laurel for ushering in an entirely new concept in US Air Force combat operations. It's pioneering fathers & brave crews had set the stage for the amazing return of Fairchild's Flying Boxcar turned hunter/killer....the **AC-119 Gunship**.

(Excerpts from *Apollo's Warriors* by Col. Michael E. Haas, USAF, Ret., & *Gunships: A pictorial History of Spooky* by Larry Davis, & Fixed-Wing Gunships by Jack S. Ballard.)

The Saving of Spooky 71 By John L. Frisbee, Contributing Editor, *Air Force Magazine*, Published Oct 1984, Vol. 67, No. 10; Valor In Two Dimensions By John L. Frisbee, Contributing Editor, *Air Force Magazine*, Published Jan 1988, Vol 71, No. 1