My AC-119K "Stinger" Gunship Story Dick Iversen - Colonel, USAF, Ret.

#### **Overview**

#### How & Why AC-119s

- C-119 Background/Performance/Specs
- Gunship History
- Why Vietnam War of Interdiction
- USAF Project Gunship I, II, III
- Gunship III The AC-119K "Stinger"
- Combat Mission/ROE/Threats & Tactics
- Igloo White/Task Force Alpha
- War Stories The MacKay Trophy
- Combat Video Clips
- Summary





#### How/Why it all Happened:

- Before Gunships (1965-70)
  - T-41/T-37/T-38/KC-135/T-39/F-4
  - 15 Months in SEA
  - SAC Command Pilot (C-135/T-39)
- AF Assignment System Form 17
  - 90% 1st Choice = A-1E "Sandy"
  - AC-119K Gunship "Stinger"
    - Life Insurance?
    - AF Training
      - Ohio





#### The C-119



#### C-119 (Redesign of C-82 'Packet')

- Fairchild Hiller 1949-74
- Airlift, Airdrop, Fire, Rescue
- Corona 1960 Midair Recovery (Wien)
- USN-USAF-USA 1183 Built/16 Nations
- Berlin, Korea & Vietnam
- Primary Airlift 1950-64
- 2004 Film Flight of the Phoenix
- "Flying Boxcar" "Widow Maker"
   "Shadow" "Stinger" "Dollar 19"





#### Comparative General Specifications

	C-119	AC-119K
Crew	4 (63 pax)	10+
Length	86'	
Wing Span	109′	
Height	27'	
<b>Empty Wt</b>	40,125Lb	61,200Lb
Max Tk of Wt	68,500Lb	80,400Lb
Power	2 x Wright-	Same + 2 GE Jets
	R-3350's	(2850 lbs Thrust Ea)

#### **Performance**

C-119 AC-119K

Max Speed 257 Kts 295 Kts

Duration 6 Hrs 30 Min 5 Hrs 45 Min

**Service Ceiling 24,300' 27,300'** 

Rate of Climb 1,010 fpm 1,315 fpm

Range 2,280 NM 2,850 NM

(Engine loss on takeoff max load=More than a handful)

AC-119K ~ 8,000 lbs. overgrossed on takeoff

#### **Gunship History**

- 1942 AF Lt. Col. McDonald (Proposed 50 cal on fixed wing)
- 1943 AF Maj. Paul "Pappy" Gunn (B-25 Gunship)
- 1962 Ralph Flexman, Bell Aero (Proposed Side Firing Gunship)
- 1964 A-26K First Gunship in Vietnam



#### **Basic Principle-Pylon Turn:**

"An aircraft flying in a level turn around a point on the ground (as if tethered to a pylon) can deliver accurate firepower from guns firing perpendicular to the line of flight."



#### Why Gunships in Vietnam?

- Not a "fast-mover" Strategy
- War of Interdiction: Basic Strategy in SEA since 1965
  - Most important aspect of modern warfare
  - Use armed force to slow or stop flow of supplies/food/ammo/personnel
    - Eventually he will lay down and surrender
  - Demand for Loiter/Firepower
  - 1963: AF Capt Ron Terry (Gunship I)
  - C-131/C-47 Project Tailchaser









#### **USAF Project Gunship I, II, III**

### Gunship I (1964-68) AC-47 "Spooky"

- 14th SOW Phan Rang 53 Aircraft
- 4th SOS
- Modified DC-3/4 Twin Recip
- 6-8 Man Crew
- 3 x 7.62mm side fire
- Flare Launcher





"Successful , but needed more capability"



#### **USAF Project Gunship I, II, III**

#### Gunship II (1965-Current) AC-130 "Spectre"

- 16th SOW Ubon
- Modified C-130
- 10-12 Man Crew
- 4 x 7.62mm Side Fire
- FLIR
- Laser Target Designator
- MTI Radar
- 40mm Cannon

- 16 Aircraft
- 4 Eng Turbo Prop
- 4 x 20mm Side Fire
- Fire Control Computer
- Low Level Light TV
- 105mm Howitzer (71-74)









"Very successful , but needed more aircraft"

### Gunship III AC-119G "Shadow" AC-119K "Stinger"

- Replacement for AC-47 "Spooky"
- High Wing Best suited for Gunship
  - C-130 or C-119
  - C-130 = Airlift Requirements
- AC-119G "Shadow" (1968-73)
  - 17<sup>th</sup> SOW Phan Rang/Tan Son Nhut/ Nha Trang/Phu Cat
  - 28 Aircraft
  - 8 Man Crew
  - 4 x 7.62 mm
  - Night Operation Sensor (NOS)
  - Flare Launcher
  - Illuminator





"Successful , but demand still for more"



#### **Gunship III (Continued)**

### AC-119K "Stinger" (1969-1973)

- 18 SOS Phan Rang/Nha Trang/DaNang/Nakhon Phanom
- 26 Aircraft (13/13)
- **MAJOR CAPABILITY ENHANCEMENTS:** 
  - 10-Man Crew (Pilot/Copilot/FE/NOS/FLIR/NAV/IO/3 Gunners)
  - 4 x 7.62 mm and 2 x 20mm Forward Looking Radar
  - FLIR /-NOS/- RHAW/- FCS/-HUD/-IO Flare Launcher
  - 2 x Wright R-3350s
  - 2 x GE Turbofan Engines
  - Ballistic Cloth Armor

- Beacon Tracking Radar
- Illuminator













### **Gunship Evolution 1964 • 1973**





#### The Gunship Mission



<b>Priority</b>	Mission
1	Close fire support of friendly troops in contact w/ enemy.
2	Close fire support of US/friendly installations/forts/posts.
3	Close fire support of strategic hamlets/villages and towns.
4	Armed recce and interdiction of hostile areas/infiltration routes.
5	Search and Rescue (SAR) support. (#1 W/O other SAR)
6	Night armed escort for road & offshore convoys.
7	Illumination for night fighter strikes.
8	Harassment & interdiction.







We were known as "Truck Hunters"

#### **Rules of Engagement (ROE)**

#### Published Gunship ROE - "Hazardous & Stupid"

- No fire on religious sanctuary's
  - Pagodas/Shrines/Temples
- No fire on river water vessels south of DMZ (Viet)
- No fire on river water vessels west of Saigon
  - When vessel is heading west or east
- No fire on engine powered water vessels over 21'
- No fire on boats near shore with less than 4 passengers
- No fire on coastal boats traveling in excess of 17mph
- No fire in 'NO-FIRE' Zones
- Others even more absurd!





Pilots had their own "unpublished" ROE

#### **Mission Profile**

- 10 + Sorties Per Night (Schedule)
  - Shadow/Spooky/Stinger/Spectre = 100 + Sorties Per Night
- N/S Viet/Laos/Cambodia
  - SEA Operations Area (Map)
- Intelligence Bfg (Tgt/ROE/Threats)
- Preflight (1-2 hours)
- Crew Duties
- TAC Doctrine (AAA/SAM)
  - "Scanner's Key"
- Postflight/Intell (TFA)









("Stinger" Happy Hour: Midnight - 0600 hrs)

#### **Mission Detail**



- Interdiction/Hamlets/Lima Sites/TIC's/SAR
- (N) - NKP = "Barrell Roll" "Alleycat"
- DaNang = "Steel Tiger" (S) "Moonbeam"
- TOT = 1.5 2.5 Hrs ("Bingo Fuel")

"Focus on Offensive Ops *Outside* Viet Nam- Not Defensive Within"



- Jets Off Radios (non-secure) Pylon Turn
- Individual Crew Duties
- 1 Gun/ 6 guns/any combination
- Flares/Lights..... Think Twice

#### Threat & Tactics

- AAA: Small Arms 7.62 12 23 37 57 (Scanner's Key)
  - Destroyed: 3 "Stingers" 6 "Spooky" 1 "Shadow"
  - Tactic: BREAK... Very Hard
- SAM: SA-2 (1957 Russian)
  - Most deployed air defense missile in history
  - Mobile 4 Hrs
  - 2 Radars: Detect/Track Acquire/Guide
  - Mach 3.5/Blast Frag/60,000'
  - Tactic: 120 BANK & DIVE... Very Quickly
- SAM: SA-7 (1968 Russian)
  - MANPAD/IR/HE/15,000'
  - 1972-74: 204 Hits of 589 firings
  - 51 Acft Destroyed 2 "Shadow" 1 "Spectre"
  - Tactic: 120 BANK & DIVE & FLARES...NOW











#### "Igloo White/Task Force Alpha

#### Operation Igloo White (Top Secret until 2006)

- Covert EW Ops (1968-1974)
- Joint Service Task Force
- Telemetry (Sensors/Computers/Communications/Aircraft)
- OBJECT:

"Direct strike aircraft along Ho Chi Minh Trail"

"Became the Keystone of US Aerial Interdiction Efforts of the Entire Vietnam Conflict"



#### Task Force Alpha (TFA) 68-74

- Infiltration Surveillance Center (NKP)

"We wired the Ho Chi Minh trail with telemetry from thousands of mic's hidden in Vietnam jungles and fed them to a massive intell processing center in Thailand."

AF/MSgt Paul Polyman

- Nakhon Phanom (NKP)
  - Heavily Guarded 250,000 sq ft Bldg
  - 100 + Military/Civilian
  - IBM 360/65
  - Vehicles: <70,000/Found & <10,000 Destroyed



"Highly Successful Operation"

### Task Force Alpha - 'The Operation'

- **SENSORS** (Thousands air delivered)
  - Accoustic/Seismic/Comm-Mic's)
  - Rubber Tree Branches
  - 80% effective after delivery 100-Day Life
- DELIVERY
  - P-2's/Helo's/F-4's



- RELAY/DATA LINK
  - EC-121R's/QU-22's/C-130's 24/7



#### Task Force Alpha "Personal" Experience

- Commanders: Col. Dick Rumney/Col. John Boyd
- Raquetball Pathway to:
  - Unique Friendship
  - TFA Gunship Flights
  - Higher Clearances TS-ESI (C-STK)
  - TFA Tour (Iversen only outsider to come inside)

TFA's "FAVORITE STORY" (1969 SAR)



"You're gonna' love this one.....!"

#### The TFA Story (TS-ESI 1969-2006)

- RF-4 Climbing to RTB
- Hit by SA-2
- Pilot KIA
- 'GIB' Landed high in trees (Mangrove)
  - Broken leg
  - Lost part of survival kit

"Here's the part you're gonna' love.....!"



#### My "Stinger" War Stories

- DFC SAR (Hue Phu By)
- Flight Controls on Takeoff
- Crew Chief Error (Life Saver)
- Rocket City DaNang
- SAM's are Bad News Very!
- North sans Escorts (Nukes/Atomic Bullets/Specials)
- Missing Scanner/Gunner
- Mission Tape (ROE)
- Secure Voice Radios (PDJ)
- 3 Aircraft Lost (AAA) 34 Aircrew

"The MacKay Trophy" - Capt. Alan Milacek



### MacKay Trophy - Created 1912



- For Most Meritorious Flight of the Year
   Oldest Award Given to AF Flying Officers
  - National Air & Space Museum
- Capt. Alan Milacek in AC-119K Gunship
  - May 8, 1970
  - Laos
  - 57MM AAA Destroyed 14' of right wing
  - Crew jettisoned equipment
  - Full left Rudder/Aileron & Assymetric Thrust
  - Skillfully managed to land at Saigon

#### My "Stinger" FUN Stories



- TFA Hootch
- Trailer Storage
- Commanders File Cabinet
- "No Hab" Kitchen (Omelets / Blueberry Pie)
- Stolen Police Dog
- "The Bob Hope" Show
- "Stinger" Flag Pole
- FUI (Flying Under the Influence)
- Royal Thai Navy
- Schumann/McGillis



#### **Summary**

#### **Interdiction - Fundamental Wartime Strategy**

- WWII "Stop Flow of Axis Supplies"
- Pacific "Disrupt Flow of Troops/Materiel"
  - 1943: Maj "Pappy" Gunn Proved Gunship Concept with B-25 (50cal) Destroyed 26 ships in 3 missions
- Korea "Thwart/Destroy Enroute Supplies"
- Vietnam "Slow/Stop/Disrupt Logistics Train"
  - Side-Firing Gunships at Night (Capt. Terry)
  - Vital Multi-Mission Weapon System

USAF Project Gunship - "Extremely Successful" AC-47 "Spooky" - AC-130 "Spectre" AC-119G "Shadow" - My AC-119K "Stinger"



### **Summary (Continued)**

#### Lessons Learned - A Comparison

- USAF Archives (1979)

"USAF gunships were the most effective night <u>Interdiction</u> and <u>Support</u> weapon of the Vietnam conflict."

- North Vietnam Archives (1983)

"Of all the weapon systems utilized against 'The Trail' – the fixed wing gunship was the most formidable; they established control over and suppressed our attempts to move troops and supplies."

### **Summary (Continued)**

#### Lessons Learned - "Gunships Most Feared!"

- Perhaps the most vivid description of the role played by U.S. Gunships in Vietnam is this:

"U.S. Gunships were the aircraft most feared by our troops. They called Them 'Dark Death.' Other aircraft came in, made a quick strike and were gone. But the Gunships lingered over the battlefield and when they sighted a target, the deadly cannons released sustained destruction such as our ground troops had never seen."

General Nguyen Duc Huy Commander, NVN 351<sup>st</sup> Div. (In a 1989 Interview with "The Weider History Group")





#### The Gunship of Today & Tomorrow

- C-130/A/E/H/U/K
- 4 x Allison T56 Turboprops
- 4 x 7.62 mm 4 x 20mm 2 x 40mm 1 x 105mm
- Modern high tech cockpit, precision weapons, radars, fire control systems, etc.
- Laser Cannon that will melt a tank from 5 miles/10,000'
- Plus much more!

"Highly effective in Vietnam, Grenada,
Desert Storm, Panama, Somalia, Iraq and Afghanistan



ETINGE

# AC-119K "Stinger" Story

#### The Vietnam conflict ended in 1974

"Over there" I met real heroes, the finest people I've ever met, men such as.....

McGillis, Schumann, Morgan, Turlington, Fitzgibbon, Blick, Petrie, Robertson, Williams, Moore, Courtney, Denfeld, Bautz, Bott, Collins, Glass, Kearney, Oliver, Stevens, Armstrong, Benedict, Breen, Doyle, Fowler, Grossman, Reid, Guerrieri, Hitzemann, McCann, Mack, Nohmer, Wargowsky, White, Webb, Griffin, Field, Tracy, Rizzo.....and many, many more.





Some came home . Some didn't. All Great Americans.

AND I LEARNED THAT.....



Freedom has a special meaning to those who have fought and nearly died that those protected will never know.



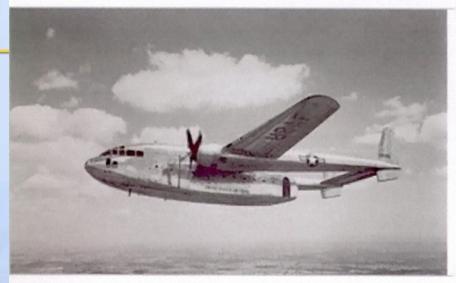








### C-119 Flying Boxcar



Role Military transport aircraft

Manufacturer Fairchild Aircraft

First flight November 1947

Introduced December 1949

Retired 1974

Primary user United States Air Force

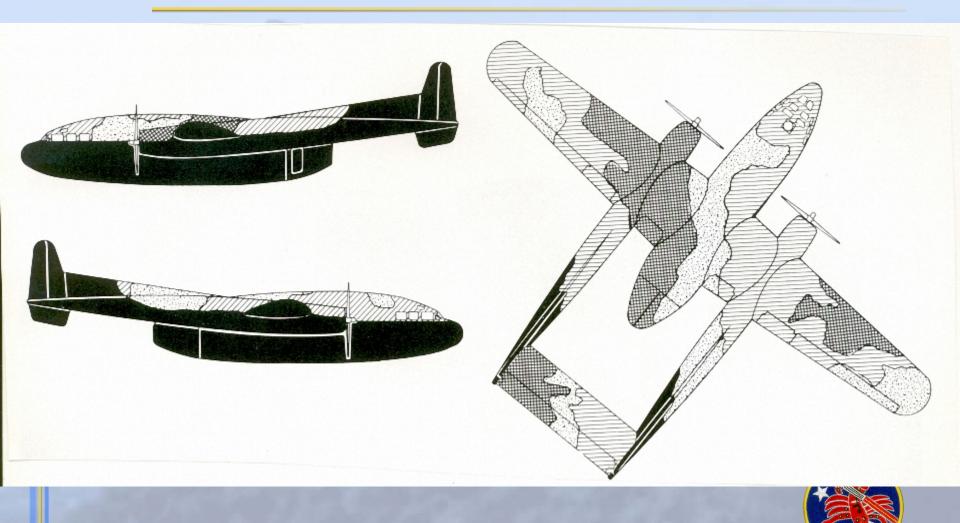
**Produced** 1949-1955

Number built 1,183

**Developed from** C-82 Packet

Variants XC-120 Packplane Fairchild AC-119

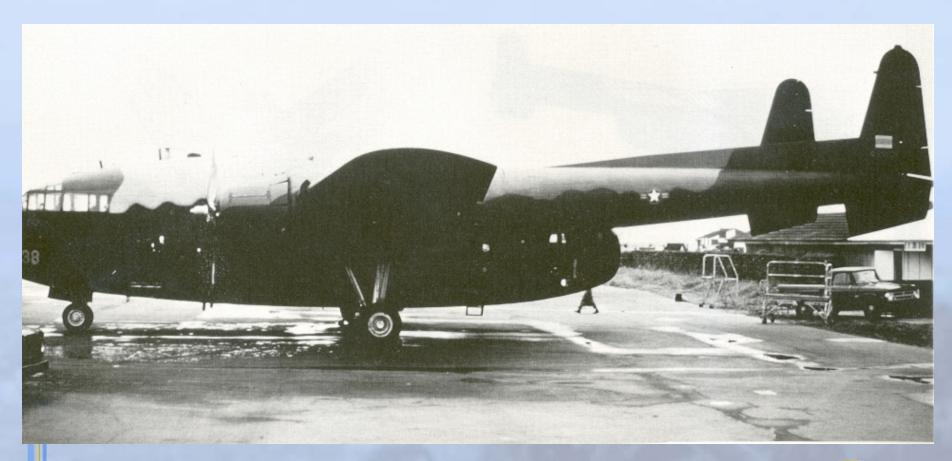




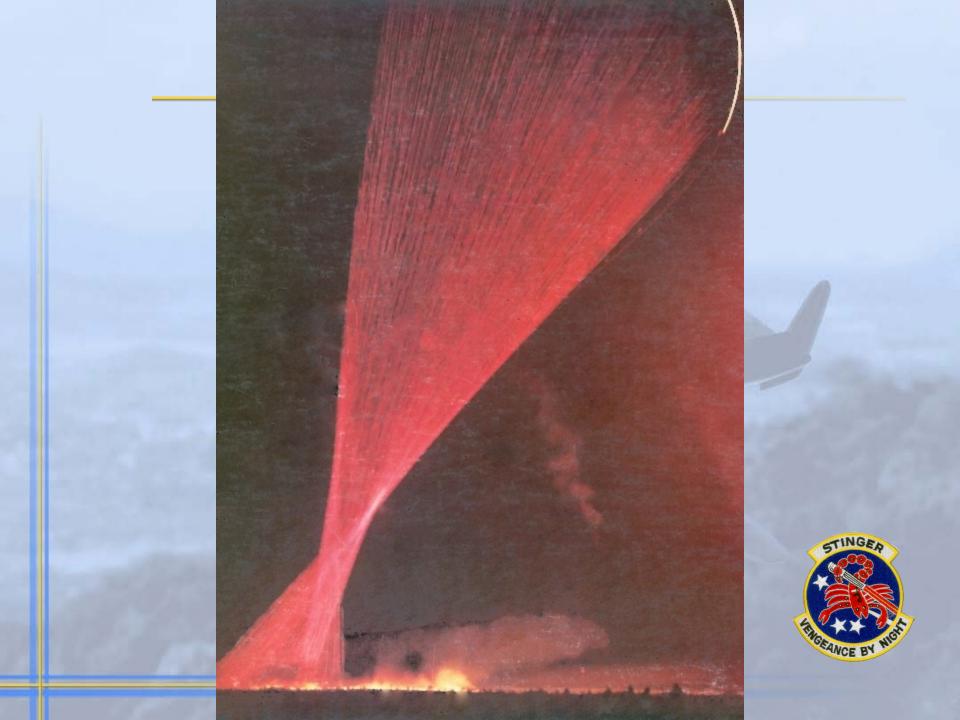
CE B'



During World War II, Major 'Pappy' Gunn conceived the idea for heavily armed B-25 gunships to be used against Japanese shipping in the South Pacific. All of his gunship aircraft were field modifications. (USAF)







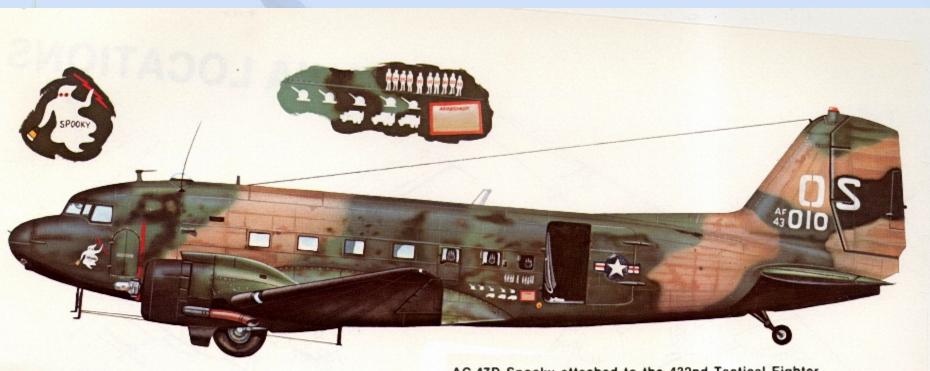


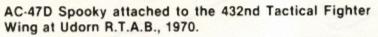
The first installation of a side-firing minigun was in a C-131B, #53-7820. The mount was fabricated from aluminum I-beams in the machine shops at Eglin. (Morris)

The first armed C-47 was this aircraft pulled off the flight line at Wright-Patterson. Capt. Ron Terry installed a single SUU-11A/1A minigun pod on homemade mounts, in the left cargo door area. Someone has appropriately tacked the name Terry & Pirates on the nose, since most of the parts were pirated from various other sources on the base. (Morris)











"Spooky"

AC-47 Dragonship

RVN'S #1 Fly By Night Outfit

We Defend: Outposts • Hamlets • Special Forces Camps
• Ambush Patrols and Any Other TIC

Our 7.62 Devastates: Rubber Trees • Monkeys
Sampans • Ground Markers • Campfires • Water Buffalo

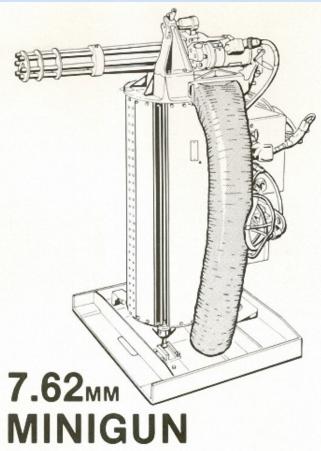
### 14th SPECIAL OPERATIONS WING

Call: Phan Rang Tuoc Daily: 1800-0600
"When You Hurt Enough to Want the Very Best"

Frank Eaton

Spooky Boss





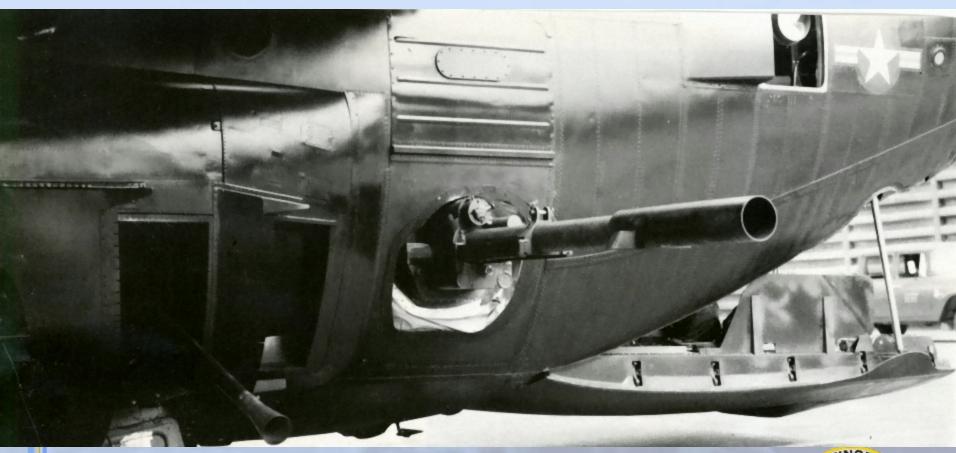




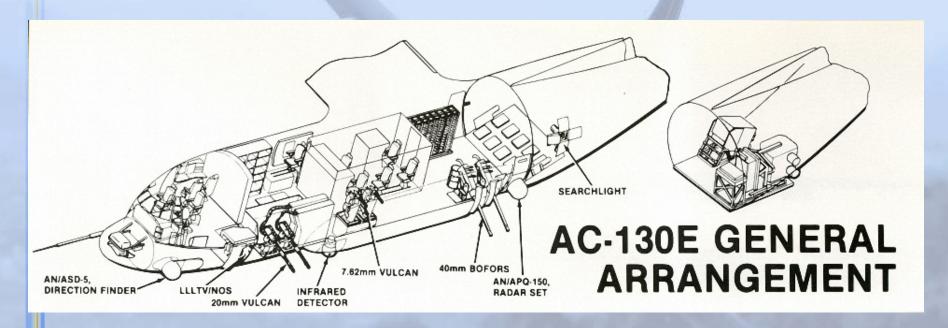






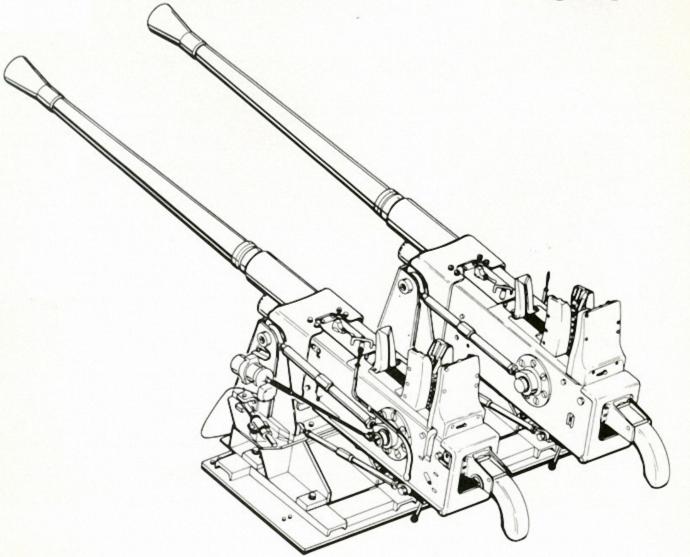




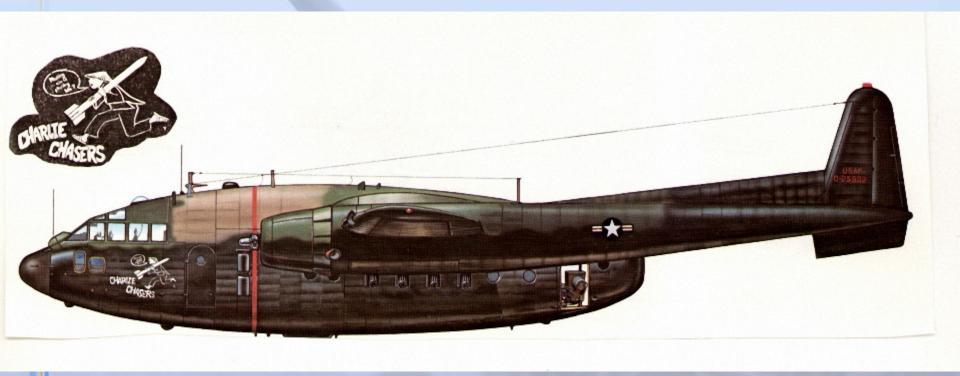




# 40<sub>MM</sub> BOFORS GUN









## When Uninvited Guests Drop In . . . Call For "THE SHADOW"

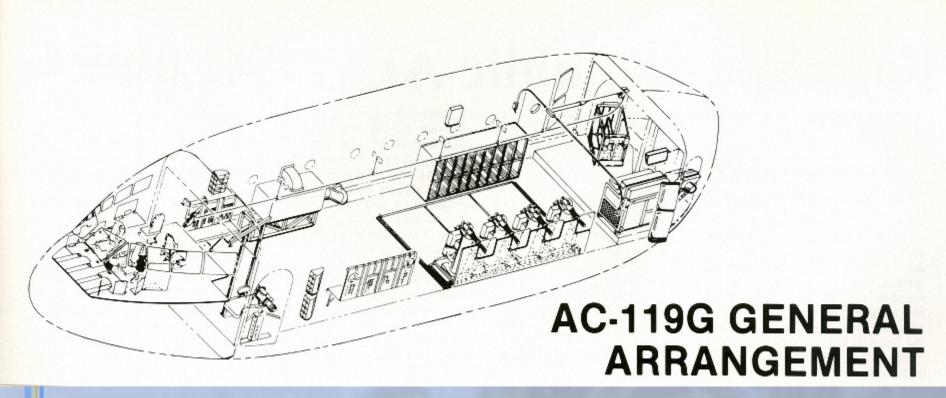
We Provide:
Lighting for
All Occasions
Beaucoup 7.62
Mortar Suppression



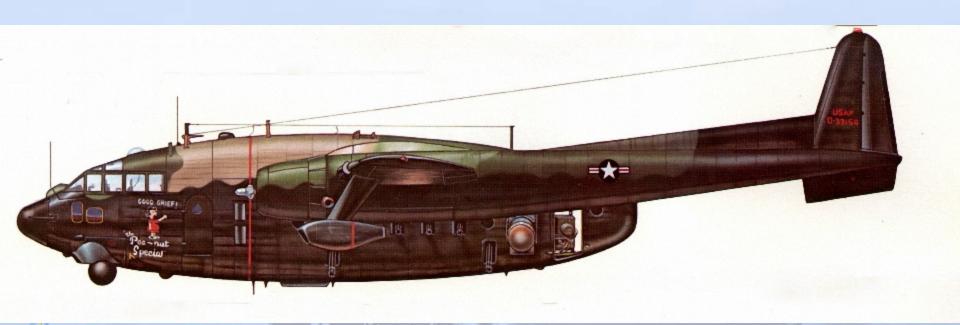
We Defend:
Special Forces Camps
Air Bases
Outposts
Troops in Contact

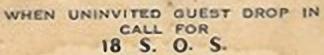
Who Knows What Evil Lurks Below the Jungle Canopy?

THE SHADOW KNOWS!









We Provide 1 Lighting for All Occasions Венисовр 7.62

& 20 mm Truck



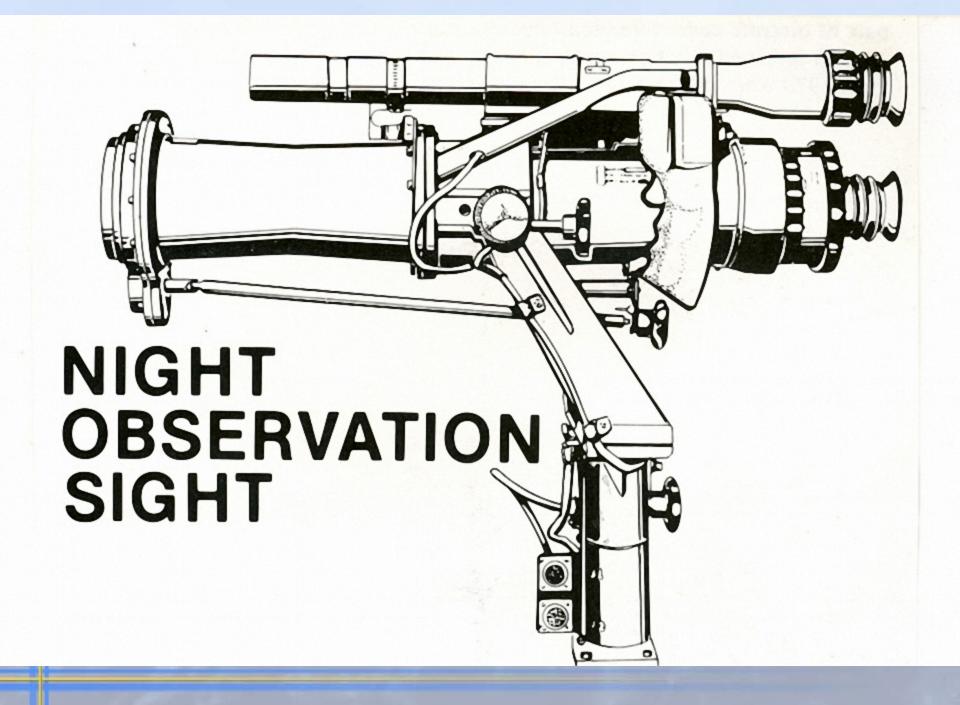
We Delend : Special Forces Camps Air Bases Outposts Troops in Contact We Also Stop Truck Sampan and other Traffic

DANANG VIETNAM



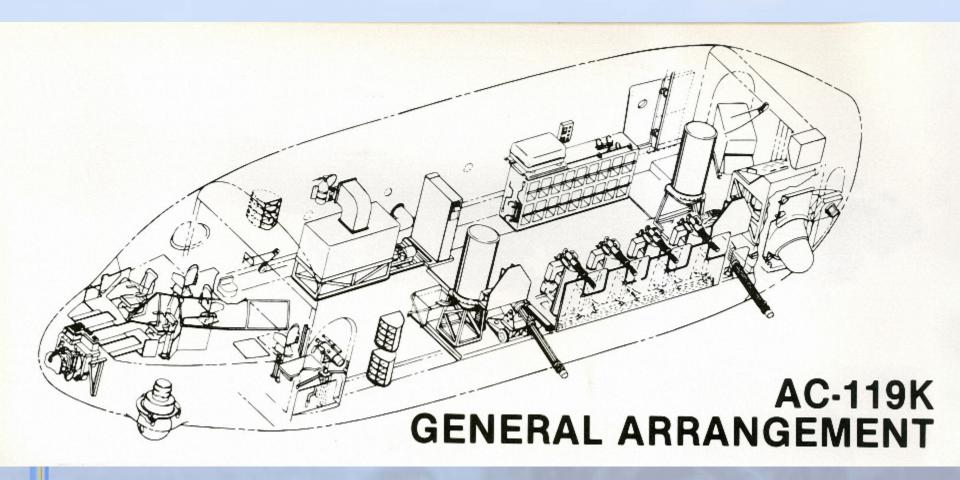










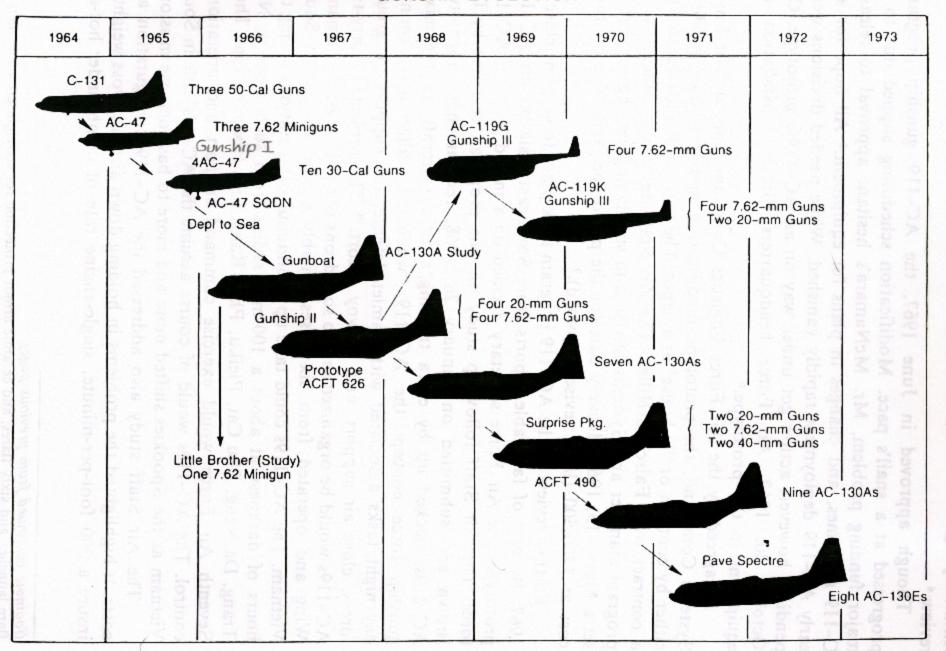






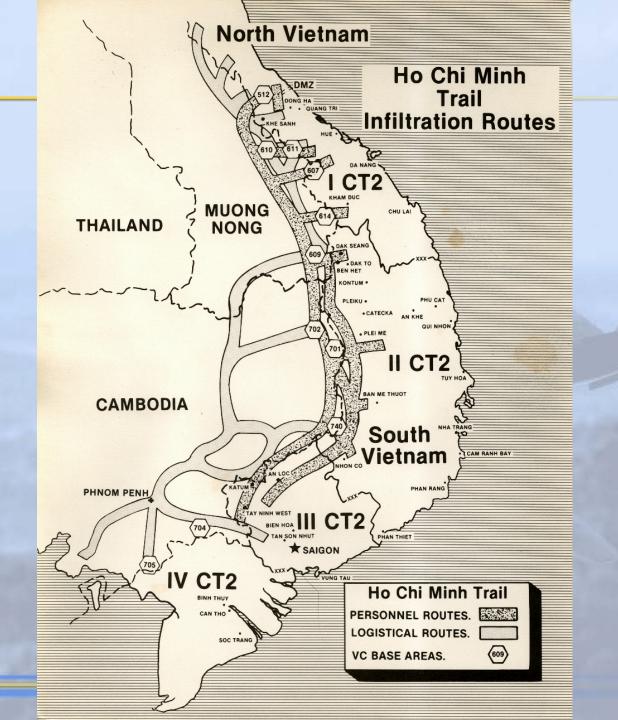


#### **GUNSHIP EVOLUTION**



AF	WEIRE	ET EM TO BURN NIGHT, COLONEL, E JUST A BIT ATIGNT!	9 6	OON T THINK THE	CHL	) 18th SOS FLY	SCHOOLSON.	CHEDULE FOR THE	TOOK A	POEC 3RD 1971			
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,	COP	WILLIAMS	COP	STEVENS (G)	GOP	WHITE (C)	COP	TURLINGTON	FOR	PORTER	oor	THIGPEN	
	NAV	BLOOMFIELD (A)	NAV	O'NEIL	NAV	ROSS	HAT	FIELD	NAV	COOPER	MAV	BLOOMFIELD (I	
	FIR	COOPER	FLR	O'LEARY	FIR.	BARBER	FIR	FITZGIBBON	FIR	GARCIA	FER	BRADACH	
	NOS	GUNSTER	NOS	HYDEN	NOS	HANSEN	MOS	HUPE	1 205	KALBERT	Mos	BLOOMFIELD (I	
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	AG2	CARWILE	AG2	BOBBITT	AG2	BAKER	AG2	BIEDKA	AG2	KRUGER	ACS.	des hauge hit (armen	
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		THE PARC MECHAL PROPERTY						WAPS STUDY & TEST 3rd & 4th: KRASNAY DAY DRIVE TODAY: ATKINSO					
	SECURITY MEETING CHAPEL#4 (CAMP SWAMPY) 1500: GUNSTER, DORAZIO												





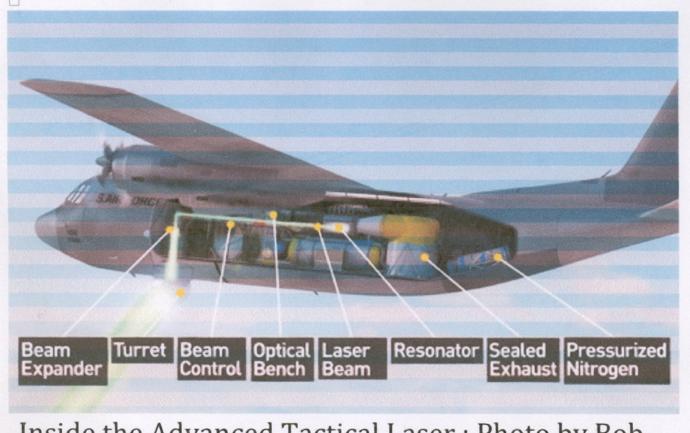






## The Airborne Laser Cannon

Boeing's new laser cannon can melt a hole in a tank from five miles away and 10,000 feet up □ and it's ready to fly this year. By Eric Adams Posted 03.13.2008





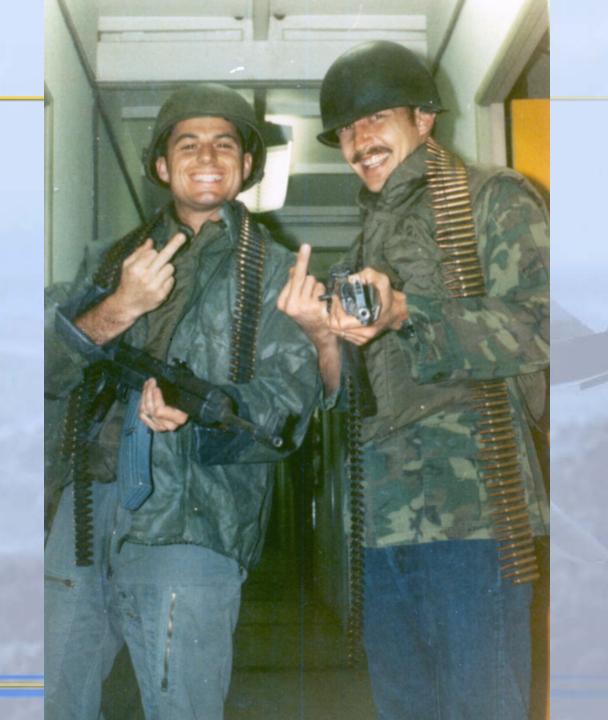
Inside the Advanced Tactical Laser: Photo by Bob



























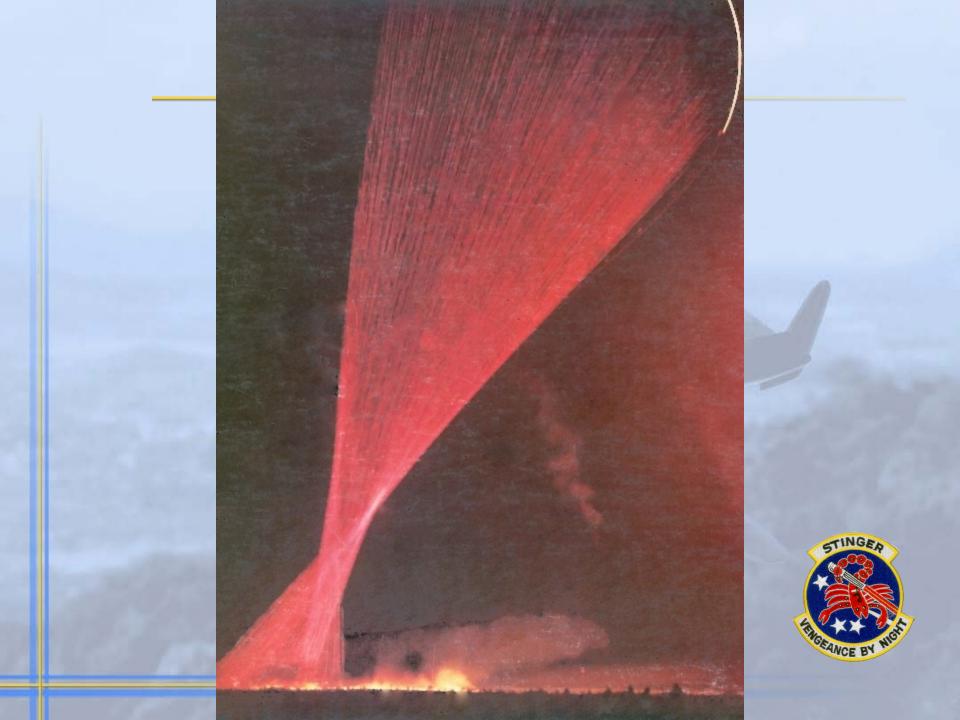




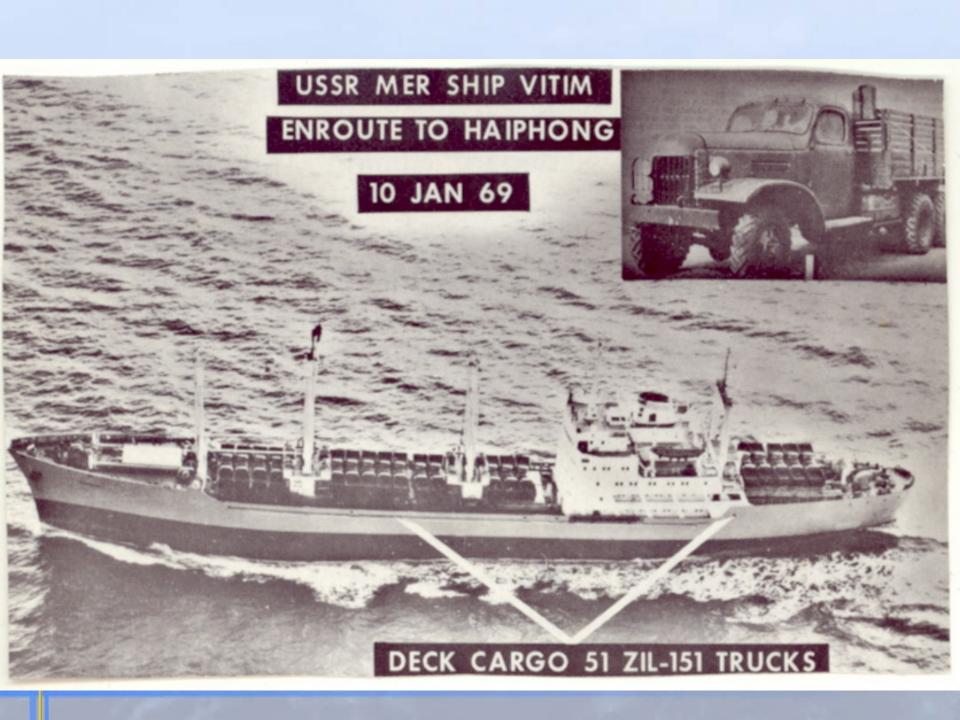


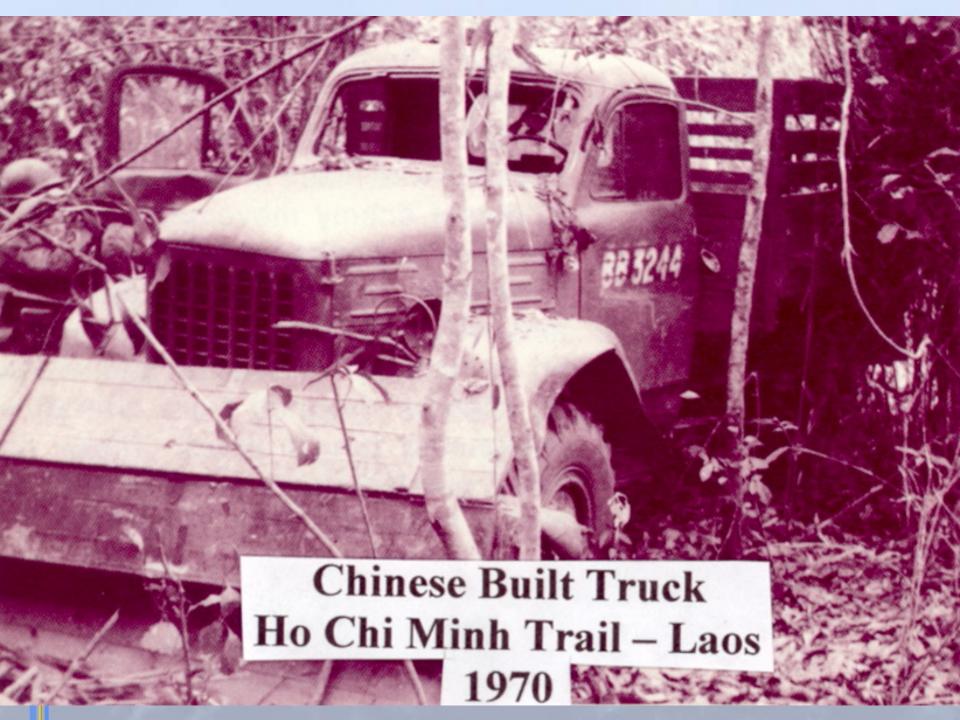


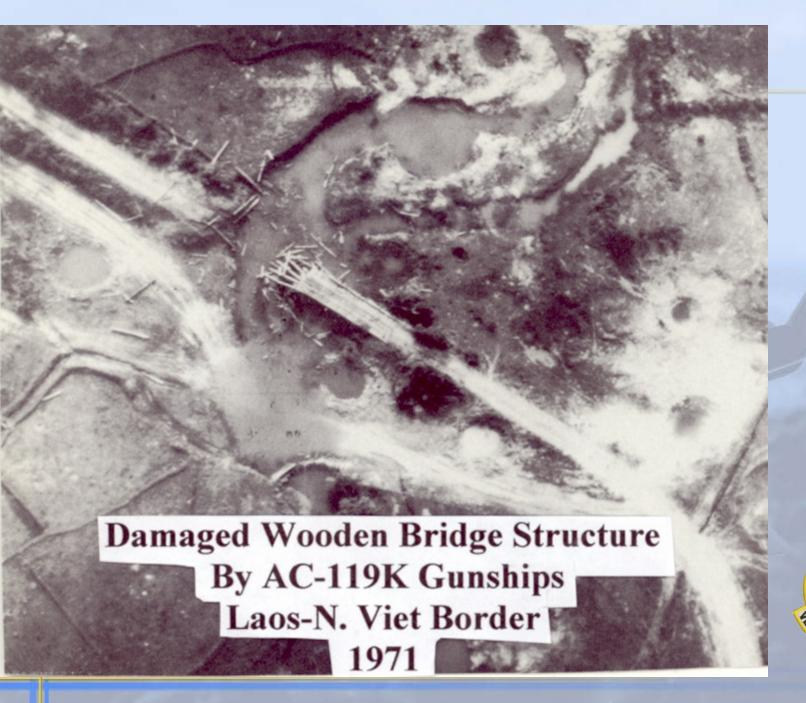




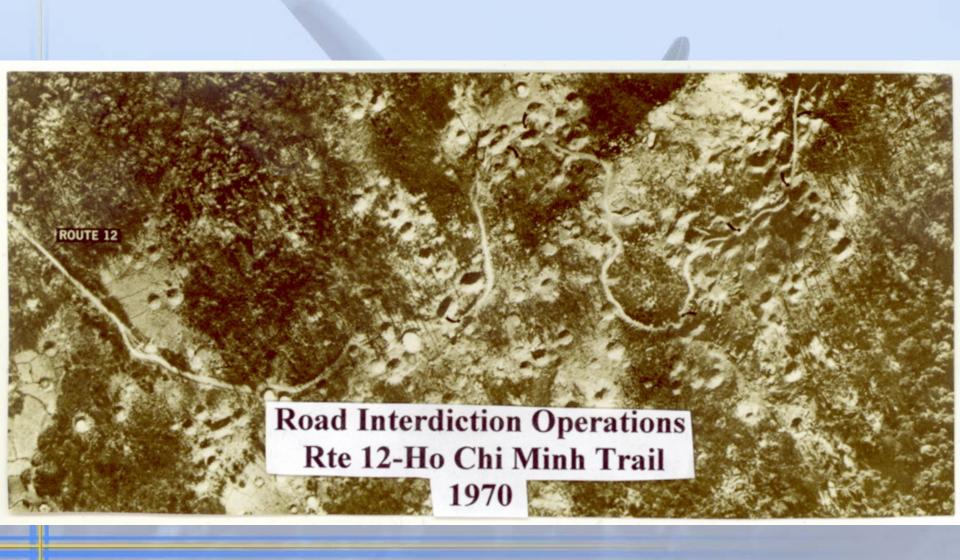


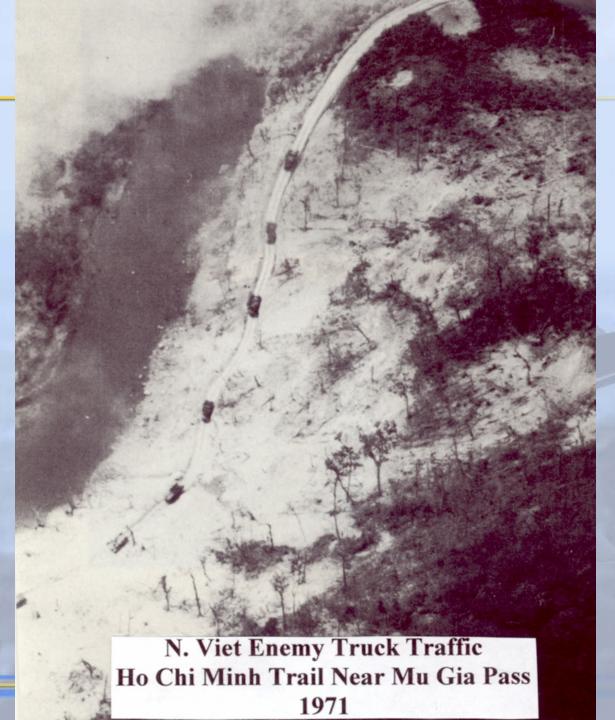
































## SA-2 IN FLIGHT





