

GUNSHIP III

By Dr. Larry Elton Fletcher

AC-119G SHADOW & AC-119K STINGER

© 2004 Darby Perrin

Editor's Note: The story of the AC-119 gunships was regrettably omitted from Vol. 1, Issue 4, of the summer issue of Air Commando Journal. The Shadows and the Stingers played an important part in our gunship heritage and their story is told here, albeit a bit late.

AC-119K Stinger "Rollin' In" by Darby Perrin (Permission obtained)



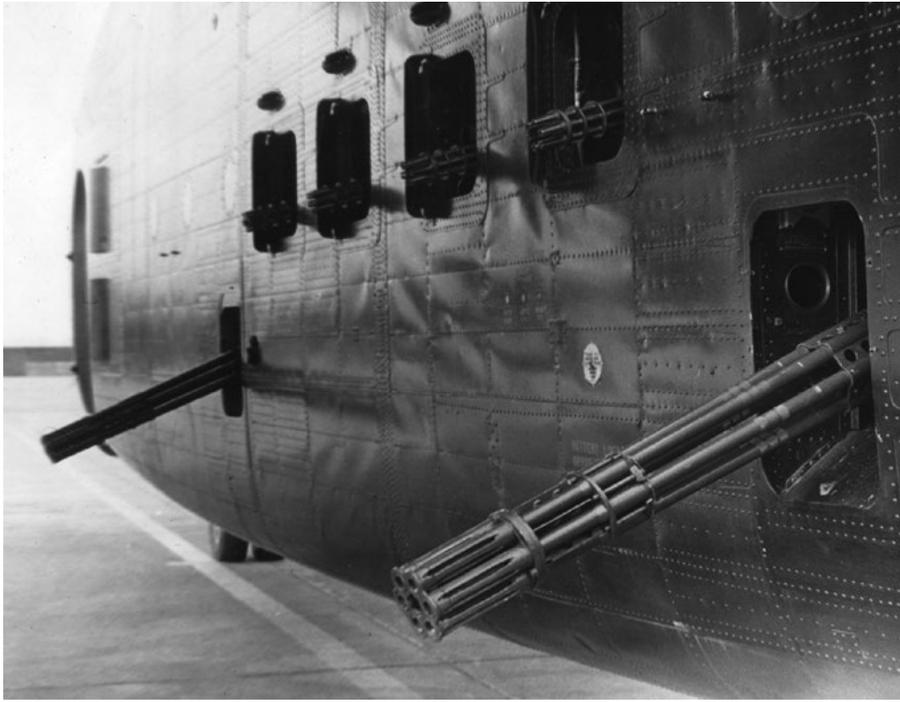
After witnessing the impact and effectiveness of the original AC-47 "Spooky" gunships, American ground commanders in Vietnam clamored for more fixed-wing gunships. Vietcong attacks on American troops and installations usually occurred during hours of darkness. An urgent need existed for additional, sustained, nighttime aerial support and more firepower to counteract enemy attacks.

The low wing AC-47 lacked payload capacity and extended loiter time. The high wing C-130 had the attributes of power, payload capacity, and extended loiter time. High wing gunships were preferred for the better visibility they afforded the crewmembers and sensors, and thus improved the acquisition of targets. Gunship II, an AC-130 was produced and sent to Southeast Asia for evaluation. Combat evaluations were most satisfactory, but the shortage of C-130 airframes available for conversion to gunships and the fact that C-130s were in great demand to haul cargo and troops slowed the fielding of more AC-130 gunships.

The Air Force consequently sought an alternative to the C-130 and turned to the high wing C-119G "Flying Boxcar" as a solution to fill the void until more AC-130 gunships could be available. The C-119 was developed after World War II as follow-on to the C-82 Packet. Flying Boxcars were utilized throughout the world as cargo carriers and troop/paratroop transports. The C-119s flew combat during the Korean War and the First Indochina War, fought by the French from 1946 – 1954 in North Vietnam, where some C-119s were modified to drop napalm on Vietminh forces at Dien Bien Phu.

The Air Staff designated the AC-119G/K Gunship III project as "Combat Hornet" on 21 February 1968. The first phase was developing improved replacement gunships for aging AC-47 gunship missions in Vietnam. The most expedient and justifiable remedy was the AC-119G model. Thus, the G model gunships took priority over the more desirable, sophisticated and powerful K models.

A contract to modify the C-119Gs to Gunship III was awarded to Fairchild-Hiller, manufacturer of C-119s. Twenty-six C-119Gs were converted into attack cargo (AC)-119G gunships. Modifications included installation of four 7.62mm



AC-119K Stinger Business Side. Four 7.62mm Miniguns & Two 20mm Vulcan Cannons.
Author Collection

miniguns, a computerized gunsight fire control system with lead computing optical gunsight and fire control display for pinpoint placement of bullets, a flare launcher housing twenty-four flares, a 1.5 million candlelight Xenon “white spot light” illuminator with variable beam, a night observation scope (NOS) which magnified starlight, moonlight, and infrared several thousand times to provide the NOS operator with a clean, though green picture of the terrain below, an auxiliary power unit (APU), ceramic armor plating for crew protection, twenty-two self-sealing fuel tank bladders in wings to suppress explosions, and updated flight, navigation, and standard radio equipment for SEA operations.

On 13 May 1968, C-119G Reserve units of the 930th Tactical Airlift Group were called to active duty. Reorganized in June as the 71st Air Commando Squadron (ACS), the squadron moved to Lockbourne AFB, Ohio for gunship training. The 71st ACS, re-designated as the 71st SOS, was the only USAF Reserve unit called for combat duty in Vietnam.

The AC-119G Gunships were ferried to Vietnam by 71st SOS crews. Skirting the northern rim of the Pacific Ocean around Alaska, they island hopped from

Adak on the final legs to war. Assigned to 14th SOW, 7th AF, Pacific Air Forces, the radio call sign “Shadow” was approved in December 1968.

The first two gunships arrived at Nha Trang on 27 December. The first Shadow combat mission was flown 5 January. A combat evaluation team assessed the AC-119’s performance during the first two months of operations in-country. Satisfactory performance was reported except for forward air controller (FAC) duty because the aircraft was too slow, hard to maneuver and vulnerable to enemy fire.

Shadows proved to be extremely accurate hitting enemy targets and very effective supporting U.S. Marines and Army ground troops-in-contact with enemy forces. Ground troops soon learned the gunship name supporting them was Shadow, not Spooky. About to be overrun, one GI radioed to a FAC, “Screw the F-4s; Get me a Shadow!” The NOS enabled the gunship to see in the dark. Thus, the motto of Shadow gunship squadrons was “Deny Him the Dark.”

Eighteen Shadow gunships were in-country by 1 March. The Shadows successfully replaced AC-47 gunships transferred to the Republic of Vietnam Air Force (VNAF) and the Royal Laotian

Air Force (RLAF). 71st SOS Forward Operations Locations (FOLs) at Tan Son Nhut AB and Phan Rang AB were established and flying missions by mid-February.

71st SOS aircrews included Reservist crews highly experienced in the aircraft, supplemented by active-duty USAF crews. Combat crews consisted of Pilot/Aircraft Commander (fired guns), Co-pilot (monitored altitude, airspeed, radios), Navigator (on the flight deck, found/identified targets), another Navigator (on the cargo deck, operated the NOS to pinpoint targets for the pilot’s gunsight), Flight Engineer (fuel/engine performance), Illuminator Operator (white light/flares), and two aerial gunners. The 8-man team worked as one entity.

Shadow attack altitudes above ground level (AGL) were: 1500, 2500, 3500, and 4,500 feet. Most missions were flown at or below 3500 feet because maximum effective range of 7.62mm miniguns was 3500 feet. Weather conditions and enemy anti-aircraft guns usually determined firing altitudes. Max duration of combat missions was 6 hours with 30 minutes reserve fuel, but most missions ranged between 4 and 5 hours. Power from two Wright R-3350 radial piston-driven engines with variable four-blade propellers enabled the aircraft to cruise at 180 knots. During combat, speed was reduced to 140 knots.

The 71st SOS completed its mission of establishing Gunship III operations in Vietnam. Procedures and standards had been established, plus they recorded an impressive BDA during five months in combat. On 1 June 1969, the 71st SOS was replaced by the newly activated 17th SOS which absorbed 65% of 71st SOS personnel. Activated Reservists departed Nha Trang for Bakalar AFB, Columbus, Indiana where they were released from active duty on 18 June.

The 17th SOS didn’t skip a beat assuming Shadow operations. In October, the 14th SOW moved its HQ and squadrons to Phan Rang AB. 17th SOS’s A Flight moved to Tuy Hoa, B Flight remained at Phan Rang, and C Flight stayed at Tan Son Nhut. Except for unofficial clandestine out-country missions, the 17th conducted operations



throughout the four military regions of South Vietnam with 18 gunships. In April 1970, A Flight moved to Phu Cat.

U.S. and ARVN ground forces invaded Cambodia on 1 May to eliminate North Vietnam Army (NVA) sanctuaries along the RVN border. Within five days of the invasion, AC-119 gunships were flying CAS and support missions for American ground troops in Cambodia.

In June, C Flight at Tan Son Nhut was assigned the secret task of providing 24/7 air support for the Cambodian Army fighting the NVA. C Flight was quickly strengthened with additional Shadow gunships and crews from A Flight and TDY AC-119K Stingers from Da Nang, reaching 15 gunships at various times.

Mission priorities for 17th SOS Shadows were to provide close fire support of U.S. and friendly troops in contact with enemy forces, close fire support of U.S. and friendly military installations, pre-planned armed reconnaissance and interdiction of hostile areas and infiltration routes, search and rescue support, night and day armed escort of road, river, and close off-shore convoys, illumination for night fighter strikes, and harassment and interdiction of enemy.

In 1971, the priority mission for the 17th SOS shifted from operations in Cambodia to Vietnamization of AC-119G gunships. The squadron was charged with training 24 VNAF crews to take over Shadow gunships by September 1971. With the FOL at Phu Cat closed, B Flight Shadows at Phan Rang flew continual support missions for Lima Sites in southern Laos and then TDY stints at Da Nang to cover for Stinger gunships supporting Lam Son 719, the South Vietnamese invasion of Laos to cut the Ho Chi Minh Trail. The Cambodian

air operations by C Flight continued until 17th SOS gunships and operations were turned over to the VNAF on 10 September 1971. The 17th SOS was deactivated on 30 September 1971. Shadow instructors at Tan Son Nhut remained as advisors for months later.

In the second phase of the Gunship III Project, twenty-six more C-119G aircraft were converted into AC-119K gunships at the Fairchild Hiller Plant in St. Augustine, Florida. In addition to modifications made to transform the C-119G into the AC-119G gunship, the K model had two J-85 jet engines added for greater take-off performance to accommodate heavier payloads. Increased payload included two 20mm Vulcan cannons and ammunition, beacon tracking radar, forward looking infrared radar (FLIR) and associated fire control system computers.

The 18th SOS was activated on 25 January 1969. Crews trained at Clinton County and Lockbourne AFBs. Six gunships departed Lockbourne for Vietnam on 21 October. Assigned to 14th SOW, the 18th SOS was also located at Phan Rang. The first AC-119K gunship arrived at Phan Rang on 3 November, flying combat 10 days later. By February 1970, 18 AC-119K Stinger gunships were in SEA. Call sign "Stinger" was approved by 7th AF, keeping fixed-wing gunship names starting with the letter "S." "Vengeance By Night" was Stinger's motto.

The primary mission for Stingers in Southeast Asia was interdiction of enemy lines of communication and supply routes on the Ho Chi Minh Trails in the Steel Tiger and Barrel Roll areas of Laos. Over time, Stingers would prove to be just as efficient in "killing trucks" as the Spectre. Flight levels for Stinger attacks ranged from 1500 to 5500 feet AGL, depending on weather conditions, terrain, targets, and anti-aircraft guns.



AC-119G Shadow "Guns Hot" by Darby Perrin (Permission obtained)



Rains of Death from Shadow Gunship Miniguns on KEL west of Phan Rang AB. Every fifth bullet fired was a red tracer. Time-delayed Photo by Shadow gunner Michael Drzyzga

If needed, the Stingers were available for close air support of ground troops and for defense of friendly installations in South Vietnam, Laos, and Cambodia.

Strategically located FOLs were established in-country at Da Nang and Phu Cat and out-country at Udorn, Thailand. In time, FOL Phu Cat was shut-down and FOL Udorn moved to Nahkon Phnom (NKP) RTAFB, leaving Phan Rang, Da Nang, and NKP for Stinger operations.

Stinger combat crews consisted of ten members; two pilots, three navigators (one navigated, one operated the NOS, one operated the FLIR), one flight engineer, one illuminator operator, and three aerial gunners.

Stingers reported their 1,000th enemy truck destroyed on 25 April. In May 70, Stinger 21 survived after enemy AAA shot off 1/3 (14 ft.) of the right wing including the aileron. The crew of Stinger 21 was awarded the McKay Trophy for the most meritorious flight of the year. In Feb 71, Stinger 04 destroyed eight NVA tanks while supporting an ARVN armor unit in Laos during Operation Lam Son 719. A new Stinger record of 39 enemy trucks destroyed on a single mission was set in April 71. Secretary of the Air Force Seaman personally recognized crewmembers while visiting Da Nang.

Anticipating deactivation of 14th SOW, 7th AF transferred the 18th SOS to 56th SOW at NKP in August. A detachment of Stingers at Da Nang and an FOL at Bien Hoa were maintained in-country. During this time, Stingers played a key role in the Commando Hunt VII air campaign, NVA Spring Offensive, and the Linebacker I campaign.

Under Project Enhance, sixteen AC-119K gunships from the 18th SOS and six from the 1st SOW were transferred to the VNAF in November 72 for training of VNAF crews by 18th SOS instructor crews. On 31 December 1972, the 18th SOS was deactivated, but Stinger instructor crews continued training

VNAF crews at Da Nang until 1 March 1973.

Gunship III AC-119G Shadows served combat duty in SEA for two years, nine months. No gunships were lost to enemy action. Two gunships crashed at Tan Son Nhut claiming the lives of 11 crewmen. Twenty-four of the original twenty-six AC-119G models were transferred to the VNAF 819th Hac Long Attack Squadron.

Gunship III AC-119K Stingers served combat duty in SEA for three years, two months. Only one of the four gunships lost resulted from enemy action. 18th SOS personnel losses totaled six. Twenty-two of the original twenty-six AC-119K models were transferred to the VNAF 821st Tinh Long Attack Squadron.

The 71st SOS was reactivated on 20 May 2005 under the 58th Operations Group at Kirtland AFB, NM and currently serves as the USAF CV-22 Osprey training squadron. The 17th SOS was reactivated on 1 August 1989 under the 353rd Special Operations Wing at Clark AB, PI. The 17th SOS is currently based at Kadena AB, Japan, operating MC-130P Combat Shadow aircraft.

The lineage of the 18th SOS continues in the current 18th Flight Test Squadron based at Hurlburt Field, FL. Aligned under 23rd AF on 1 January 2008, the 18th FLTS is the USAF Special Operations Command's independent field test agency, determining operational effectiveness and suitability of aircraft equipment and tactics.

For more information about Gunship III Shadow and Stinger, log on www.ac-119gunships.com and www.71stsos.com. 

About the Author: ACA Life Member, Former USAF Captain, Dr. Larry Elton Fletcher flew 177 combat missions as AC-119G Shadow gunship pilot awarded the DFC with oak leaf cluster. Fletcher has authored two novels about Shadows & Stingers in SEA. His latest nonfiction work Shadows of Southeast Asia is forthcoming. Log on his website at www.shadowgunships.com.