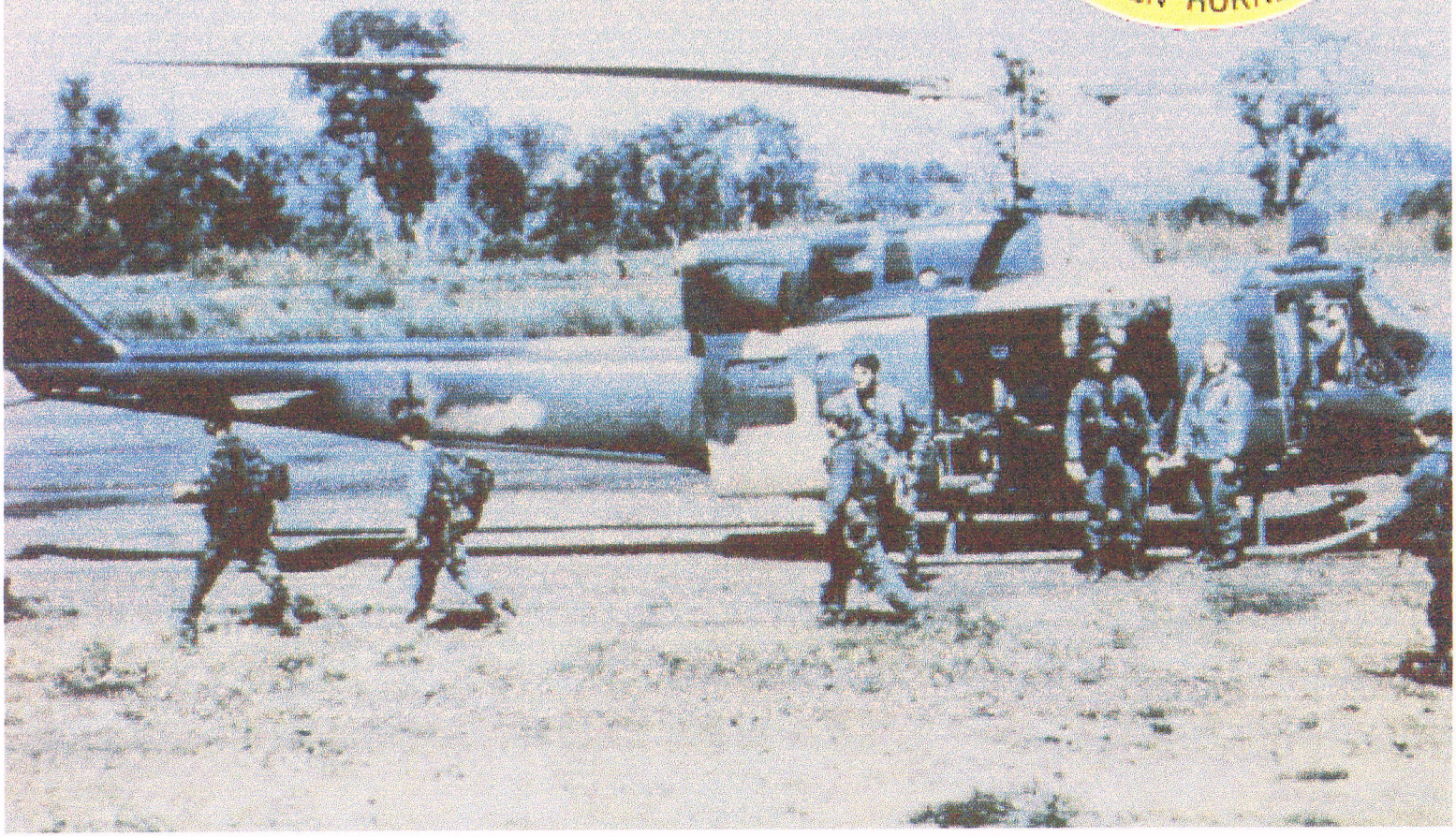
1977

HISTORY OF THE 20th SPECIAL OPERATIONS SQUADRON





MEMORANDUM

Date: 27 Dec 94

From: 20 SOS/CCX

To: WHOM IT MAY CONCERN

Subject: DOCUMENT CLASSIFICATION

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1. The documents contained herein are portions of the 1ST/16TH SOW histories for the dates shown on each document. The SOW histories as a whole are classified for the most part.

2. The documents in this binder are a compilation of materials from varied sources and have all been declassified if necessary. Sheets showing declassification are all posted in the last document protector for each respective binder.

3. Any materials you feel may be of questionable classification you are encouraged to bring to my attention and I will endeavor to alleviate your apprehensions.

SQUADRON HISTORIAN

HISTORICAL REPORT

TWENTIETH SPECIAL OPERATIONS SQUADRON

1 Jan 77 - 31 Mar 77

LT COLONEL ROBERT E. MAYO
Commander

MISSION STATEMENT

The primary mission of the 20th Special Operations Squadron can be compared to an encyclopedia of special operations. The squadron is tasked to conduct day or night infiltration, day or night gunnery, and reenforcement and resupply into hostile or enemy controlled territory. These operations include the use of airland and airdrop techniques, and entail land or water overflight. Another primary mission is the conduct of psychological operations which include speaker broadcasts and the aerial dispensing of leaflets.

Corollary missions give the squadron flexibility and varied capabilities for which special operations units are noted. These missions include:

a. Recovery of personnel which includes escape and evasion operations and combat search and rescue (SAR). In forward operating locations (FOL) where ARRS forces are not readily available SAR efforts would include all major rescue techniques such as search and location of survivors, recovery using hoist or STABO rig, minimal first aid, and transportation to the nearest medical facility.

b. Helicopter suipboard operations (joint service).

c. Medical evacuation of injured personnel.

d. Humanitarian and civic action programs.

e. Limited photo reconnaissance, by handheld or modularly installed camera systems.

f. Other missions, as directed by higher headquarters.

MANNING

POSITION	AUTHORIZED	ASSIGNED
Commander	1	1
Operations Officer	1	1
Flight Surgeon	1	0

POSITION	AUTHORIZED	ASSIGNED
Pilots, CH-3E	12	13
Flight Mechanics, UH-1N	9	8
Flight Mechanics, CH-3E	12	9
Weapons Specialist, UH-1N	9	10
Administrative Specialist	3	3
Operations Specialists	3	4
Medical Technicians	3	3
Life Support Technicians	4	4
Total	76	76

KEY PERSONNEL

POSITION	INDIVIDUAL	EFFECTIVE
Commander	Lt Col Robert E. Mayo	22 Oct 75
Operations Officer	Lt Col Frank E. Spencer	3 Sep 75
Asst Ops Officer, UH-1N	Maj Jerome L. Gudvangen	5 Sep 76
Asst Ops Officer, CH-3E	Maj Dwight A. Haworth	21 Jul 76
Executive Officer	Capt John M. Graham	12 Feb 76
Safety Officer	Capt John H. Schramm	29 Oct 75
A Flight Commander	Capt Edward W. Gmyrek	4 Jan 77
B Flight Commander	Capt Charles R. Merriott	15 Dec 75
C Flight Commander	Capt Carl P. Moore	26 Jan 76
D Flight Commander	Capt Richard J. Hlavaty	23 Jan 76
Stan/Eval Officer	Capt John V.S. Fineour	9 Apr 76
NCOIC, Operations/1st Sgt	MSgt Alfred A. Van Pool	7 Nov 75
NCOIC, Enlisted Flying Personnel	SMSgt Ronald J. Gray	11 Jan 77
NCOIC, Stan/Eval	MSgt Floyd W. Watson, Jr.	2 Dec 75
NCOIC, Administration	SSgt James H. Wells	16 Dec 75
NCOIC, Life Support	SSgt Lamont C. Pass	28 Sep 76

STATEMENT OF SPECIALIZED EQUIPMENT

The squadron's aircraft equipage, as authorized by Air Force Programming Documents, includes six UH-1Ns and four CH-3Es all special operations forces (SOF) configured. To date, five UH-1Ns and 3 CH-3Es are on station, while the remaining aircraft have been identified by tail number.

Various items of specialized equipment are authorized for the unit's primary and corallary mission. This equipment includes:

a. The XM-93 Subsystem, which consits of 7.62mm electrical gattling guns, capable of firing 4000 rounds per minute.

b. The M-23 Subsystem, which includes 7.62mm gas operated machine guns, capable of firing 550 rounds per minute.

c. The 2.75 inch Folding Fin Aircraft Rocket (FFAR), which is normally configured with a none pound warhead.

d. The UH-1N Loudspeaker System, designed primarily for psychological operations, can broadcast taped or live sound over a two mile radius.

e. The 3090-3 Spray System, a self contained, windmill operated aerial spray system with a capacity of 200 gallons.

CHRONOLOGY OF SIGNIFICANT EVENTS

3 Jan 77 — Capt Jim Woolworth, Capt Frank Gray, TSgt Craig, and TSgt Kriletich to Luke AFB, AZ to ferry 65-5697 on loan from the 302nd AFRES.

All aircrew members are hard at preparation for anticipated ORI. Flight crews were given Phase I and II intelligence training, 51 Series briefing, H-1 pilots given a 151 question test on TOs, Regs and Manuals, H-3 pilots given a 130 question test on TOs, Regs, Manuals, H-3 flight mechanics given a 130 question test on TOs, Regs and manuals.

4 Jan 77 — Lt Stephen Roark TDY to Homestead AFB, FL to attend Water Survival School.

5 Jan 77 — SSgt Jerry Schutte TDY to Elmendorf AFB, Alaska to participate in exercise "Jack Frost".

13 Jan 77 — 20 SOS aircrews participated in Operation Green Flag. This exercise marked the first time CH-3E and UH-1N interfaced their tactics, and operated from an FOL.

14 Jan 77 — All 20 SOS officers participated in the 1 SOW Dining In. Of special note was the arrival and landing of 15 squadron personnel on Dr. Gauvin's houseboat.

20 Jan 77 — All squadron office personnel were briefed on the new OER system by Lt Col Sutton, Chief of Personnel.

Lt Joe Vallimont, Tactics Officer, has devised a picture card threat file which is used as a part of each mission briefing to aid in required continuation intelligence training.

26 Jan 77 — A squadron UH-1N was flown to Ft Rucker to stand static display for Det 1, 29 ABgp and UHT helicopter students. Spin-offs of this trip included aquistion of microphone equiped gas masks for 20 SOS testing, acquisition of Army NAP-of-the-Earch (NOE) and night vision goggle publications, and inquiries into physcological ramifications of cold weather helicopter operations by Maj (Doctor Gauvin), Flight Surgeon.

28 Jan 77 — Capt Ed Gmyrek and Capt Gerald Toth were presented AF Commendation Medals by Col Hume during an awards ceremony.

1 Feb 77 — TSgt Fred Cook TDY to Lackland AFB to attend USAF Recruiter School.

Lt Joe Pounder and Lt David Greer TDY to USAFSOS to attend the Unconventional Warfare Course.

4 Feb 77 — 20 SOS challenged CCT to a soccer match and lost 2-1 Referees for the match were Col Hume and Lt Col Keating.

The 20 SOS in true special operations fashion removed the 16 SOS colors from in front of the entire 1 SOW. The colors were returned in proper ceremonies by the 20 SOS/CC to 16 SOS on 7 Feb 77. The operation was designed to increase moral and friendly rivalry between 1 SOW organizations.

8 Feb 77 — Joe Vallimont promoted to Captain.

9 Feb 77 — Waymond Herring promoted to Airman.

11 Feb 77 — Sgt David Rech and James Gray TDY to Sheppard AFB, TX to attend the Helicopter Mechanic's Course.

Mr. Maloney, the AF marketing representative for Sikorsky's UTTAS helicopter presented a briefing, slides and films showing the UTTAS versitility and maneuverability.

15 Feb 77 — All UH-1N aircraft, except 641, have been grounded for delamination of structural bulkheads and panels. This severly impacts mission capability as the predicted sortie rate from 641 is insufficient to meet mission training/proficiency requirements.

16 Feb 77 — Squadron conducted 5 hours of life support academic training, to include refresher training on survival techniques and demonstration of life support equipment.

22 Feb 77 — Capt John Graham and MSgt James Roach TDY to USAFSOS to attend FID Course.

23 Feb 77 — 20 SOS and 1 SOW are undergoing an ORI/MEI by TAC IG team.

4 Mar 77 — Major Richard Porter TDY to Kirtland AFB, NM to attend UH-1N Combat Crew Training.

20 SOS completed the TAC ORI/MEI with a satisfactory rating with no answerable write-ups.

13 Mar 77 — MSgt Ronald Gray TDY to Gunter AFS, AL to attend Senior NCO Academy

UH-1N 613 (On loan from Indian Springs AFAF) returned to Indian Springs AFAF, NV.

17 Mar 77 — Lt Joe Pounder and Lt Colin Chatham TDY to Camp Swift, TX to participate in Gallant Crew 77.

21 Mar 77 — Capt Joe Vallimont and Capt Dave Tidd TDY to AF AGOS to attend COSC.

The squadron is in the process of rewriting TACM 55-41 and TACM 55-153. The revision of these manuals will enhance squadron procedures and operations.

22 Mar 77 — Capt Peter O'Day TDY to Ft Hood, TX to participate in Gallant Crew 77.

25 Mar 77 — Capt Gary Weikel and Lt Kenneth Charfauros TDY to Maxwell AFB, AL to attend Squadron Officer School.

MSgt Michael Otis TDY to Bergstrom AFB, TX to attend TAC NCO Academy.

30 Mar 77 — Maj Haworth, Capts Woolworth, Blough, Toth, Fineour, Waid, Vallimont, and Moore visited NAS Pensacola and were briefed aboard the aircraft carrier USS Lexington on shipboard operations.

HIGHLIGHTS OF ROUTINE OPERATIONS

Self-help projects continue to receive heavy attention. The squadron has reorganized its flight rooms to provide more useable working area. The Flight planning room has also been remodeled to provide better facilities. A squadron stand up file for each aircrew member was constructed along with a newly designed FCIF file. The crew lounge was also moved and remodeled to provide easier access for all members. A public address system was installed to alleviate a paging problem which existed. A public address system was installed in the main briefing room so that a sound problem could be reduced.

The 20 SOS Standardization Section is heavily involved in various fields of training essential for mission ready status of the squadron. In preparation for the ORI, they administered over 23 squadron aircrew tests. To enhance the squadron's fire power, significant progress was made toward adapting the .50 caliber machinegun to the UH-1N. To further enhance operation of the squadron the standardization section is in the process of revising TACM 55-41 and TACM 55-153 for the UH-1N and CH-3E helicopter. The results of their hard work as been well rewarded by the fact that aircrew testing was rated outstanding by the TAC OR/MEI team.

Another operational milestone was reached by squadron participation in Operation Green Flag by CH-3E and UH-1N aircrews. As most of the current 20 SOS tactics and employment procedures are handed down from the days of Southeast Asia, it was felt that new and more widely varied tactics were needed to prepare for the changing world environment. To this end the 20 SOS conducted and self generated training exercise, dubbed "Green Flag I", on 13 Jan 77. The purpose of this and follow on Green Flag exercise is to provide a training and tactics testing vehicle for 20 SOS aircrews.

During Green Flag I the following areas of concern were addressed: UH-1N gunship escort procedures; integration of UH-1N gunships and CH-3E transports; SAR procedures in hostile environment; single aircraft operating capability; FOL operations. All the sorties flown were during daylight and the FOL used was Duke Field. Assistance was provided by the SOCCT and Security Police in the form of ground teams.

All sorties were flown as scheduled and without mishap. There were, however, some areas that need attention in follow on exercises. The main item of concern was UH-1N/CH-3E coordination and interaction. Other items of interest were: communications, FOL staff, command and control; tactics in various threat environments.

Areas to be tested in follow on Green Flag exercises will be extensive UH-1N/CH-3E coordination and night employment tactics.

The 20 SOS Weapons and Tactics Officer was heavily involved in various projects. The squadron's shipboard operations training began, with

20 SOS aircraft landing aboard the USS Lexington. Continued coordination on the .50 cal ROC produced the possibilities of a test firing in late Apr. Plans were made to attend an engineering conference at Wright-Patterson AFB, OH on the UTTAS in April. Re-evaluation of threat forces has revealed a need for NOE navigation. Plans were made to attend an Army NOE orientation class at Ft Rucker, AL in late April. Previously submitted ROCs on Radar Warning Receivers and Infa Red Jammers continue coordination. Upgraded T58-T5E engines for the CH-3E aircraft along with SH-3B tail rotor system is awaiting funding at Air Staff. Radar altimeters for UH-1N are also awaiting funding.

SPECIAL ACHIEVEMENTS

The following individuals completed USAF SOS Psychological Operations Course:

Capt Frank Pelz
Capt Peter O'Day
Capt Stetson Cowan

The following individuals completed USAF SOS Foreign Internal Defense Course:

Capt Michael Lackey
Capt John Graham
MSgt Floyd Watson
MSgt James Roach
SSgt James Carter

The following individuals completed USAF Unconventional Warfare Course:

1Lt Dave Greer
1Lt Joe Pounder

The following individuals completed the USAF AGOS Combat Operations Special Course:

Maj Jerome Gudvengen
Capt Dave Tidd
Capt Joe Vallimont

The following individuals completed Base Aircrew Instructor Training:

Capt Gerard Toth
Capt James Decerbo
TSgt Richard Vanderploeg
TSgt Emory Craig

The following personnel were decorated during this period:

Capt Gerard Toth - AFCM
Capt Ed Gmyrek - AFCM

The following personnel attend TAC NCO Academy:

MSgt Michael Otis

The following Individual attended the Senior NCO Academy:

SMSgt Ronald Gray

SPECIAL PROBLEMS

The lack of special operations configured aircraft continues to be the single most critical problem. This prevents flying training and inhibits ground training necessary to obtain combat ready status. Of six UH-1Ns authorized five are on station; however only four have been SOF configured. Our UH-1Ns need the complete set of special operations Group B equipment to include armament, armor and avionics such as VHF-FM radios, etc. The four CH-3Es authorized have been identified. Three of these aircraft are on station and two are SOF configured. However, all UH-1N aircraft, with the exception of 641, have been grounded for delamination of structural bulkheads and engine decks. This action severely impacts our mission capability as the sortie rate projected from 641 is insufficient to meet minimum training/proficiency requirements

SPECIAL INTEREST ITEMS

The following is a listing of sorties flown by the 20 SOS by category:

UH-1N

MONTH	CATEGORY	SORTIES	HOURS
Jan 77	O-8	19	7.6
	T-3	65	86.8
Feb 77	O-8	15	6.0
	T-3	40	56.0
Mar 77	O-8	12	4.8
	T-3	38	53.2

CH-3E

Jan 77	O-8	18	10.8
	T-3	46	115.0
Feb 77	O-8	5	3.0
	T-3	61	85.4
Mar 77	O-8	6	3.6
	T-3	58	145.0

AFTER ACTION REPORT
Green Flag I

1. The 20 SOS conducted a mini-exercise, Green Flag I, to evaluate capabilities in the areas of joint H-1/H-3 missions and operations from a forward operating location (FOL).

2. Participants were the 20 SOS, SOCCT, and SP's. Field 3 (Duke) was used as the FOL (operating from the area east of the runway) for this one day operation.

3. The scenario involved infiltration/exfiltration of ground teams (SOCCT and SP's) at various locations in the northwest portion of the Eglin Reservation. All participants attended two war-situation briefs which established the scenario for the exercise. Simulated enemy defenses and threats were briefed to all participants. Hostile activity included actual aggressor teams on the ground to add realism to the exercise.

4. Seventeen sorties were flown by the 20 SOS with the first flights launching at 0800L and the last flights landing at 1500L. Every air crew member in the squadron participated in the exercise as a crew member, team member, or FOL staff member.

5. The exercise was culminated with a simulated SAR on an H-1 crew "shot down" during the course of the day. The final sorties exfiled the friendly team from a "hot" LZ in the target area; the CH-3E's picked the teams up as the UH-1N's flew suppressive fire cover.

6. A mass debrief was held at the 20 SOS following the exercise to compile lessons learned and suggestions for the next exercise. Tentative date for Green Flag II is 9 Jun 77; it will involve all 1 SOW ~~operational~~ flying squadrons plus the SOCCT and Special Forces from Ft Bragg.

AIR FORCE FACT SHEET

OFFICE OF INFORMATION
1st Special Operations Wing
Hurlburt Field, FL 32544
904/884-7564 AV: 872-7464

UH-1N TWIN HUEY

The Bell UH-IN Huey is a twin-turbine engined helicopter which has enhanced the ability of special operations forces because of its vertical airlift capability.

The UH-IN provides gunship coverage, as well as infiltration and exfiltration of reconnaissance and combat control personnel. It can also be used for medical evacuation of casualties.

The helicopter carries a three or four person crew depending on the mission. The crew includes an aircraft commander, pilot, helicopter mechanic and a gunner for armed missions. The aircraft is capable of carrying 11 passengers, six parachutists, six litters or 2,500 pounds of cargo internally with a crew of four. It can carry loads up to 5,000 pounds externally on a cargo sling.

The aircraft may be equipped with a variety of equipment, including searchlights, personnel rescue hoists, pintle-mounted machine or gatling guns, grenade launchers, rocket pods and loudspeakers.

UH-IN helicopters are currently flown by the 20th Special Operations Squadron of the 1st Special Operations Wing at Hurlburt Field, Fla.

AIRCRAFT SPECIFICATIONS:

Prime Contractor:	Bell Helicopter Co.
Powerplant:	Two Pratt & Whitney T400-CP-400 engines
Horsepower:	Turboshaft rated at 900 shaft horsepower per engine
Length:	57 feet 3.3 inches
Width:	9 feet 4.5 inches
Height:	13 feet 1.3 inches
Rotor:	48 feet
Max Speed:	130 knots (150 m.p.h.)
Average Cruise Speed:	110 knots (127 m.p.h.)
Range:	260 nautical miles or 500 with auxiliary tanks (300 statute miles or 575 statute miles)
Maximum Gross Takeoff Weight:	10,500 pounds
Armament:	See paragraph four above
Crew:	Four

(Current as of 1 Aug. 1976)

AIR FORCE FACT SHEET

OFFICE OF INFORMATION
1st Special Operations Wing
Hurlburt Field, FL 32544
904/884-7464 AV: 872-7461

CH-3E SEA KING

The Sikorsky CH-3E Sea King is a long-range support helicopter which provides a vertical airlift capability for special operations forces.

The twin-engine CH-3E has a hydraulically operated rear-loading ramp, a 2,000-pound capacity winch for internal cargo handling and an externally mounted hoist for rescue operations. It can carry 25 passengers, 16 litter patients or a 5,000-pound payload. It is a fully amphibious, all-weather instrument aircraft and the forerunner to the HH-3E Jolly Green Giant.

CH-3E helicopters are currently flown by the 20th Special Operations Squadron of the 1st Special Operations Wing (SOW) at Hurlburt Field, Fla. The 1st SOW is the intermediate gaining command of the 302nd Special Operations Squadron of the Air Force Reserves, which is also equipped with CH-3E helicopters at Luke AFB, Ariz.

AIRCRAFT SPECIFICATIONS:

Prime Contractor:	Sikorsky Aircraft Division, United Aircraft Corp.
Powerplant:	Two General Electric T-58 GE-5 gas turbine engines
Horsepower:	1,500 shaft horsepower each engine
Length:	72 feet 10 inches
Width:	17 feet 4 inches
Height:	18 feet 1 inch
Rotor:	62 feet
Max Speed:	142 knots (164 m.p.h.)
Average Cruise Speed:	110 knots (127 m.p.h.)
Ceiling:	Above 12,000 feet
Range:	Beyond 630 statute miles
Max Gross Takeoff Weight:	22,050 pounds
Armament:	Two M-60 machine guns
Crew:	Four

(Current as of 1 Aug. 1976)

HISTORICAL REPORT

TWENTIETH SPECIAL OPERATIONS SQUADRON

1 APRIL 1977 - 30 JUNE 1977

LT COLONEL ROBERT E. MAYO
Commander

MISSION STATEMENT

The primary mission of the 20th Special Operations Squadron can be compared to an encyclopedia of helicopter special operations. The squadron is tasked to conduct day or night infiltration, exfiltration, gunnery support, reenforcement, and resupply into hostile or enemy controlled territory. These operations include the use of airland and airdrop techniques, and entail land and water overflight. Another primary mission is the conduct of psychological operations, which include speaker broadcasts and aerial dispensing of leaflets.

Corollary missions give the squadron the flexibility and varied capabilities for which special operations units are noted. These missions include:

a. Recovery of personnel, which also entails escape and evasion operations, and combat search and rescue (SAR). SAR operations would normally be prosecuted from forward operating locations where dedicated Aerospace Rescue and Recovery Service (ARRS) forces are not available. SAR efforts would include the majority of ARRS techniques: search and location of survivors, air and or aerial recovery (i.e., hoist, STABO rig), first aid, and transportation to the nearest medical facility.

b. Helicopter shipboard operations (joint service).

c. Medical evacuation of injured personnel.

d. Humanitarian and civic action programs.

e. Limited photo reconnaissance, by handheld or modularly installed camera systems.

f. Other missions, as directed by higher headquarters.

MANNING

Position	Authorized	Assigned
Commander	1	1
Operations Officer	1	1
Flight Surgeon	1	0
Pilots, UH-1N	18	20
Pilots, CH-3E	12	14
Flight Mechanics, UH-1N	9	8
Flight Mechanics, CH-3E	12	11
Weapons Specialists, UH-1N	9	10
Administrative Specialists	3	3
Operations Specialists	3	4
Medical Technicians	3	3
Life Support Technicians	4	4
Total	76	79

KEY PERSONNEL

Position	Individual	Effective
Commander	Lt Col Robert E. Mayo	22 Oct 75
Operations Officer	Lt Col Frank E. Spencer	3 Sep 75
Asst Ops Officer, UH-1N	Maj Jerome L. Gudvangen	5 Sep 76
Asst Ops Officer, CH-3E	Maj Dwight A. Haworth	21 Jul 76
Executive Officer	Maj Richard E. Porter	23 May 77
Administrative Officer	Capt John M. Graham	23 May 77
Safety Officer	Capt John H. Schramm	29 Oct 75
A Flight Commander	Capt Edward W. Gmyrek	22 Feb 77
B Flight Commander	Capt Charles R. Merriott	15 Dec 75
C Flight Commander	Capt Carl P. Moore	26 Jan 76
D Flight Commander	Capt Richard J. Hlavaty	23 Jan 76
Stan/Eval Officer	Capt John V.S. Fineour	9 Apr 76
NCOIC, Operations	SSgt Jerry L. Schutte	1 Apr 77
NCOIC, Weapons Specialists/1st Sgt	SMSgt Ronald J. Gray	24 Feb 75
		1 Apr 77
NCOIC, Flight Mechanics/	MSgt Floyd W. Watson Jr.	1 Apr 77
NCOIC, Stan Eval	" "	2 Dec 75
NCOIC, Administration	SSgt James H. Wells	16 Dec 75
NCOIC, Life Support	SSgt Lamont C. Pass	28 Sep 76

STATEMENT OF SPECIALIZED EQUIPMENT

The squadron's aircraft equipage, as authorized by Air Force Programming Documents, includes six UH-1Ns and four CH-3Es all special operations forces (SOF) configured. To date, 6 UH-1Ns and 3 CH-3Es are on station, and the remaining aircraft has been identified by tail number.

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a. The XM-93 Subsystem, which consists of 7.62mm electrical gattling funs, capable of firing 4000 rounds per minute.

b. The M-23 Subsystem, which includes 7.62mm gas operated machineguns, capable of firing 550 rounds per minute.

c. The 2.75 inch Folding Fin Aircraft Rocket (FFAR), which is normally configured with a nine pound warhead.

d. The UH-1N Loudspeaker System, designed primarily for psychological operations, can broadcast taped or live sound over a two mile radius.

e. The 3090-3 Spray System, a self contained, windmill operated aerial spray system with a capacity of 200 gallons.

CHRONOLOGY OF SIGNIFICANT EVENTS

1 Apr — A large work party of officers and enlisted personnel work to renovate Eglin Site A-4 (situated on the Gulf of Mexico). Purpose of the renovation was to make this facility acceptable for the upcoming Green Hornet Reunion.

2 Apr — A contingent of squadron members, headed by Maj Dwight Haworth, were briefed aboard the aircraft carrier USS Lexington. The briefing concerned upcoming ship-board qualification of squadron aircrews.

Four separate aircrews participated in the annual Hurlburt Field Open House. Combat Crew Members were airdropped from the CH-3E in a HALO demonstration, while the UH-1N demonstrated the use of STABO equipment. Both aircraft were on static display.

Also during this period, Capt Peter O'Day returned from TDY to Exercise Gallant Crew '77, and Sgts David Rech and James Gray returned from the Helicopter Mechanics Course.

11 Apr — Two CH-3E and one UH-1N aircrews were qualified in ship-board landings aboard the USS Lexington.

18 Apr — Capts Joseph Vallimont and James Woolworth depart TDY to Hq TAC in order to participate in a conference tasked with drafting a manual on helicopter tactics.

Coordination with Wing offices continues with respect to the test and evaluation of the .50 caliber gun. The Armament Test Lab at Eglin AFB will supervise the tests.

24 Apr — Capt Karl Poulsen departs TDY to Wright-Patterson AFB to aid in TAC's review of future special operations helicopter aircraft.

20 Apr — Tests were begun with the .50 caliber gun on the UH-1N airframe. The ground test fire was a complete success. Inflight, vibration to the airframe was similar to the 7.62mm minigun and much less than the M-94 gremade launcher. For the flight test, initial burst on target was within 20 meters.

21 Apr — Capt Gregory Clark of the Canadian Armed Forces presented a film on the Canadian developed advanced 2.75 FFAR rocket. Test results indicate that this weapon could be far more accurate than present squadron equipment.

25 Apr — At approximately 1630, UH-1N 604 was diverted from a standard training mission to search for and recover crewmembers from an F-4 aircraft that had crashed southeast of range 52 on the Eglin reservation. The squadron aircrew members, Capts Frank Waid and John Schramm andSSgt James Carter, successfully located and medivaced the two F-4 crewmembers. The operation was severely complicated by the lack of a nearby landing area, and the presence of F-4 ordnance exploding in the vicinity of the crash site. SSgt Carter was specially recognized by the squadron Commander for professionalism and courage in his efforts to effect the recovery of the downed crewmembers.

1 May — The Commander, Lt Col Robert Mayo, departed TDY to participate in Exercise Solid Shield '77.

The third CH-3E aircrew was upgraded to combat ready status.

5 May — Four UH-1N crewmembers depart TDY to Ft Bragg to participate in a firepower demonstration using the aircraft's pintle mounted weaponry.

8 May — Thirteen CH-3E crewmembers depart TDY to Pope AFB to participate in Exercise Solid Shield '77.

13 May — The 20 SOS Green Hornets held their annual reunion in the Hurlburt Field area. Members traveled from as far as San Antonio, Texas and Washington, DC in order to participate in the festivities.

27 May — The squadron is awarded the Wing Commander's Quarterly Safety Trophy for the first quarter of 1977. The award was received for the best ground safety program, and for a "zero" accident rate in the under 1000mile class.

6 Jun — Three squadron members, Kenneth Charfauros, David Greer, and George Tota were promoted to the rank of Captain.

9 Jun — Maj Standley McGhan signs in. He will become the assistant Operations Officer for the squadron's CH-3E section.

SPECIAL ACHIEVEMENTS

The following individuals completed the USAF Air Ground Operations School Combat Operations Specialist Course:

Maj Richard E. Porter
Capt Frank J. Pelz, Jr
Lt Michael C. Chatham
Lt William M. Collins
Lt Patrick M. StRomain

The following individuals completed the USAF Special Operations School (SOS) Foreign Internal Defense Course:

Capt Richard J. Hlavaty
Capt Frank W. Waid

The following individual completed the USAFSOS Psychological Operations Course:

Capt Samuel G. Tota

The following individuals completed the base level Aircrew Instructor Training Course:

Capt Peter R. O'Day
MSgt Michael J. Otis

The following individual completed the USAF Air Ground Operations School NCO Orientation Course:

TSgt Richard VanDerPloeg

The following individuals completed the Air University's Squadron Officer School:

Capt Kenneth H. Charfauros
Capt Gary W. Weikel

The following individual completed the Air University's Senior NCO Academy:

SMSgt James Gray

The following individuals completed the TAC NCO Academy:

MSgt Michael J. Otis
TSgt John A. Civick

In addition to completing the professional courses and schools listed above, several squadron members have achieved special recognition. Capt Samuel G. Tota was awarded the AFCM for meritorious service as an air rescue helicopter commander in Iceland. Capt Gary L. Weikel graduated in the top one-third (actually, the 90th percentile) of his class in Squadron Officer School. MSgt Michael J. Otis was also a top graduate

of his class at the NCO Academy—identified as a Distinguished Graduate, he was also awarded the Commandant's Award. Additionally, the squadron as a whole won the Wing's Quarterly Safety Trophy for permanent retention. Covering the period 1975 - 1976, the award applies to units that drive under 1000 miles a quarter. In his letter to the squadron, Wing Commander Colonel Edward Levell, Jr, stated that this superior performance "reflected favorably on every member of the unit."

SPECIAL PROBLEMS

The lack of special operations configured aircraft continues to be a most critical area. This prevents some flying training events, and also inhibits ground training necessary to obtain combat ready status. All authorized UH-1Ns are on station, however, they are not all SOF configured. They need the complete set of special operations group B equipment—to include armament, armor, and avionics—to be combat ready. Of the four CH-3Es authorized, only three are permanently assigned.

The structual delamination of bulkheads previously identified in the UH-1N has been greatly aleviated. All aircraft are now flyable, although some delaminated panels are still awaiting repair.

The lack of a dedicated squadron briefing room has become more urgent as flying operations increase in tempo. The squadron facility has been previously identified as a general use conference room, and is used by the base education office as a classroom in the evenings. Therefore, it is not available for aircrew briefings and debriefings during this period. This is critical, as this briefing room has been specially outfitted with the maps, projection screens, and audio-visual aids that enhance professional briefings.

SPECIAL INTEREST ITEM

FLYING SUMMARY

Following is a list of flying hours and sorties flown by the squadron; although category O-8 only includes fuctional check flights, category T-3 includes training, cross country, and support missions.

Month	Category	UH-1N Sorties	Hours	Landings
April	O-8	15	12.7	
	T-3	86	112.1	385
May	O-8	15	16.5	
	T-3	138	205.2	751
June	O-8	1	0.5	
	T-3	110	173.0	521
		CH-3E		
April	O-8	4	1.9	
	T-3	64	109.3	341
May	O-8	2	1.9	
	T-3	69	114.7	188
June	O-8	5	2.1	
	T-3	41	70.1	267

During this period, the squadron flew a total of 820 safe flying hours compiled by launching 550 separate sorties. Of particular note is the fact that 2453 successful landings were accomplished. The summary above also includes 71.8 flying hours and 42 sorties dedicated to Exercise Solid Shield '77.

File 9A
ECS

DEPARTMENT OF THE AIR FORCE
20TH SPECIAL OPERATIONS SQUADRON (TAC)
EGLIN AF AUXILIARY FIELD NO. 9, FLORIDA 32544

REPLY TO
ATTN OF: Capt Merriott, 7438

17 May 1977

SUBJECT: Trip Report

TO: 1 SOW/DO ADO - Jmw.
~~CCE~~
CV
CC
20 SOS
IN TURN

1. Purpose: Demonstration of pintle mounted weaponry at Ft Bragg.

2. Dates and Duration of Visit: 7-11 May, 5 days.

3. Mode of Travel: UH-1N (69-6654).

4. Place of Visit: 12 Aviation Division, Simmons AAF, Ft Bragg, NC.

5. List of Attendees: See Atch 1.

6. Agenda: See Atch 2.

7. Discussion: See Atch 3.

8. Problems and Recommendations: See Atch 4.

CHARLES R. MERRIOTT, Captain, USAF
B Flight Commander

4 Atch
1. Active Attendees
2. Agenda
3. Discussion
4. Problems and Recommendations

Do -
Give me feedback on recomendations
b c + d.
CV

Ron:
Done good trip report.
RM

AMERICAN REVOLUTION BICENTENNIAL 1776-1976

ACTIVE ATTENDEES

Weapon System	
(MK-19)	Gordon Dornick - Navy Weapons Support Center Henry Watson - Project Engineer Naval Ordnance Center Walt Noland - Project Technician Naval Ordnance Center
(M-134)	Thomas McKean - G.E. Airborne Armament Systems Marketing and Sales Dept Arnold Jewett - G.E. Field Service Rep Paul Austin - G.E. Field Service Rep Capt Pavero - 12 Aviation Division Group Safety Officer
(.50 Cal)	CW3 Al Laymance - Marine Corp Development Engineering Center
(XM-94)	Dennis Holstrom - ARRADCOM George Scofield - ARRADCOM Capt Ron Seay - DRDAR-SGS-T Vince Baldanza - DRDAR-SGS-T Col Derrick - Commander 12 Aviation Division CW2 Morgan - 12th Aviation Division Maintenance Officer SSgt Harry Wiley - 12 Aviation Div Weapons Expert

VIPs at Demonstration

Lt Gen Emerson
Maj Gen Holmes
Col H.B. Hume
Col Derrick

Atch 1

AGENDA

7 May

Capt Merriott, Capt Vallimont, SSgt Hall and Sgt Tavarez flew 69-6654 from Hurlburt to Simmons AAF. Refueling stops were made at Robins AFB and Shaw AFB. Briefed by CW2 Morgan on demonstration and met with various weapon experts.

8 May

1300-1800 Configured 69-6654 with weapons, mounts, ammo cans and support assemblies for demonstration purposes. Looked at the various modifications made on the XM-94 and observed the MK-19.

9 May

0630-0800 Flight planned, briefed and preflighted aircraft.

0800-0830 Flew to OP-5 range.

0830-1000 Configured Army aircraft with pintle mounts and weapons. Discovered that only Army VNAF Mod aircraft could use pintle mounts as designed.

1000-1300 Flew practice demonstration with live fire from XM-94 system and .50 caliber.

1300-1330 Flew back to Simmons AAF.

1330-1700 Debriefed Army pilots on weapon systems and cleaned weapons.

10 May

1000-1130 Flight planned and preflighted aircraft.

1130-1200 Flew to OP-5 range.

1200-1400 Uploaded guns and ammo.

1400-1430 Flew demonstration for Lt Gen Emmerson.

1430-1500 Static Display

1530-1630 Downloaded ammo and guns and configured M-93 system for 11 May.

1630-1700 Flew to Simmons AAF.

11 May

0630-0800 Briefed, configured A/C and preflighted for return trip.

0800-0830 Informal discussion with Col Derrick.

0930-1630 Return trip to Hurlburt. Refueling stops at Charleston and Moody AFBs.

DISCUSSION

1. Mission Summary: The pintle mount demonstration seemed to be a total success. The Army elements were very pleased with the capabilities of the pintle mounted weapon systems. They were extremely impressed with the accuracy and destructive effectiveness of the soft mounted .50 caliber.

We flew on two separate days. The first being a practice while the actual demonstration was flown on the second day. Our first practice firing pass was with the XM-94 system. We fired four hundred rounds of ammo without any problems. The Army then attempted to mount the .50 caliber on their H model Huey, however, the base plate for the pintle mount was not compatible with the floor studs on their model aircraft. So the .50 caliber was then mounted on our pintle mount and flown on our aircraft. The system had several jams due to the rounds chambering arm. Once fixed, it was extremely impressive.

The Army Hueys flew with the XM-93 system (with a declutching GAU-2B/A mini-gun) and the Navy MK-19 (40mm grenade launcher). The mini-gun system, which the wing loaned the Army, did not work properly. The GAU-2B/A mini-guns were rebuilt by the General Electric field representatives before they could be used without jamming. Only one gun was used as there were not enough spare parts to rebuild both guns. The gun then worked very well. The M19 grenade launcher worked well in both of its firing passes.

During the actual demonstration on 10 May, the XM-94 broke half way through the first pass after only firing approximately 30 rounds. A roll pin broke in the round positioning arm causing our second pass to be cold. The .50 caliber worked perfect on both passes and impressed all observers. We felt very proud that we got to lead an Army demonstration in an Air Force helicopter. We also fired two separate weapon systems off one platform whereby the Army required two separate aircraft for their two different systems.

PROBLEMS AND RECOMMENDATIONS

a. This demonstration was originally planned as a pintle mount comparison between two different 40mm systems. However it did not work out this way. We were unable to fire the Navy M-19 grenade launcher and we did not fire the XM-94 system in a realistic flight profile. It appears that the representatives from ARRADCOM have fixed the feed problems with the XM-94 system. We did not experience any of the old jamming problems that were so common to the system. However, there were not enough rounds fired through the system to justify saying the system is "fixed". Pictures and modification data on the XM-94 will follow at a later date.

b. I highly recommend a competitive fire-off between the two 40mm systems before we purchase either. I feel that a realistic flight profile flown here at Hurlburt over a 4 to 5 day period would allow this squadron to safely determine if either system is reliable enough to use.

c. Recommend we purchase a .50 Caliber soft mount system as soon as possible. This system certainly improves our present capabilities and would greatly enhance our chances for survival in a combat environment.

d. Recommend a formal invitation be sent to the 12th Aviation Division, inviting them here to observe and fly with us during our weapon missions. Col Derrick, Commander 12th Aviation Division, expressed the desire to send some of his IPs and EMs here to observe our gun tactics. This invitation would be sent following a request through channels by the Army.

e. The Army treated my crew and I very well. They welcomed all suggestions and solicited our help on their gun problems. SSgt Hall was able to fix several weapon malfunctions that the Army and civilian representatives could not correct. They were quite impressed with his knowledge of gun systems. We enjoyed the cross talk and made some valuable friends for any future work with the 12th Aviation Division. I feel certain that the Army will procure the pintle mounted systems as Lt Gen Emmerson told Col Derrick to press forward with the letter requesting Army action on pintle mounted weaponry.

File 7

DEPARTMENT OF THE AIR FORCE
20TH SPECIAL OPERATIONS SQUADRON (TAC)
EGLIN AF AUXILIARY FIELD NO. 9, FLORIDA 32544

REPLY TO ATTN OF: DO

5 APR 1977

SUBJECT: Trip Report USS Lexington

TO: ~~1 SOW/DO~~ SDO (Jamie) HH CV ___ CC ___

1. Purpose: To receive carrier qualification briefing.

2. Date and Duration of Visit: 30 Mar 77 / 1 day.

3. Mode of Travel: Government auto.

4. Place of Visit: USS Lexington, NAS Pensacola, FL.

5. List of Attendees: Maj Dwight A. Haworth, Capt Frank Waid, Capt James C. Woolworth, Capt John V.S. Fineour, Capt Robert D. Blough, Capt Carl P. Moore, Capt Gerald S. Toth, Capt Joseph C. Vallimont.

6. Agenda: 0945 - Carrier Operations Briefing; 1100 - Tour of Flight Deck.

7. Narrative of Events:

a. The party arrived at 0935 at USS Lexington and was escorted to the aircrew briefing room. The party was introduced to Commander Schneidewind, the Air Operations Officer and Commander Halley, the Air Boss. Commander Schneidewind opened the briefing with a description of the training plan and questions about numbers of pilots to be qualified. The information presented pointed out that 11 April would be the earliest date that qualification landings could be made by pilots from the 20th SOS. Major Haworth, after brief consultation with the CH-3 scheduling officer, agreed that the first qualification of 20th SOS pilots would be on 11 April. Commander Schneidewind indicated that a 1200 "overhead" time would allow the 20th SOS helicopters to be easily fitted into the training plan.

b. Commander Halley presented a briefing which described procedures and terms used on the carrier. An item of concern to Commander Halley was how to remove the blades and stow the CH-3 should one be grounded on the carrier. It was agreed that one CH-3 would bring a blade cradle to assist in removing the blades if necessary. Commander Halley also requested that an officer be in the tower to assist in the event of aircraft malfunction. The orientation concluded with a quick tour of the flight deck.

8. Recommendations:

a. Two CH-3 helicopters and one UH-1N be scheduled to takeoff on Monday 11 April at 1100 hours.

b. A blade cradle for the CH-3 be carried on one of the helicopters.

c. Lt Col Spencer be aboard the Lexington to assist and advise in the event of an aircraft malfunction. Boarding time will be NLT 0900 hours on 11 April.

DWIGHT A. HAWORTH, Major, USAF
Assistant Operations Officer

Note
a. Helicopters are scheduled.
b. Maintenance agrees to provide cradle aboard one H-3
c. Lt Col Spencer DO and Capt Vuckovich DOW will man Lexington "Tower Flower" position

R Mays Lt Col.

MANNING

Position	Authorized	Assigned
Commander	1	1
Operations Officer	1	1
Flight Surgeon	1	0
Pilots, UH-1N	18	17
Pilots, CH-3E	12	15
Flight Mechanics, UH-1N	9	9
Flight Mechanics, CH-3E	12	11
Weapons Specialists, UH-1N	9	10
Administrative Specialists	3	3
First Sergeant	0	1
Operations Specialists	3	4
Medical Technicians	3	3
Life Support Technicians	4	4
TOTAL	76	78

KEY PERSONNEL

Position	Individual	Effective
Commander	Lt Col Robert E. Mayo	22 Oct 75
Operations Officer	Lt Col Frank E. Spencer	3 Sep 75
Asst Ops Officer, UH-1N	Maj Jerome L. Gudvangen	5 Sep 76
Asst Ops Officer, CH-3E	Maj Dwight A. Haworth	21 Jul 76
Executive Officer	Maj Richard E. Porter	23 May 77
Administrative Officer	Capt John M. Graham	23 May 77
Safety Officer	Capt John H. Schramm	29 Oct 75
A Flight Commander	Capt Edward W. Gmyrek	22 Feb 77
B Flight Commander	Capt Charles R. Merriott	15 Dec 75
C Flight Commander	Capt Carl P. Moore	26 Jan 76
D Flight Commander	Capt Richard J. Hlavaty	23 Jan 76
Stan/Eval Officer	Capt Karl W. Poulsen	
First Sergeant	MSgt George W. Puett	19 Aug 77
NCOIC, Operations	TSgt Jerry L. Schutte	1 Apr 77
NCOIC, Weapons Specialists	SMSgt Ronald J. Gray	24 Feb 75
NCOIC, Flight Mechanics	MSgt Floyd W. Watson Jr.	1 Apr 77
NCOIC, Stan Eval	MSgt Floyd W. Watson Jr.	2 Dec 75
NCOIC, Administration	TSgt Allan G. Hineman	11 Jul 77
NCOIC, Life Support	SSgt Lamont C. Pass	28 Sep 76

STATEMENT OF SPECIALIZED EQUIPMENT

The squadron's aircraft equipage, as authorized by Air Force Programming Documents, includes six UH-1Ns and four CH-3Es all special operations forces (SOF) configured. To date, 6 UH-1Ns and 3 CH-3Es are on station, and the remaining aircraft has been identified by tail number.

Various items of specialized equipment are authorized for the unit's primary and corallary mission. This equipment includes:

a. The XM-93 Subsystem, which consists of 7.62mm electrical gattling guns, capable of firing 4000 rounds per minute.

b. The M-23 Subsystem, which includes 7.62mm gas operated machineguns, capable of firing 550 rounds per minute.

c. The 2.75 inch Folding Fin Aircraft Rocket (FFAR), which is normally configured with a nine pound warhead.

d. The UH-1N Loudspeaker System, designed primarily for psychological operations, can broadcast taped or live sound over a two mile radius.

e. The 3090-3 Spray System, a self contained, windmill operated aerial spray system with a capacity of 200 gallons.

CHRONOLOGY OF SIGNIFICANT EVENTS

7 Jul — Capt Dave Schildmeyer signed in. He will assume duties as C Flight Commander.

11 Jul — TSgt Allan G. Hineman signed in. He will assume duties as NCOIC of Administration.

Capt Ed Gymrek, TSgt John Kriletich, SSgt James Carter TDY to Homestead AFB, Fl to attend Water Survival School.

Capt Joe Vallimont TDY to Pt Mugu, Ca to attend Tri-Service .50 Caliber Weapons Conference.

12 Jul — 20 SOS supported the Army Ranger School by providing repelling and infiltration training for 48 trainees.

UH-1N 642 made a precautionary landing at Duke Field on a night training flight with a 42 degree gear box chipdector light. The pilot was Capt Mike Lackey.

Capt Harrington, Commander CCT was injured (broken leg) while parachuting from a 20 SOS UH-1N. He was med-evauced to Eglin AFB Hospital by Capt Mike Lackey in a UH-1N.

13 Jul — Mr. Gregory Chalcraft, USAF Audit Agency, Hq TAC, Langley AFB, VA visited the squadron. He is gathering preliminary data for an audit of helicopter assets assigned to TAC.

1 Aug — TSgt Hall and TSgt Mustered TDY to Bergstrom AFB, Tx to attend TAC NCO Academy.

Capt Stetson Cowan TDY to Nellis AFB, Nevada for Operation Red Flag.

Capt Frank Pelz and Lt Patrick St Romain TDY to Kirtland AFB, NM to attend CH-3E Simulator Training.

Capt Ron Merriott TDY to MacDill AFB, Fl to participate in Bold Eagle 78.

Capt Joe Vallimont and SSgt Bob Hall TDY to NAVAIRSYSCOM, Washington DC to attend Weaponry Conference.

Capt Rich Hlavaty, Capt Carl Moore and Sgt Tavarez TDY to Homestead AFB, Fl to attend Water Survival Training.

5 Aug — Mr. Bob Greer and Mr. John Oswalt of Bell Helicopter briefed the squadron on the status of XV 15 Tilt Rotor Research Aircraft.

10&11 Aug — 100 AFROTC Cadets were given a 20 SOS orientation which included mission briefing and UH-1N and CH-3E static displays.

11 Aug — A UH-1N crewed by Capt Frank Waid, Lt Joe Pounder, TSgt Rich Vanderploeg and Sgt Don Griffin were involved in an incident while flying on a gunnery mission over range 77. Quick actions of Sgt Griffin averted danger to the entire crew when his mini-gun flash suppressor separated from the aircraft. Several rounds hit the flash suppressor as it separated the aircraft but major damage was eliminated by Sgt Griffin's actions.

13 Aug — Major Rich Porter TDY to Maxwell AFB, Al to attend Theater Air Warfare Course.

24 Aug — Capt Dave Tidd and Lt Steve Roark TDY to Shaw AFB, SC to participate in Blue Flag.

Sgts Rodolfo Vasquez and Mark McGlaughlin TDY to Tyndall AFB, Fl to attend initial Physiological Training.

27 Aug — 20 SOS participated in Blue Flag with 2 UH-1N and 1 CH-3E aircraft in a night SAR scenario behind enemy lines.

28 Aug — Sgt Mark McGlaughlin TDY to Kirtland AFB, NM to attend H-3 Helicopter Mechanic initial qualification course.

31 Aug — Col Houbin, Army Senior controller for Bold Eagle 78 was given an orientation flight over the entire Eglin complex.

31 Aug-2 Sep — Aircrews from the 20 SOS participated in a search and rescue operation in the Panama City, Fl coastal waters. The object of the SAR was to locate a crew from a Marine F-4 which had crashed into the Gulf. Search was staged from Tyndall AFB and met with negative results. 13 sorties and 23.5 hours of time were flown.

6 Sep — Lt Col Robert Mayo briefed the 16 SOS on the squadrons mission.

Major Stan McGhan and Capt Robert Blough briefed Col Wicker on mountain training for the 20 SOS. Tasking approval was received.

12 Sep — 20 SOS participated in a base-wide mobility exercise.

Lt Rash from Eglin Auditor's Office began conducting an audit of TAC helicopter assets.

CH-3E 290 returned from Pensacola .

16 Sep — Major Stan McGhan TDY to Kirtland AFB, NM to attend Flight Simulator refresher training (H-3).

TSgt Bill Houston TDY to Homestead AFB, Fl to attend Water Survival School.

SSgt James Carter was recommended for the Cheney Award by direction of 9AF for his action in rescuing a downed F-4 crew on 25 Apr 77.

TSgt Rich Vanderploeg, TDY to Sheppard AFB, Tx to attend Helicopter mechanics course.

20-21 Sep — 20 SOS hosted the Joint Technical Coordinating Group AD HOC Committee on Helo Weapons.

TSgt Thomas G. Erschen signed in.

.50 Cal evaluation with AD HOC committee was demonstrated.

22 Sep — Lt Col Robert Mayo assumed the duties as the Assistant Deputy Commander for Operations due to the death of Col Hume.

2030 hours UH-1N 653 made a precautionary landing at Field 6 for a high frequency vibration. A tail rotor hanger bearing was replaced and the aircraft was returned to base on 23 Sep 77.

23 Sep — TSgt Kriletich, an H-3 flight mechanic separated from the Air Force for a position in the Air National Guard at Haywood ANGB, CA.

27 Sep — Col Dunwoody was briefed on the 20 SOS mountain training package and gave his approval to begin training.

30 Sep — Capt Rich Hlavaty flew a paradrop mission for the Mullet Festival at Niceville, Fl.

TSgt Jerry Schutte promoted to Technical Sergeant.

SPECIAL ACHIEVEMENTS

The following individuals completed the USAF Air Ground Operations School Combat Operations Specialist Course:

Capt Frank A. Gray
1Lt Joseph J. Pounder
2Lt Michael M. Collins

The following individuals completed the USAF Special Operations School (SOS) Foreign Internal Defense Course:

Capt Frank A. Gray
Capt James C. Woolworth
Capt John H. Schramm
2Lt Patrick M. St Romain
Capt Peter O'Day
MSgt Michael J. Otis

The following individuals completed the base level Aircrew Instructor Training Course:

Capt Lloyd L. Buchfinck
SSgt James T. Carter

The following individuals completed the TAC NCO Academy:

TSgt Michael R. Hall
TSgt Richard L. Mustered

The following individual completed the USAF Special Operation School Dynamics of Terrorism Course:

Maj Dwight A. Haworth

The following individuals attended the USAF Special Operations School Unconventional Warfare Course:

Capt Peter R. O'Day
Capt Samuel G. Tota

The following individual attended the base level NCO Leadership School:

SSgt Glenn R. Wartluft

In addition to completing the professional courses and schools listed above, several squadron members have achieved special recognition. SSgt James T. Carter was nominated for the Chaney Award. He was the only individual nominated from Hurlburt Field this year.

SPECIAL PROBLEMS

The lack of special operations configured aircraft continues to be a most critical area. This prevents some flying training events, and also inhibits ground training necessary to obtain combat-ready status. All authorized UH-1Ns are on station, however, they are not all SOF configured. They need the complete set of special operations group B equipment--to include armament, armor, and avionics--to be combat-ready. Of the four CH-3Es authorized, only three are permanently assigned.

The structual delamination of bulkheads previously identified in the UH-1N has been greatly aleviated. All aircraft are now flyable, although some delaminated panels are still awaiting repair.

The lack of a dedicated squadron briefing room has become more urgent as flying operations increase in tempo. The squadron facility has been previously identified as a general use conference room, and is used by the base education office as a classroom in the evenings. Therefore, it is not available for aircrew briefings and debriefings during this period. This is critical, as this briefing room has been specially outfitted with the maps, projection screens, and audio visual aids that enhance professional briefings.

HIGHLIGHTS OF ROUTINE OPERATIONS

The 20 SOS Standardization Section is heavily involved in various areas of training for continued mission ready status of the squadron. In order to enhance the firepower of the UH-1N an ongoing evaluation of .50 caliber machine gun and 40mm gernade launcher is being conducted. To further standardization three new meetings have been initiated. The first is an weekly instructors meeting; the second is an enlisted supervisors meeting; the third is an aircrew meeting. One of the benefits of these meetings is to identify any deficiencies in training. One such need is a requirement for mountain training for all helicopter crews. This training requirement was briefed to the Wing Commander. We will in the future begin this needed training in the mountains north of Dobbins AFB, GA. Other items developed include a new OI on tool box control design and testing of a new briefing guides, plus numerous updating of existing procedures.

The Tactics Office has also been hard at work during this quarter. TACM 3-X, Helicopter Tactics, has been completely written in this squadron. This time consuming undertaking is a tribute to the squadron as projects of this magnitude areusually compiled at higher headquarters. The Tactics Office is also deeply involved with the Ad Hoc Committee for soft mounting small caliber weapons on helicopters. One of the tri service meetings was hosted by the 20 SOS at Hurlburt on 20-23 September. Another task undertaken was an evaluation of Rescue UTTAS ROC for TAC DORS. A master question file on helicopter tactics were also provided to TAC DORS. Co-ordinates for additional carrier qualification deck time has been completed, however weather precluded the actual landings and will be scheduled at a later date. Other projects currently underway include helo verus helo air-to-air tactics to be hopefully tested in the simulator at Langley AFB, VA.

SPECIAL INTEREST ITEM

FLYING SUMMARY

Following is a list of lying hours and sorties flown by the squadron; although category 0-8 only includes functional check flights, category T-3 includes training, cross country, and support missions.

UH-1N

Month	Category	Sorties	Hours	Landings
July 77	0-8	3	1.2	6
	T-3	110	163.1	591
Aug 77	0-8	20	14.0	20
	T-3	106	162.0	594
Sep 77	0-8	24	16.8	24
	T-3	91	152.6	551

CH-3E

July 77	0-8	4	2.4	4
	T-3	51	91.0	325
Aug 77	0-8	15	9.0	15
	T-3	50	96.4	260
Sep 77	0-8	14	8.4	14
	T-3	28	38.6	162

During this period, the squadron flew a total of 754.9 safe flying hours compiled by launching 516 separate sorties. Of particular note is the fact that 2567 successful landings were accomplished.

HISTORICAL REPORT

TWENTIETH SPECIAL OPERATIONS SQUADRON

1 JULY 1977 - 30 SEPTEMBER 1977

LT COLONEL ROBERT E. MAYO
Commander

MISSION STATEMENT

The primary mission of the 20th Special Operations Squadron can be compared to an encyclopedia of helicopter special operations. The squadron is tasked to conduct day or night infiltration, exfiltration, gunnery support, reenforcement, and resupply into hostile or enemy controlled territory. These operations include the use of airland and airdrop techniques, and entail land and water overflight. Another primary mission is the conduct of psychological operations, which include speaker broadcasts and aerial dispensing of leaflets.

Corollary missions give the squadron the flexibility and varied capabilities for which special operations units are noted. These missions include:

a. Recovery of personnel, which also entails escape and evasion operations, and combat search and rescue (SAR). SAR operations would normally be prosecuted from forward operating locations where dedicated Aerospace Rescue and Recovery Service (ARRS) forces are not available. SAR efforts would include the majority of ARRS techniques: search and location of survivors, airland or aerial recovery (i.e., hoist, STABO rig), first aid, and transportation to the nearest medical facility.

b. Helicopter shipboard operations (joint service).

c. Medical evacuation of injured personnel.

d. Humanitarian and civic action programs.

e. Limited photo reconnaissance, by handheld or modularly installed camera systems.

f. Other missions, as directed by higher headquarters.

Appendix 1

3-MTN-3

(46)

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 1ST SPECIAL OPERATIONS WING (TAC)
EGLIN AF AUXILIARY FIELD NO. 9, FLORIDA 32544

REPLY TO ATTN OF: MAL (MSgt Huffman, 1Lt Howlett) 14 Sept 77

SUBJECT: H-3 Users Conference Trip Report.

TO: MA

1. Purpose: Provide 1 SOWg representation and present our specific maintenance and logistic problems.

2. Travelers: 1Lt T.L. Howlett
MSgt C.D. Huffman

3. Itinerary: Warner Robins Air Logistics Center, Robins AFB Ga., 6-10 Sept 77.

4. Discussion: Atotal of 65 formal agenda items were presented for discussion and numerous informal items. Several of these items were minor or of no specific value to our wing. Therefore, only a few items of interest are provided herein.

a. Single Point Refueling (SPR) Capability - A SPR Surge valve will be ready for testing in Oct 77. If test results are satisfactory, TCTO kits should be reaching the field in April 78, to return the SPR to an operational status.

b. Technical Order printing discrepancies - Numerous T.O. printing deficiencies have been reported to and noted by WRALC. Actions are being taken to replace the primary Data Contractor on or about 15 Mar 78 in an effort to improve our T.O. quality.

c. M-60 Machine Gun Ejection Chute deficiencies - Three different ejection chute versions have been developed and satisfactorily tested by various units including 1 SOWg. WRALC is currently conducting an engineering study and will notify all units when their decision is finalized.

d. Main Gearbox and Main Rotor Head overhaul deficiencies - The Item Manager, Mr. W.J. Hamsley will conduct a quality audit of the Pensacola NAVAIR Rework Facility on or about 15 Oct 77. Commands will be notified when dates are confirmed and may send representation if desired.

e. Over Inspection of Main Rotor Brake assembly - Removal, disassembly and inspection requirements will be changed from a 300 to a

Atch 8

600 hour interval.

f. Gear Up Landing Procedures - Existing directives are vague to non-existant for Gear Up Landing procedures and supporting devices. On 8 Aug 77, WRALC initiated a project to determine supporting device requirements and establish specific procedures and safety guidelines for ground crew personnel as soon as possible.

g. Nose Gear Kneeling Valve - Most units have experienced recurring failures of the Nose Gear Kneeling Valve. A new improved valve (PN HP848420-600) has been developed and will be available within 45 days for replacement on an attrition basis.

h. Main Landing Gear Swap-Out TCTO - A new TCTO dated 1 Sept 77 is in print at this time and establishes a schedule for the removal and replacement of main landing gear struts. We reviewed a draft of this TCTO and believe the only probable scheduling difficulty may be with acft 63-9686 for November 77.

i. Local Repair of Main Rotor and Main Wheel Brake assemblies - The ERRC will be changed within 60 days to authorize field repair.

j. TCTO 1H-3-661 Wipe Inspection (IBIS) - TCTO 1H-3-661 kit contains requirement for subject inspection. This inspection is required for Coast Guard aircraft only, therefore, Air Force units may remove decals requiring subject inspection. A formal change is forthcoming.

k. Cargo Sling Fitting Cracks - Several units are finding cracks in the corner fittings on the Cargo Sling frame. These fittings are non-procurable at this time.

l. Inspection Concepts - Maintenance Steering Group-2 (MSG-2) has recommended a change to our current Phase Inspection procedures. This change will increase our inspection interval to 200 hours and streamline our inspection procedures. An initial work-deck review conference will convene at Sikorsky Aircraft Corporation, Stratford, Conn., during the latter part of Oct. The deck will be field tested at Tyndall AFB, Fla., after the review. We expect to implement the MSG-2 inspection early in 1978.

5. Recommendations: We should capitalize on every opportunity to attend all aircraft users conferences for our assigned aircraft. The ability to indentify and resolve deficiencies is greatly enhanced by the "face to face" contact between all users and the System and Item Managers. Also, we should attend the forthcoming MSG-2 conference and test to insure our best interests are served and a thorough understanding of these new procedures is attained.

Clarence D. Huffman

CLARENCE D. HUFFMAN, MSgt, USAF
Programs and Mobility

Terry L. Howlett

TERRY L. HOWLETT, 1Lt, USAF
Maintenance Officer

Cy to: MAQ
MAO

Atch 8
pg 2

HISTORICAL REPORT

TWENTIETH SPECIAL OPERATIONS SQUADRON

1 OCTOBER 1977 - 31 DECEMBER 1977

LT COLONEL ROBERT E. MAYO
Commander

MISSION STATEMENT

The primary mission of the 20th Special Operations Squadron can be compared to an encyclopedia of helicopter special operations. The squadron is tasked to conduct day or night infiltration, exfiltration, gunnery support, reenforcement, and resupply into hostile or enemy controlled territory. These operations include the use of airland and airdrop techniques, and entail land and water overflight. Another primary mission is the conduct of psychological operations, which include speaker broadcasts and aerial dispensing of leaflets.

Corollary missions give the squadron the flexibility and varied capabilities for which special operations units are noted. These missions include:

a. Recovery of personnel, which also entails escape and evasion operations, and combat search and rescue (SAR). SAR operations would normally be prosecuted from forward operating locations where dedicated Aerospace Rescue and Recovery Service (ARRS) forces are not available. SAR efforts would include the majority of ARRS techniques: search and location of survivors, airland or aerial recovery (i.e., hoist, STABO rig), first aid, and transportation to the nearest medical facility.

b. Helicopter shipboard operations (joint service).

c. Medical evacuation of injured personnel.

d. Humanitarian and civic action programs.

e. Limited photo reconnaissance, by handheld or modularly installed camera systems.

f. Other missions, as directed by higher headquarters.

MANNING

Position	Authorized	Assigned
Commander	1	1
Operations Officer	1	1
Flight Surgeon	1	0
Pilots, UH-1N	18	18
Pilots, CH-3E	12	14
Flight Mechanics, UH-1N	9	11
Flight Mechanics, CH-3E	12	12
Weapons Specialists, UH-1N	9	10
Administrative Specialists	3	3
First Sergeant	0	1
Operations Specialists	3	4
Medical Technicians	3	3
Life Support Technicians	4	4
TOTAL	76	81

KEY PERSONNEL

Position	Individual	Effective
Commander	Lt Col Robert E. Mayo	22 Oct 75
Operations Officer	Lt Col Frank E. Spencer	3 Sep 75
Asst Ops Officer, UH-1N	Maj Jerome L. Gudvangen	5 Sep 76
Asst Ops Officer, CH-3E	Maj Standley A. McGhan	9 Jun 77
Executive Officer	Maj Richard E. Porter	23 May 77
Administrative Officer	Capt John M. Graham	23 May 77
Safety Officer	Capt John H. Schramm	29 Oct 75
A Flight Commander	Capt Edward W. Gmyrek	22 Feb 77
B Flight Commander	Capt Charles R. Merriott	15 Dec 75
C Flight Commander	Capt Carl P. Moore	26 Jan 76
D Flight Commander	Capt Richard J. Hlavaty	23 Jan 76
Stan/Eval Officer	Capt Karl W. Poulsen	12 Dec 75
First Sergeant	MSgt George W. Puett	19 Aug 77
NCOIC, Operations	TSgt Jerry L. Schutte	1 Apr 77
NCOIC, Weapons Specialists	SMSgt Ronald J. Gray	24 Feb 75
NCOIC, Flight Mechanics	MSgt Floyd W. Watson Jr.	1 Apr 77
NCOIC, Stan/Eval	MSgt Floyd W. Watson Jr.	2 Dec 75

KEY PERSONNEL

Position	Individual	Effective
NCOIC, Administration	TSgt Allan G. Hineman	11 Jul 77
NCOIC, Life Support	SSgt Lamont C. Pass	28 Sep 76

STATEMENT OF SPECIALIZED EQUIPMENT

The squadron's aircraft equipage, as authorized by Air Force Programming Documents, includes six UH-1Ns and four CH-3Es all special operations forces (SOF) configured. To date, 6 UH-1Ns and 3 CH-3Es are on station, and the remaining aircraft has been identified by tail number.

Various items of specialized equipment are authorized for the unit's primary and corallary mission. This equipment includes:

a. The XM-93 Subsystem, which consists of 7.62mm electrical gattling guns, capable of firing 4000 rounds per minute.

b. The M-23 Subsystem, which includes 7.62mm gas operated machineguns capable of firing 550 rounds per minute.

c. The 2.75 inch Folding Fin Aircraft Rocket (FFAR), which is normally configured with a nine pound warhead.

d. The UH-1N Loudspeaker System, designed primarily for psychological operations, can broadcast taped or live sound over a two mile radius.

e. The 3090-3 Spray System, a self contained, windmill operated aerial spray system with a capacity of 200 gallons.

HIGHLIGHTS OF ROUTINE OPERATIONS

The most significant matter of operations this quarter was our participation in Red Flag 78-2, 25 Nov - 18 Dec 77, at Nellis AFB, NV. The 20 SOS deployed 2 UH-1N helicopters (696604 and 696654) and 3 crews. The 20 SOS was also tasked and provided an operations officer for Red Flag (Lt Col Frank Spencer), a mission manager (Maj Jerome Gudvangen) and a mission planner (Capt Joe Vallimont). At the half way point in the exercise three H-1 crews replaced the first contigent (so that maximum numbers of aircrew could participate in the exercise). The training provided to the aircrews was excellent and pointed out several strong and weak areas. A strong point was that we feel that the UH-1N can survive in a medium to high threat enviroment. However, we do need to include terrain following and nap of the earth flying into our training syllabus. For the first time we were allowed to fly down to 25 feet AGL. We found the UH-1N to have adequate power to work in the high dessert but found that the lack of radar warning receivers (RWR), infrared counter measures (IRCM), night terrain following equipment, and precise navigation equipment made night work very difficult. Another short coming of the UH-1N was that it does not have sufficient range. The 20 SOS participated in dissimilar air combat training (DACT) and found that we need to train further in this area. We encountered two major maintenance problems. UH-1N 654 had a lift link failure and required a transmission change in field conditions. The second problem was that UH-1N 604 was left at Indian Spring AFAF, NV, with small cracks in the lift link beam and will be repaired there by a WRAMA team.

SPECIAL ACHIEVEMENTS

The following individual completed the USAF Air Ground Operations School Combat Operations Specialist Course:

Capt Frank A. Gray

The following individual completed the USAF Special Operations Foreign Internal Defense Course:

Capt Richard L. Gardner

The following individual completed the USAF Special Operations School Dynamics of Terrorism Course:

Lt Patrick M. St Romain

The following individuals completed the USAF Special Operations School Psychological Operations Course:

Lt Patrick M. St Romain
Capt Richard J. Hlavaty

The following individuals completed the USAF Special Operations School Uncoventional Warfare Course:

Capt Frank J. Pelz Jr.
Capt Stetson R. Cowan
Capt John M Graham

In addition to completing the professional courses and schools listed above several squadron members have achieved special recognition.

SSgt James T. Carter was awarded the Airman's Medal for his efforts in the rescuing of a downed F-4 crewmember.

The following were awarded Commendation Medals.

Capt John Grove
Capt David Schildmeyer
MSgt George W. Puett
TSgt Allan Hineman

CHRONOLOGY OF SIGNIFICANT EVENTS

4 Oct 77 — Capt Joseph Vallimont and SSgt Robert Hall TDY to Triangle, VA to attend Joint Tri-Service Working Group Meeting.

5 Oct 77 — Sgt Lawerance Weber and A1C Williams TDY to Eglin AAF 3 for Bold Eagle 78.

8 Oct 77 — Capt Karl Poulsen, Lt Joe Pounder and Sgt Paul Cartter represented the 1 SOW at Milton, Fl Air Fair by providing a static display UH-1N.

13 Oct 77 — The following individuals were assigned to the 20 SOS as helicopter flight mechanics from the 834 OMS.

SSgt John Martin	- CH-3E	A1C Don Kiley	- UH-1N
Sgt Rick Bobo	- CH-3E	A1C Randy Hinkler	- CH-3E
Sgt Douglas Wyman	- CH-3E	AMN Randall Haines	- CH-3E

13 Oct 77 — 20 SOS began participation in Bold Eagle 78.

31 Oct 77 — 20 SOS closed out operation in Bold Eagle 78.

1 Nov 77 — Capt Richard Gardner signed in PCS and will be assigned to D Flight.

4 Nov 77 — Capt Frank Gray TDY to MacDill AFB, FL to participate in Empire Glacier 78 as a staff augmentee in the joint planning and control group.

Capt Dave Schildmeyer TDY to 302 SOS Luke AFB, AZ for CH-3 upgrade training.

6 Nov 77 — Major Standley McGhan TDY to NASA Langley AFB, VA to participate in the air-to-air simulator.

7 Nov 77 — CH-3E 686 lost its right sponson window in flight. Minimum damage was sustained to the horizontal stabilizer. Cause for loss has not been determined.

15 Nov 77 — LtCol Frank Spencer TDY to Shaw AFB, SC as a member of the 1 SOW team which briefed Lt Gen Hartinger on Red Flag operations.

16 Nov 77 — Capt Joe Vallimont TDY to Santa Anna, California where he was a member of the Ad Hoc Committee for SOFT Mounting of Small Caliber Weapons on Helicopters. The Committee presented their final report to the Tri-Service Working party for guns.

21 Nov 77 Capt John Grove signed in PCS. Capt Grove is an H-3 pilot and assigned to A Flight.

25 Nov 77 The following individuals TDY to Nellis AFB, NV to participate in Red Flag 78-2. Lt Col Frank Spencer, Maj J. Gudvangen, Capt Llyod Buchfinck, Capt Rich Hlavaty, Capt John Graham, Capt John Schramm, Capt Joe Vallimont, Capt Ken Charfauros, Lt Joe Pounder, Lt Mike Collins, Lt Steve Roark, Lt Pat St Romain, MSgt Buck Watson, MSgt Mike Otis, TSgt Jerry Schutte, Sgt Ron Magill, Sgt Paul Cartter, and Sgt Mark Dye.

28 Nov 77 Maj Rich Porter was tasked to head up the Wing Parade to be held on 9 Dec 77.

5 Dec 77 Capt Ross Spahr signed in PCS and will be assigned to D Flight.

Sgt David Mock signed in PCS and is an H-1 flight mechanic assigned to D Flight.

Capt Karl Poulson and Capt George Tota TDY to Langley AFB, VA to rewrite TAC Sup 1 (Test) to AFM 51-2.

9 Dec 77 The 20 SOS participated in the 1st Quarterly Parade which was headed up by Maj Rich Porter. Capt Dave Greer was Wing Adjutant. SSgt James Carter was awarded the Airmans Medal for his participation in the rescue of a downed F-4 crew member.

10 Dec 77 The second "wave" of aircrew members departed for Red Flag 78-2 at Nellis AFB, NV. They are Capt Karl Poulsen, Capt Gary Weikel, Capt S. Cowan, Capt Dave Greer, Capt Pete O'Day, Lt Colin Chatham, SMS Ron Gray, TSgt Richard Mustered, SSgt James Carter, SSgt Dave Rech, SSgt Glen Wartluff and Sgt Ron Magill.

12 Dec 77 TSgt Jon A. Knox signed in PCS. TSgt Knox is a H-3 flight mechanic and is assigned to C Flight.

19 Dec 77 Capt Robert Edgerton signed in PCS. Capt Edgerton is a CH-3E pilot and assigned to A Flight.

21 Dec 77 — 20 SOS held a welcoming party for Lt Col Roberts and his wife Liz at the Hurlburt Officers Open Mess. The party was attended by both enlisted and officer personnel. Col Wicker, 1SOW/DO attended as guest of the Green Hornets.

SPECIAL PROBLEMS

1. The lack of a dedicated squadron briefing room has become more urgent as flying operations increase in tempo. The squadron facility has been previously identified as a general use conference room, and is used by the base education office as a classroom in the evenings. Therefore, it is not available for aircrew briefings and debriefings during this period. This is critical, as this briefing room has been specially outfitted with the maps, projection screens, and audio visual aids that enhance professional briefings.

2. The lack of available aircraft to fly training sorties has been a significant problem. There has been a major modification of the engine deck of UH-1Ns 696653, 696604, 69644, 696641 which required approximately two months time to repair. There is also a lack of available aircraft for training on the CH-3 side of the house. Of the 4 CH-3Es authorized only three are permanently assigned and one aircraft is sleek only (i.e. does not have SOF required equipment such as hoist, armor, armament and avionics).

SPECIAL INTEREST ITEM

FLYING SUMMARY

1 OCTOBER 1977 - 31 DECEMBER 1977

Following is a list of flying hours and sorties flown by the squadron; although category O-8 only includes functional check flights, category T-3 includes training, cross country, and support missions.

UH-1N

Month	Category	Sorties	Hours	Landings
Oct 77	O-8	30	21.0	
	T-3	90	118.9	449
Nov 77	O-8	24	16.8	
	T-3	76	112.2	394
Dec 77	O-8	23	16.1	
	T-3	92	162.6	416

CH-3E

Oct 77	O-8	10	7.0	
	T-3	68	90.9	340
Nov 77	O-8	9	6.3	
	T-3	48	81.2	280
Dec 77	O-8	11	7.7	
	T-3	62	78.7	375

During this period, the squadron flew a total of 719.4 safe flying hours compiled by launching 543 separate sorties. Of particual note is the fact that 2254 successful landings were accomplished.

Green Flag displays Special Operations

Story by 1st Lt. Joseph C. Vallimont, 20th SOS

Photos by Technical Sergeants George C. Scott and Aaron A. Sampson

The 20th Special Operations Squadron (SOS), Combat Control Team and 834th Security Police Squadron (SPS) held a war recently.

It was not a very big war, so do not feel bad if you were not invited.

Dubbed "Green Flag," this joint exercise was designed to provide realistic training for crewmembers of the UH-1N and CH-3E helicopters and ground members of the 834th SPS and Combat Controllers.

The scenerio pitted the Security Police against the Combat Controllers, who would also be augmented by a squad of rotorheads known as Mustered's Mauraders.

At exactly 5:30 a.m., Jan. 13 (most of you fixed wing pilots were not even up yet, except for the 16th SOS who were still at the Officers Open Mess looking for their table cloth), the war began.

The exercise members met their first challenge, a twenty man tent provided by the 823d Civil Engineering Squadron, at the Forward Operating Location (FOL) of Duke Field.

Almost everyone agreed the tent was of Army design, because the instructions were attached to the front door, and could only be followed after the tent was erected, and the front door was found!

Throughout the rest of the day, 17 sorties were flown for infils, exfils and recons.

Further problems developed when the Environmental Protection Agency disapproved the slit trench.

Finally, the first elements of the Security Police and Combat Controllers were inserted into the area by the helicopters. Contrary to popular belief, both parties started off in the right direction, and proceeded to harass each other.

Later in the day, a simulated search and rescue (SAR in chopper talk) was conducted when the wing Standardization and Evaluation representative attempted to establish his own FOL. The SAR was delayed for a time, primarily because no one wanted to go get him.

Back at the war, the 20th SOS was preparing for the last exfil. The Combat Controllers and Security Police continued harassing each other, and failed to notice they had become surrounded by a large band of Army Rangers (probably wanting the tent back.

Although outnumbered, and under extensive



simulated enemy fire, the Combat Controllers and Security Police were saved when the 20th SOS helicopters exfilled them, returning home for a post mission celebra..., I mean debriefing!

With this, the war was almost over, and only one more highly skilled, precision operation had to be accomplished.

The Combat Controllers were covertly infilled into the channel behind the Officers Open Mess the afternoon of Jan. 14. There, they performed a reconnaissance mission to scout out all water approaches to the Mess.

With their route skillfully planned, the 20th SOS made their final assault Jan. 15.

Under the cover of darkness, and dressed in the new style of assault clothing (Mess Dress), members of the 20th made an unopposed beach assault near the Mess.

The operation was so successful, that no one even knew the 20th members had infiltrated the Dining-In until Lt. Col. Robert E. Mayo, 20th SOS commander, made his first of many trips to the Hemlock bowl.

By the way, special thanks to the 834th Transportation Squadron, Dining Hall, Chapel and 823d Civil Engineering Squadron for their support.



SEARCH AND RESCUE—A member of the 20th Special Operations Squadron takes part in a search and rescue during Green Flag.



GROUND FIRE — Members of the 834th Security Police Squadron and Combat Control Team make for their rescue under heavy simulated fire from Army Rangers.



ANOTHER SORTIE — The crew of a 20th Special Operations Squadron CH-3E prepares for another sortie during Green Flag.

Heroism Award Given to Sgt. Carter

A staff sergeant assigned to the 20th Special Operations Squadron here is the recipient of he 1977 Cheney Award.

SSgt. James T. Carter was selected for the award because he voluntarily risked his life while on a helicopter mission near Eglin AFB, Fla.

On April 25, 1977, Sgt. Carter was aboard a UH-1N Huey Gunship conducting an instrument training flight when Eglin mission control asked the crew to search for an F-4 Phantom which had disappeared from its radar moments earlier. The helicopter was sent to an isolated and heavily wooded region where the crew spotted smoke and small fires.

The crash of the F-4 had spead wreckage, fuel and 20 millimeter ordinance. The helicopter set down in a nearby clearing and Sgt. Carter worked his way through burning underbrush to the wreckage. He located the first survivor and directed him toward the waiting helicopter.



SSgt. James T. Carter, an aerial gunner assigned to the 20th Special Operations Squadron, performs a pre-flight inspection of a 7.62 millimeter minigun. Sergeant Carter is the recipient of the 1977 Cheney Award for heroism. (U.S. Air Force photo by SSgt. Cliff Nation)

With Amunition detonating all around him, he searched for the second pilot. A signal from the injured pilot, a faint whistle, helped Sgt. Carter locate him and administer first aid. Joined by his copilot, Sgt. Carter helped carry the injured safety

"His action showed fortitude in a volatile situation and was in the highest humanitarian tradition. It is a pleasure to have an individual of his calibre in Tactical Air Command," commented Gen. Robert J. Dixon, TAC commander, in a congratulatory letter.

Along with the Cheney Award, which will be presented to Sgt. Carter at a later date in Washington, D.C., he received the Airman's Medal during a 1st Special Operations Wing quarterly parade held here recently.

The Cheney Award is presented annually by the Air Force Chief of Staff for an "act of valor, extreme fortitude, or self-sacrifice in a humanitarian interest performed in connection with aircraft" but not necessarily of a military nature. The award was established in memory of 1st Lt. William H. Cheney, Air Service, killed in an air collision at Foggia, Italy. Jan. 20, 1918.

Carter earns award

SSgt. James T. Carter, recently selected to receive the coveted Cheney Award, has been chosen to receive the Air Force Sergeants Association's (AFSA) Pitsenbarger Award.

Both awards are being presented during August for Staff Sergeant Carter's "voluntary risk of life while on a helicopter mission near Eglin AFB, Fla."

On April 25, 1977, Staff Sergeant Carter, assigned to the 20th Special Operations Squadron, was aboard a UH-1N Huey Gunship, conducting an instrument training flight when asked by Eglin mission control to search for a missing F-4 Phantom.

The helicopter was sent to an isolated and heavily wooded area, where the crew spotted smoke and small fires.

The helicopter sat down in a clearing near the downed Phantom and Staff Sergeant Carter worked his way through burning brush and exploding ammunition and directed the first survivor to the helicopter.

He then searched for the second pilot and found him after hearing a faint whistle. After administering first aid, Staff Sergeant Carter, aided by the copilot carried the injured pilot to the waiting helicopter.

The Pitsenbarger Award is presented annually by the AFSA to the Air Force enlisted man receiving the highest award for valor during the preceding year.

The Cheney Award is presented annually by the Air Force Chief of Staff, for an "act of valor, extreme fortitude, or self-sacrifice in a humanitarian interest performed in connection with aircraft" but not necessarily of a military nature.

Awards & Citations

(Continued From Page 37) Hallman Jr. — Air Nati

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ian — Joseph J. Turczyn, Hq SAC, LUKE AFB, Ariz. —
Offutt AFB. Aerospace Defense Com
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POPE AFB, N.C. —
Military Airlift Command
Year.
PRESIDIO OF MONT
Randall Moore — NCO
Secretariet and Air Force

1977 Cheney Award

HURLBURT FIELD, Fla. — SSgt. James T. Carter has been chosen to receive the 1977 Cheney Award for risking his life to save another last year.

In April 1977, Carter was aboard a UH-1N Huey gunship which was asked to search for an F-4 Phantom which had disappeared from its radar moments earlier. The chopper was sent to an isolated and heavily wooded region where the crew spotted smoke and small fires.

The crash of the F-4 had spread wreckage, fuel and ammunition. After the helicopter landed, Carter worked his way through burning underbrush to the wreckage. He found the first survivor and directed him toward the Huey.

With ammunition detonating all around him, Carter continued to search for the second pilot. A signal from the pilot, a faint whistle, helped Carter find him. Joined by the copilot, Carter carried the injured pilot to the safety of the waiting helicopter.



GOOD MAINTENANCE, a good crew, and a good heater are all the ingredients for another successful Empire Glacier mission.



EVERY LAST INCH of hangar space was used at Griffis AFB, N.Y., during Empire Glacier. Here, three of our helicopters, a UH-1H and two CH-3s, stand ready to be put to the cold weather test.

TAC ATTACK

MAY 1977





NIGHT RESCUE
AND YOU...Pg 4

NIGHT RESCUE and YOU



By Capt Donald R. Backlund
1551 FTS
Kirtland AFB, NM

Late afternoon. As you hurriedly gather up your chute and harness and conceal them in some nearby underbrush, you're thinking it's not the best time to try hitching a ride home from enemy territory. It will be dark soon and even if the Rescue helicopter was on station, it would never be able to get here before nightfall.

At least you were able to nurse the bird away from that 7-level gunner who had the "golden BBs" before you bailed out, and the parachute ride provided you an opportunity to survey the surrounding terrain.

A short talk with your wingman on the radio and now you are alone, deep inside enemy territory, and a long way from home. As you struggle up the ridgeline, your mind searches for the important characteristics of the good evasion shelter that you learned in "Snake School."

Hopefully, no one saw you come down. If they did, that road means easy access for search teams. They'll be looking for you. They'll probably have dogs, and you know what that means - certain capture or worse. If only you can hide until the Search and Rescue (SAR) folks show up at daylight.

Sounds like a discouraging situation? Things might not be as bad as they seem. Crews of the Aerospace Rescue and Recovery Service (ARRS), flying H-53s modified with the Night Recovery System (NRS), have the capability to locate and recover downed aircrews on the darkest of nights. This capability was developed in response to operational requirements identified early in the Southeast Asia conflict. Some aircrews were not being recovered because Search and Rescue (SAR) efforts were limited almost entirely to daylight operations. The longer a downed aircrewman remains on the ground, the higher the probability of his capture.

To solve the night SAR problem, the frontline H-53 rescue helicopter was modified with some off-the-shelf components. A Low Light Level Television (LLLTV) system, similar to that used by the AC-130 Gunship, was installed for night navigation and survivor location. The LLLTV produces a picture, closely resembling a daylight TV picture of a selected area in front of, and below, the helicopter under even the darkest night conditions.

Approach and hover couplers, integrated with the H-53s doppler navigation system and radar altimeter, provide precise aircraft control during the actual recovery phase. Night Vision Goggles (NVGs) allow the hoist operator and pararescuemen to "see in the dark" during the recovery. (Photo 2)

Combined with the Electronic Location Finder (ELF) equipment, which utilizes the Course Deviation Indicator (CDI) to display steering and hover guidance in reference to a survival radio, the NRS gives the Rescue forces the capability to perform successful night SAR under Visual Meteorological Conditions (VMC) conditions.

The mission capability of the HH-53C, which has an unrefueled range of approximately 500 miles, can be enhanced for night SAR by utilizing air refueling from HC-130 tankers Although the NRS system gives the HH-53C a limited capacity to terrain mask, no automatic terrain avoidance equipment is provided. So, night VMC conditions are required for successful system employment.

A typical NRS recovery might run something like this: With either a known survivor location or confirmed bailout position as its destination, the NRS-equipped helicopter navigates through enemy territory at a safe altitude (determined by the crew from intelligence reports) to evade en route enemy weapons. Upon arrival in the survivor's area, both visual and electronic techniques can be used to pinpoint the survivor's location, which is then stored in the doppler computer.

The NRS system automatically hovers the helicopter, with pilot inputs based on LLLTV and ELF information, and positions the aircraft precisely over the survivor so the hoist operator and pararescuemen can complete the pickup.

Although the term "automatic" is attached to some of the equipment and procedures, there is nothing really automatic about an NRS pickup. Night SAR is an extremely complex operation for the helicopter crew and; perhaps even more than during daylight SAR, the survivor must play an integral part.

Should you ever be involved in a night SAR effort, there are a few things you can do to help. First, you should regularly check your survival equipment for completeness and proper operation. The distress beacon strobe light with its blue infrared cover and the survival radio are especially crucial in successful night operations.

You should also be able to locate and operate your equipment in the dark without the aid of a light. The strobe light presents few problems (it's



night rescue and you



either on or off), but when was the last time you practiced changing modes or frequencies on your survival radio by feel alone?

Of course, you must also listen to the briefings and follow the instructions of the helicopter crew. They'll be asking you for information concerning your condition and surrounding terrain. Based on your responses, they will modify their tactics to expedite your recovery.

ARRS is presently in the process of further upgrading its HH-53C NRS with the development of PAVE LOW III. Additional equipment installed on the HH-53C includes terrain following/terrain avoidance radar, a doppler-inertial navigation system, a projected map display, a Forward Looking Infrared (FLIR) electrooptical sensor, an improved ELF, and a hover coupler. All of these systems are interfaced with a central avionics computer to provide flexibility and backup capability. Operational testing and evaluation is complete on one prototype and ARRS expects PAVE LOW III to be operational in late 1979.

In the final analysis, an effective SAR mission is a team effort between the rescue forces and the downed aircrew. The fully operational night/adverse weather - rescue capability provided by PAVE LOW III enhances our side of the equation. However, to make the system pay off, you the pilots and 'gators, must do your part by knowing your SAR procedures. Your survival depends on it.



Captain Donald R. Backlund (M.A., Indiana University) is assigned as an HH-53C flight examiner with the 1551st Flying Training Squadron, Kirtland Air Force, New Mexico. Following completion of helicopter training in 1972, Captain Backlund received transition training in the HH-53C. In 1973, he was assigned to the 40th Aerospace Rescue and Recovery Squadron, Nakhon Phonom Royal Thai Air Force Base for a 2-year tour. Captain Backlund is a 1971 graduate of the United States Air Force Academy. His decorations include the Air Force Cross, Air Medal with one Oak Leaf Cluster, and the Air Force Commendation Medal.

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Gunship, choppers in rescue mission

Both the 16th Special Operations Squadron (SOS) and the 20th SOS were involved this week in search and rescue operations for the crew of a Marine F-4 aircraft which was downed in the gulf near Tyndall AFB Monday.

The AC-130H Spectre Gunship of the 16th SOS was dispatched Monday to help search for the navigator who was still missing and to help in the recovery of the pilot and also the recovery of the crew of a helicopter from Tyndall. The helicopter, sent to pick up the downed crewmen, experienced difficulties and was ditched in the search area.

The gunship was launched to the scene in order to take advantage of the aircraft's unique capability to conduct night search operations. The aircraft is equipped with low-light level television and an infrared sensing system capable of detecting heat sources on the surface. In addition, the aircraft has a two kilowatt search light and a gunfire simulator light capable of illuminating objects on the surface.

The aircraft, commanded by Capt. Gregory Kalnitzky, was diverted from a routine training mission to aid in the search effort. After a quick refueling stop at Hurlburt, the aircraft was on the search scene, 70 miles south of Tyndall, less than 40 minutes later.

The gunship crew orbited the floating helicopter and, as night fell, used their search light and gunfire simulator light to guide land-based helicopters to the scene.

When the Coast Guard's aircraft was forced to leave the area due to low fuel, the gunship crew assumed on-scene command, directing the rescue effort and serving as a radio relay station. The gunship remained on scene until severe thunderstorms forced the crew to leave.

Other members of the Spectre crew included: 1st Lt. John Chadwick, copilot; Capt. Keith Toft, navigator; Captains David Thompson and Thomas Wilson, fire control officers; 1st Lt. Flayo Kirk, electronic warfare officer; SSgt. Allen Bertagnolli, television operator; SSgt. Dan McClintock, infrared operator, MSgt. Gary Knecht, flight engineer; MSgt. William Patterson and SSgt. Guillermo Hernandez, illuminator operators; and Msgt. Chester Pepek, Jr., and SSgt. Larry Hickey, weapons mechanics.

Although the 20th SOS was ready to respond immediately after the aircraft was downed, they were not called on until Wednesday morning. Even though the Coast Guard called off their search for the missing navigator, the Air Force chose to continue. A CH-3 launched from Hurlburt at 6:20 Wednesday morning to begin a "creeping line" search of an assigned area. Capt. Robert Blough and his crew, Capt. Frank Pelz, MSgt. Bill Dunbar, and Technical Sergeants Ben Marshall and Emory Craig were scheduled to search and refuel at Tyndall until the search either ended or they completed their crew day.

At press time Wednesday, five sorties were scheduled to be flown by the UH-1N Hueys from the 20th SOS on Thursday. The sorties were planned to fly the coastline and follow the currents.



THE MAGIC KINGDOM was created at New Heights Elementary School last week for the school's open house and orientation. Dickie the Clown delighted the youngsters with the help of several Disney characters. The magical atmosphere quickly disappeared with the start of school Monday. As a reminder to motorists, the area's schools are back in full session so be extra cautious. See more, continued on page 14. (Photo by Mrs. Sharon Weaver)

SOF Hi-Lites, 2 Sep 77

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HAF-CI

RETURN TO
Air Albert F. Simpson
Historical Research Center
Maxwell AFB, AL 36112

1st SPECIAL OPERATIONS WING

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REVIEW ON 31 Mar 97

NOV

VOLUME ONE - NARRATIVE

HISTORY OF THE 1st SPECIAL OPERATIONS WING

HURLBURT FIELD, FLORIDA
(EGLIN AF AUX. FLD. #9)
1 JANUARY - 31 MARCH 1977

CLASSIFIED BY 1SOW/CC
EXEMPT FROM GDS OF EO 11652
EXEMPTION CATEGORY 3
DECLASSIFY ON 31 Dec 2005

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HAF-CHO(

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The Albert F. Simpson
Historical Research Center
Maxwell AFB, AL 36112

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(EGLIN AF AUX. FLD. #9)

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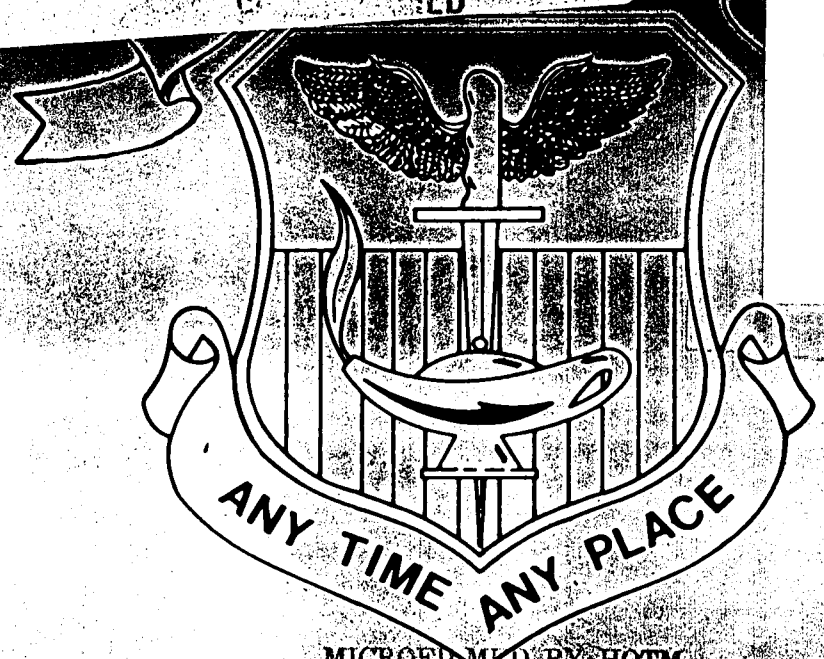
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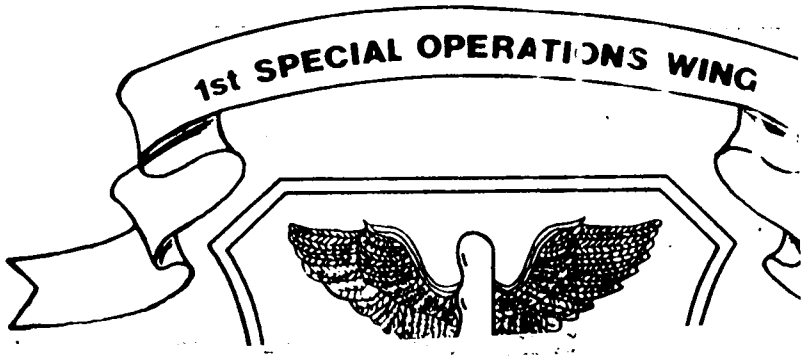
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