1979

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

[redacted] RCS: HAF - CVA (AR) 7101

HISTORY OF THE 1st SPECIAL OPERATIONS WING (U

[redacted] ONLY



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

Jan - Jun 1979
V. 2

REVIEW ON 30 June 99

"READINESS IS OUR PROFESSION"

Volume Two - Supporting Documents

Only those portions contained in this package are considered declassified. The Original document retains its Secret classification

CLASSIFIED BY MULTIPLE SOURCES

REVIEW ON 25 JUN 1999

IF DECLASSIFIED, REVIEW UNDER AFR 12-30 BEFORE RELEASE

HURLBURT FIELD, FLORIDA

1 JANUARY - 30 JUNE 1979

[redacted]

1036710

1. Mission Statement: The primary mission of the 20th Special Operations Squadron is extremely comprehensive. 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 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 reconnasissance, by hand held or modularly installed camera systems.

f. Other missions, as directed by higher headquarters.

2. Statement Of Specialized Equipment:

The squadron's aircraft equipage, as authorized by Air Force Programing Documents, includes six UH-1Ns and four CH-3Es all special operations forces (SOF) configured.

Various items of specialized equipment are authorized for the unit's primary and corollary 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 Rocker (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 2090-3 Spray System, a self contained, windmill operated aerial spray system with a capacity of 200 gallons.

3. Unit Manning:

a. Authorized vs Assigned personnel as of 31 Mar 79.

	Authorized	Assigned
Officers	33	34
Enlisted	44	53
TOTAL	77	87

b. Key personnel changes for the period 1 Jan 79 - 31 Mar 79 are as follows:

(1). Major David Schildmeyer became the Chief, Weapons and Tactics Section.

(2). Major Andrew Gonos became the H-3 Assistant Duty Officer.

(3). Captain John Graham took over as Chief, Mobility Section.

(4). Captain John Grove took over as A Flight Commander.

(5). 1Lt Laurie Parker became new Administrative Officer.

4. Flying Summary: The following is a breakout of flying hours and sorties flown by the squadron from 1 Jan 79 - 31 Mar 79. Category 0-8 only includes functional check flights while category T-3 includes training, cross-country, support missions, and J-CATCH missions. We overflew our quarterly allocation by 35.6 hours in UH-1N; 38.5 hours in CH-3E.

UH-1N

Month	Category	Sorties	Hours
Jan 79	0-8	33	11.6
	T-3	108	163.3
Feb 79	0-8	12	4.8
	T-3	96	162.4
Mar 79	0-8	23	8.9
	T-3	93	169.0
CH-3E			
Jan 79	0-8	4	2.1
	T-3	83	146.0
Feb 79	0-8	9	4.5
	T-3	48	89.4
Mar 79	0-8	8	4.4
	T-3	63	131.3
	TOTAL	580	897.7

ficant Events:

J-CATCH Phase III and IV completed. Phase III was conducted
Jan and 3 Feb 79. It involved all 20 SOS resources flying
he F-4, A-7, F-15, and A-10's for one week apiece, Phase IV was
between 12 Feb and 2 Mar 79. It involved all 20 SOS resources
inst Army Scout/Cobra teams supported by A-7 and A-10 fighters.
total of 312 hours and 187 sorties for J-CATCH Phases III and
l for J-CATCH phases II, III, and IV are 700 flying hours and
es.

During the period 12-26 Feb, the Aerospace Audio Visual Service
filming both ground and flight operations to be included in a J-CATCH
ry film.

20 SOS was the spotlight unit during the Wing Commanders Call
79. A slide briefing was presented on the unit mission and
s. J-CATCH video tapes were also shown.

The squadron obtained 100% participation in the Air Force Assistance
ng the month of February.

We welcomed numerous American and foreign visitors this quarter.
uded:

(1). Lt General Braswell, 9AF/CC, visited J-CATCH Phase III on
He flew on a CH-3E during mission against F-15; debriefed crews.

(2). Lt Colonel Argue, Director of Land Aviation of the Canadian
sited with a party of six.

(3). Brig General Johnson, JCS/J-3 DDO and Colonel Stearnes, JCS/
l Operations Division, were briefed on the unit mission,capabilities,
on 29 Mar 79.

(4). Static displays were set up for Lt General Adams and a
l South American Officers from the Inter American Defense Board on
Brig General Johnson, JCS/J-3 DDO on 29 Mar 79, and for Colonel
C/LG.

ghts Of Routine Operations:

During January the CH-3E and UH-1N pilots, flight mechanics, and
ners conducted inflight operations training and evaluation of the
arfare ensembles at the direction of the Tactical Air Warfare

b. This quarter began Night Vision Goggle (NVG) training for initial CH-3E instructor crew and remaining UH-1N aircrew members. 20 SOS is the only USAF unit presently NVG qualified.

c. A wing Limited Force Exercise was conducted on 20 Mar 79. Demonstrated our capability to insert CCT jeep and pax. The exercise was also used to demonstrate ability to work right guns with AC-130H white light illuminator, and to use AC-130H for right vectoring. Worked UH-1N armed fire support for MC-130E airland/exfil. Unable to use NVG due to scenario and weather/moon conditions. Sent out two cross-country, home station generated CH-3E's during the exercise. Lt Colonel Roberts was COMAFSOCC for the exercise.

d. A squadron reorganization was accomplished on 26 Mar 79. Major organizational changes were the combination of tactics and intelligence and the creation of a mobility section.

e. During this quarter we received TAC approval to purchase ten APR 39 radar warning receivers for all assigned aircraft. The 20 SOS is the only unit in USAF with this Army System.

7. Special Achievements:

a. Captain Joseph Vallimont was selected as 1 SOW Officer aircrew member of the year for 1978. Capt Vallimont's J-CATCH article was also honored in TAC Attack, as Best of the Month for Mar 79. The Wing Commander, Colonel Dunwoody, presented him with a Fleegle T-Shirt at Wing Commanders call.

b. Captain Joseph Vallimont and Technical Sergeant Robert Hall were 20 SOS aircrew members of the year for 1978.

c. Technical Sergeant Robert Hall was selected as 9th Air Force and TAC Outstanding Contributor to Weapons Safety for 1978.

d. A squadron awards ceremony was conducted on 16 Mar 79. Plaques were awarded to Senior Master Sergeant Floyd Watson as 20 SOS NCO of the Year and to Airman First Class Waymond Herring as 20 SOS Airman of the Year. The following awards were presented by the Wing Vice Commander, Colonel Roysdon:

Meritorious Service Medal

Major David A. Jones

Air Force Commendation Medal

First Lieutenant Peter Trent
Staff Sergeant David Mock

Air Force Commendation Medal, First Oak Leaf Cluster

Captain Joseph Leoffler
Staff Sergeant Richard Dolby

Air Force Commendation Medal, 2nd Oak Leaf Cluster
Technical Sergeant Donald Peavy

[redacted] UNCLASSIFIED RCS: HAF - CVA (AR) 7101

HISTORY OF THE 1st SPECIAL OPERATIONS WING (U)

AFSHRC
MAXWELL AFB AL 36112
RETURN TO
V. 2
Jul Dec 1979
DK-W G-T-HIC mpo)



"READINESS IS OUR PROFESSION"

Volume Two - Supporting Documents

FOR [redacted]
AND ITS DEPUTY RELEASE

MICROFILMED BY TIM
NOV 1980

HURLBURT FIELD, FLORIDA

1 JULY - 31 DECEMBER 1979

10327457

UNCLASSIFIED

1. Mission Statement: The primary mission of the 20th Special Operations Squadron is extremely comprehensive. 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:

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b. Helicopter shipboard operations (joint service).

c. Medical evacuation of injured personnel.

d. Humanitarian and civic action programs.

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

f. Other missions, as directed by higher headquarters.

2. 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.

Various items of specialized equipment are authorized for the unit's primary and corollary 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 2090-3 spray system, a self contained, windmill operated aerial spray system with a capacity of 200 gallons.

3. Unit Manning:

a. Authorized vs assigned personnel as of 30 September 1979.

	Authorized	Assigned
OFFICERS	33	35
ENLISTED	44	48
TOTAL	77	83

b. Key personnel changes for the period 1 Jul - 30 Sep are as follows:

(1) Major David Schildmeyer attached to 1 SOW/DOV 20 Aug, Captain Gene Bowman became the new Chief, Weapons and Tactics.

(2) Major Jerome L. Gudvangen attached to 1 SOW/CVV 25 Sep, Captain Richard Gardner became the new Assistant Operations Officer.

(3) Major Edward Gmyrek departed PCS on 31 Jul, Major John Grove took over as Chief, Standardization/Evaluation.

(4) Captain Stetson Cowan departed PCS on 19 Sep, Captain Peter O'Day replaced him as the squadron Standardization officer.

c. New arrivals for the reporting period were:

(1) Lt Colonel Jim Ralph, 20 Aug, Flight Surgeon.

(2) Major Warren Hubbard, 20 Sep, UH-1N Pilot.

(3) 2Lt Dyke H. Whitbeck, 4 Sep, UH-1N Pilot.

(4) SSgt Cordis Blackwood, 10 Aug, Aerial Gunner.

(5) SSgt Robert W. Jenkins, 17 Sep, Aerial Gunner.

4. Flying Summary: The following is a breakout of flying hours and sorties flown by the squadron from 1 Jul - 30 Sep 79. Category 0-8 only includes functional check flights while category T-3 includes training, cross-country, and support missions. We finished fiscal year (FY) 79 flying hour program on 18 Sep in the CH-3E and 24 Sep in the UH-1Ns. The actual flying time for FY79 was 1992.0 hours in the UH-1Ns and 1532.0 hours in the CH-3Es.

UH-1N

Month	Category	Sorties	Hours
Jul 79	0-8	9	4.5
	T-3	87	173.7
Aug 79	0-8	1	0.5
	T-3	66	184.4
Sep 79	0-8	19	4.6
	T-3	92	147.8

CH-3E

Jul 79	0-8	0	0
	T-3	73	142.4
Aug 79	0-8	2	1.0
	T-3	65	152.1
Sep 79	0-8	4	2.4
	T-3	46	100.4
	TOTAL	464	913.8

5. Significant Events:

a. The squadron made preparations on 10 Jul for hurricane Bob which was anticipated to hit the Ft Walton Beach area. Fortunately the preparations for possible rescue missions were not exercised; an all clear was issued on 11 Jul 79.

b. An infrared searchlight filter system, built by the Army at Fort Rucher, Al, and locally modified for our use, was successfully flight tested on 12 Jul. Our initial goal is three for the UH-1Ns and two for the CH-3Es not later than exercise Red Flag 80-1.

c. Ten new helicopter landing zones were selected and surveyed during 17-18 July; subsequently approved.

d. 1Lt Steve Roark and Capt Frank Gray flew a 3.5 hour VFR flight direct from Little Rock AFB to the Hurlburt Field West Helipad on 2 Aug to test the longrange navigation (LORAN) accuracy. Results were exceptional. The set was returned to Teledyne 3 Aug, an informal evaluation will be prepared by the squadron for higher headquarters. Plans are underway to continue evaluating the LORAN during exercises Bold Eagle and Red Flag.

e. Preparations began 3 Aug for the 9th Air Force Base Imporvement competition. Prior to the teams' arrival on 12 Sep, a day early due to the threat of hurricane Fredrick, the squadron had performed numerous projects to clean and insure the exterior area was prepared for the competition.

f. The squadron became heavily committed and deeply involved in exercise Label Knight II conducted 7-13 Aug within the Eglin Range Complex by US Army Special Forces (SF) from Ft Bragg, NC. On 8 Aug, a new first was accomplished when the Combat Control Team's (CCT) rubber Zodiac craft was successfully deployed into Hurlburt Lake from the aft ramp end of a CH-3E without a landing having been made. On 9 Aug, the Zodiac and a two-man CCT was deployed 28 nm south of Eglin in the Gulf of Mexico by a CH-3E. At the same time a UH-1N deployed a six man SF team near the Zodiac by using helocast procedures. A second night vision goggle (NVG) qualified UH-1N crew infiltrated Major General Jack Mackmull, USJFKCENMA/CC, and party of five aboard the target ship USS Ozark, to observe the SF team activities. Upon completion of the scenario, the General and his party were extracted from the ship by a NVG qualified CH-3E crew. On 13 Aug, the Zodiac and a seven-man scuba team were deployed simultaneously from a CH-3E.

g. Static displays were conducted 8-10 Aug for AFROTC cadets attending summer camp at Eglin Main. In addition, numerous local orientation flights were conducted on 7-9, and 13 Aug for the cadets.

h. On 20 Aug a CH-3E made an emergency landing in the Choctawhatchee Bay near Eglin AFB while performing routine water training. A fire broke out onboard the aircraft and the number two engine failed. The crew, Capt Andrew A. Fairlie, Pilot, Major David M. Jones, Co-Pilot, SSgt Richard R. Bobo, and SSgt Douglas F. Wyman, flight mechanics, performed emergency procedures on the aircraft but were forced to land in the bay. After a six hour tow the aircraft was safely recovered at Eglin. Due to the professionalism of all crewmembers, the incident occurred without injury and a valuable aircraft was saved.

i. A 9th Air Force team arrived on 20 Aug for a staff assistance visit. The team performed a thorough inspection of training, life support and a quick look at tactics and administration.

j. Lt Colonel George Borinski, 20 SOS/DO, and TSgt John Knox went TDY to Luke AFB from 26 Aug to 1 Sep to help train the pilots of the 302nd Special Operations Squadron (SOS) in night vision goggles. Training for one instructor pilot and one instructor flight mechanic was successfully completed.

k. Lt Col John Roberts, 20 SOS/CC and two squadron representatives, TSgt Robert Hall and Capt Gary Weikel, attended a Helicopter Guns Conference at Warner Robins Air Logistics Center (WRALC) 6-7 Sep. Attendees were asked for a six-month special reporting on M-93 malfunctions to validate need for improvements. WRALC also advised thay they would assist in .50 cal qualification if asked by HQ TAC.

l. 1st Special Operations Wing (1 SOW) Standardization/Evaluation annual visit began on 10 Sep. The actual visit ran 10-14 and 17-21 Sep, with the outbrief on 24 Sep. The visit was interrupted by a hurrevac due to hurricane Frederick. Squadron results were an overall marginal.

m. 20 SOS participated in a 1 SOW Capabilities Demonstration at Range 52 on 10 Sep. Our involvement consisted on two CH-3Es and three UH-1Ns. The UH-1Ns were the highlight of the demonstration.

n. Lt Col John Roberts, Capt Andrew DeMeyer, 1 SOW/DOX, and Major Withers and TSgt Bowers, 1 SOW/LGX, went TDY to Nellis AFB, 11-13 Sep for the preplanning of Red Flag 80-1.

o. On 12 Sep, three CH-3Es and five UH-1Ns were evacuated to Shaw AFB and Moody AFB, respectively, due to the threat of hurricane Frederick. The UH-1Ns returned on 13 Sep and the CH-3Es on 14 Sep. We had no injuries or significant damage reported.

p. The first 20 SOS escape and evasion training was conducted 25 Sep in the Eglin Central corridor. The training involved 11 volunteers and is now being planned on a monthly basis.

q. The squadron had several distinguished visitors this quarter, among them were:

(1) Major General Svendson, USAF MPC/CC, was here from 21-27 Aug. Gen Svendson met with seven unit officers in the 6-11 year group for an informal discussion of aircrew concerns. The primary discussion items were fixed wing assignment policies and the UHT/fixed wing program.

(2) Colonel Freeman and Lt Col Gadd, AF/XOOTA, visited briefly on 29 Aug.

(3) On 7 Sep we had the privilege of airlifting the Egyptian Chief of Staff of the Armed Forces, Lt General Ahmad Badawi, 8 members of his staff and Maj General Carey, USAF Tactical Air Warfare Center Commander. Major John Grove, 20 SOS/DOV, was the aircraft commander and ran this high level interest program from start to finish. Very successful event.

(4) Lt General Brasswell, 9AF/CC and party, Colonel Wilkes, Colonel Bonner, and Colonel McGoarty, visited the squadron on 28 Sep.

(5) Colonel Bonner, 9AF/IN, visited during the week of 10-16 Jul for a discussion of intel support of the squadron.

(6) On 13 Jul we hosted two CINCLANT liaison officers, Major Jim Cook and Major Prater. Major Prater will be our Special Operations Force Liaison Officer (SOFLO) at CINCLANT.

(7) Colonel Brown, TAC/DOR, visited on 5 Sep. He received a squadron briefing and demonstration of night vision goggles.

(8) Mr Bill Brennan, the local technical representative for Teledyne, visited the squadron on 18 Jul. He provided an informal briefing on LORAN progress.

6. Special Achievements

a. Lt Colonel George Borinski, Jr., pinned on his silver oak leaf clusters on 1 Jul 79.

b. Major Edward Gmyrek and Major John Grove pinned on their gold oak leaf clusters on 1 Jul and 1 Sep, respectively.

c. During this quarter we received approval for all the individual Air Force Commendation medals submitted for the Joint Countering Attack Helicopter Test, Development, and Evaluation. The squadron had a total of 57 personnel receive the award. A formal presentation will be made as soon as the award elements are received.

0000112

HISTORICAL REPORT

TWENTIETH SPECIAL OPERATIONS SQUADRON

1 October - 31 December 1979

LAURIE A. PARKER, 1Lt, USAF
Unit Historian

JOHN R. ROBERTS, Lt Col, USAF
Commander

1. Mission Statement: The primary mission of the 20th Special Operations Squadron is extremely comprehensive. 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.

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b. Helicopter shipboard operations (joint service).

c. Medical evacuation of injured personnel.

d. Humanitarian and civic action programs.

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

f. Other missions, as directed by higher headquarters.

2. 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.

a. Various items of specialized equipment are available for the unit's primary and corollary mission. This equipment includes:

(1) The XM-93 subsystem, which consists of 7.62mm electrical gattling guns, capable of firing 4000 rounds per minute (UH-1N only).

(2) The M-23 subsystem, which includes 7.62mm gas operated machineguns capable of firing 550 rounds per minute.

(3) The 2.75 inch folding fin aircraft rocket (FFAR) which is normally configured with a nine pound warhead (UH-1N only).

(4) Alternate methods of infiltration/exfiltration can be accomplished by rope ladder, rappeling, rescue hoist, and stabo rig.

b. The following specialized equipment is authorized, but presently not on hand.

(1) The UH-1N loudspeaker system, designed primarily for psychological operations, can broadcast taped or live sound over a two mile radius.

(2) The 2090-3 spray system, a self contained, windmill operated aerial spray system with a capacity of 200 gallons.

3. Unit Manning:

a. Authorized vs assigned personnel as of 31 Dec 79:

	Auth	Assign
OFFICERS	33	36
ENLISTED	45	46
TOTAL	78	82

b. Key personnel changes for the period 1 Oct - 31 Dec are as follows:

(1) Major John W. Grove became the new Chief, Standardization/ Evaluation on 2 Oct 79.

(2) Captains Bruce E. Adriance and Burton E. McKenzie were appointed Flight Commanders for A and B Flight, respectively, on 2 Oct 79.

c. New arrivals for the reporting period were:

(1) 1Lt Douglas N. Clark, 23 Oct, CH-3E pilot

(2) 2Lt Michael F. Ausserer, 13 Nov, CH-3E pilot

(3) 2Lt Thomas E. Hull, 6 Nov, UH-1N pilot

(4) TSgt Jessie L. Herrell, 17 Oct, UH-1N Flight Engineer

(5) SSgt Gordon L. Williams, 29 Oct, UH-1N Aerial Gunner

(6) A1C Peter W.R. Norton, 7 Oct, UH-1N Flight Engineer

4. Flying Summary: The following is a breakout of flying hours and sorties flown by the squadron from 1 Oct - 31 Dec. Category 0-8 only includes functional check flights while category T-3 includes training, cross-country, and support missions. These times include the Red Flag 80-1 exercise.

UH-1N

Month	Category	Sorties	Hours
Oct 79	0-8	62	19.2
	T-3	104	147.7
Nov 79	0-8	18	8.5
	T-3	86	141.0
Dec 79	0-8	17	6.4
	T-3	163	249.7

CH-3E

Month			
Oct 79	0-8	9	3.2
	T-3	112	173.7
Nov 79	0-8	6	2.0
	T-3	60	108.6
Dec 79	0-8	8	3.6
	T-3	54	102.6
	TOTAL	699	966.2

5. Significant Events:

a. From 12 Oct to 28 Oct 79 the squadron participated in Bold Eagle 80. The flying consisted of 66 sorties for a total of 94.9 hours in the CH-3 and 28 sorties for a total of 35.1 hours in the UH-1. Good exercise, included night vision goggles (NVG), guns, rockets, blivet drop and refuel, and a successful deceptive airfield raid.

b. A loaned Teledyne LORAN system was installed in a CH-3 on 17 Oct 79. The purpose was to evaluate the system during exercise Bold Eagle 80. Results were outstanding.

c. On 19 Oct the 20 SOS flew, Brig General Hansen, TAC Surgeon General, and party on a Bold Eagle medical facilities tour of Auxiliary Fields 1, 2, & 3.

d. The TAC project order was received for CORONET CHOPPER and Major Loren Rodway was appointed 1 Special Operations Wing (1 SOW) project officer. Squadron personnel met 24 and 25 Oct with TAC, MAC, TAWC and other interested parties to discuss the details of the program. A practice mobility exercise was conducted on 14 Nov with outstanding support from all Hurlburt Field agencies, TAWC personnel, and the MAC C-5A aircrew.

e. Warner Robins Air Logistics Center (WRALC) engineering representative, Lt O'Conner, arrived to perform a preliminary engineering analysis of the UH-1N installation of the .50 caliber machine gun; and to help figure out the CH-3E installation. His recommendations/comments will go to the TAWC Configuration Control Board meeting in January.

f. Lt Col John Roberts, 20 SOS commander, attended the squadron commanders meeting at Headquarters 9AF, from 31 Oct - 1 Nov 79.

g. On 8 Nov Captain Joseph Vallimont briefed two visitors, Mr. Gordon Dibbler and Mr. Charles Gableron unit capabilities and plans.

h. Captain Peter O'Day's article "Night Work" on the NVG program was published in the November TAC Attack. The article won Capt O'Day the Fleagle award.

i. The decision was made on 16 Nov to send helicopters only to exercise Red Flag 80-1. The squadron briefing was conducted on 19 Nov and all crews for the first half were NVG qualified. Lt Col John Roberts departed 20 Nov to be 1 SOW component commander. On 21 Nov, four UH-1s and two CH-3s deployed without a single problem. Three UH-1s and two CH-3s were in place at Nellis AFB on 25 Nov for the start of the exercise. The fourth UH-1 was at College Station, Texas, awaiting arrival of a replacement caution panel. After several frustrating days, an operable panel was located, delivered, and installed. The replacement aircrews and maintenance personnel departed Hurlburt Field on 7 Dec via C-130 from the 919 Special Operations Group at Duke Field, Florida. Personnel from the first half of the exercise returned to Hurlburt Field on 8 Dec aboard the same C-130. After a successful exercise, support personnel and equipment returned to Hurlburt Field on 23 Dec. Four UH-1s and one CH-3 returned on 24 Dec, with one CH-3 remaining behind at Randolph AFB, Texas due to a main transmission leak. The flying hour accomplishments for Red Flag 80-1 are as follows:

	Deployment	Employment	Redeployment	Total
H-1	72.7	197.5	76.7	346.9
H-3	36.5	93.4	31.4	161.3
TOTAL	109.2	290.9	108.1	508.2

j. The announcement was made during this period that Lt Col George E. Borinski, Jr. would be our next Squadron Commander, vice Lt Col John R. Roberts. Major Lloyd L. Buchfinck will replace Lt Col Borinski as squadron Operations Officer.

k. A request was submitted to add an "A" prefix to the AFSCs of

the 20 SOS enlisted medical personnel. The "A" will identify these personnel as aircrew members. The request was approved during November by Headquarters TAC.

1. On 17 Dec the squadron received a wing safety inspection. Ground and weapons safety received a satisfactory rating, while flight safety was rated excellent. The squadron safety officers' documentation is being used as an example for other 1 SOW unit safety personnel.

6. Special Achievements:

a. The following personnel were promoted during this reporting period:

1Lt Peter P. Trent to Captain - 4 Dec 79

SrA Nancy E. Watson to Sgt - 1 Oct 79,

SrA Donald J. Kiley to Sgt - 1 Dec 79

SrA Dean F. Larsen to Sgt - 1 Dec 79

A1C Peter W. R. Norton to SrA (Below the zone) - 1 Dec 79

b. On 4 Dec, Lt Col John Roberts received a personnal message of congratulations from the Commander, Tactical Air Command, following approval of the AF Outstanding Unit Award to the men and women of the 20 SOS for their performance during the Joint Countering Attack Helicopter (J-CATCH) TD&E.

TAC ATTACK

NOVEMBER 1979



NIGHT WORK
...Pg 10



NIGHT WORK

By Capt Pete O'Day
1 SOW/PA

"Our Hornet escort just checked in--they're standing by if things get hot."

"Tracers, small arms, four o'clock--no threat."

"I have intermittent strobes at two o'clock--keep her low on the trees."

It's a good night, scattered middle clouds and clear half-moon. The helicopter maneuvers gently at treetop level, rising and falling as the pilots use the terrain for concealment. It is not visible in the darkness. No exterior lights are on, the cockpit is dark.

"Come left five, we're looking for big rocks in the river at twelve."

"Small arms fire at three--shooting at the sound--they can't find us."

"Two minutes out from Foxtrot."

"Should be power lines in 20 seconds."

"Tower at one."

"Coming right."

One hour prior, an enemy radar site disappeared in an explosion. The special forces team has completed its mission. Twelve men are now moving carefully and swiftly toward a point identified by eight digit coordinates. So was the CH-3E. Chances are things will not remain quiet--if the enemy finds the team, the night could get exciting. The CH-3E had the task of getting the team out--from deep in enemy territory.

"One minute to Foxtrot. Team call sign: Cougar. The team will authenticate FE with PA. Heading's good, instruments are good."

"Still no concentrated fire on us--random--they can't see us."

How do we make this mission happen? We know the enemy threat--tough, deep, and sophisticated. However, we are keenly aware of its limitations; we use them. Radar is subject to line of sight and ground clutter problems. Standard optics don't fare too well at night. The tactical solution is obvious. Fly low, hide behind trees and rocks; fly at night, using the darkness to advantage. Obvious? Yes. Easy? It can be.

The "Star Wars" look-alikes in the accompanying photographs are crew members of the 20th Special Operations Squadron of the 1st Special Operations Wing at Hurlburt Field, Florida. Their job is unconventional warfare, a joint force-multiplier that depends on a high level of training, planning, and innovation to achieve success. Success, in this business, is measured by getting in (and out) of enemy territory undetected, unharmed, and with a full complement of crew and passengers. The 20 SOS is charged with that concise mission.

Their helicopters, CH-3Es and UH-INs, are

Photos by SSgt Clifford Nation

relatively unsophisticated, low and slow, machines that hold no surprises or answers. How to beat the threat then? The answer is not a new one--good people, thorough training, and a lot of "can do" attitude. Add a device called Night Vision Goggles (NVG) to the "advantages" of low speed machines and the answer begins to appear. Not new, but it works, it's simple, it's cheap, and it's here.

The NVGs (officially AN-PVS-5) are light amplification devices fitted into a battery-powered unit consisting of two monocular assemblies. The goggles are fitted to a standard Air Force helmet and weigh 28 ounces. Providing passive vision at night, the NVGs amplify existing astral illumination (starlight and/or moonlight) giving the pilot and crew the ability to discriminate obstacles and terrain features during the hours of darkness just as they would in the daytime.

The world is seen through a 40° field of view, as with binoculars. Images are sharp and clear. Depth perception is good in flight at 200 feet above ground level (AGL) and below. Most pilots feel comfortable flying at very low altitudes, due to increased clarity of the terrain. Prominent terrain features are recognizable at up to two miles. Depth of perception and resolution allow crews to perform all tactical maneuvers exactly as they would in the daytime. Defeat the threat--fly at night, but do it very low level and hide behind those rocks and trees.

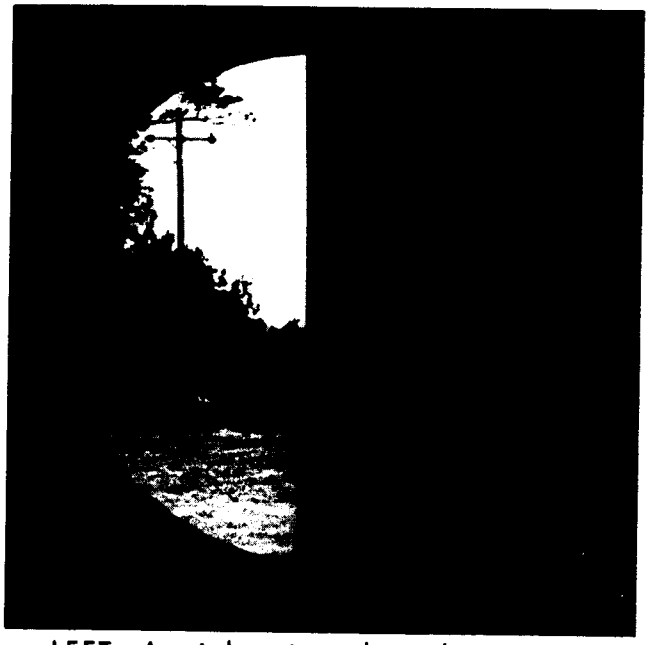
There are specific steps in preparing for a night flight with NVGs, but it is important to emphasize that normal flying procedures and techniques are not changed--only new ones added that are required for effective employment of



Night Vision Goggles (NVG)



Capt Pete O'Day
is this month's
Fleagle T-shirt winner



LEFT- A night view through NVGs.
RIGHT- A night view unaided by NVGs.



A 20 SOS "GREEN HORNETS" UH-1N Pilot wearing NVGs.

NIGHT WORK

NVGs. Since the copilot is the only one who will have access to a map for navigation, special attention is paid to planning the route and marking the map. The entire four-man crew must be familiar with turnpoints, hazards, and threats. Next, the goggles themselves are checked. Lenses are cleaned and minor adjustments made for comfort and focus, accommodating individual differences.

The goggles are checked in a dark room and a spare battery is tucked into the flight suit sleeve pocket. Due to the light amplification abilities of the NVGs, no aircraft lighting is used. Lights that routinely illuminate during flight (landing gear, aux fuel low, and AFCS) are covered with tape. (A small hole or slit is used to allow sufficient light for identification.)

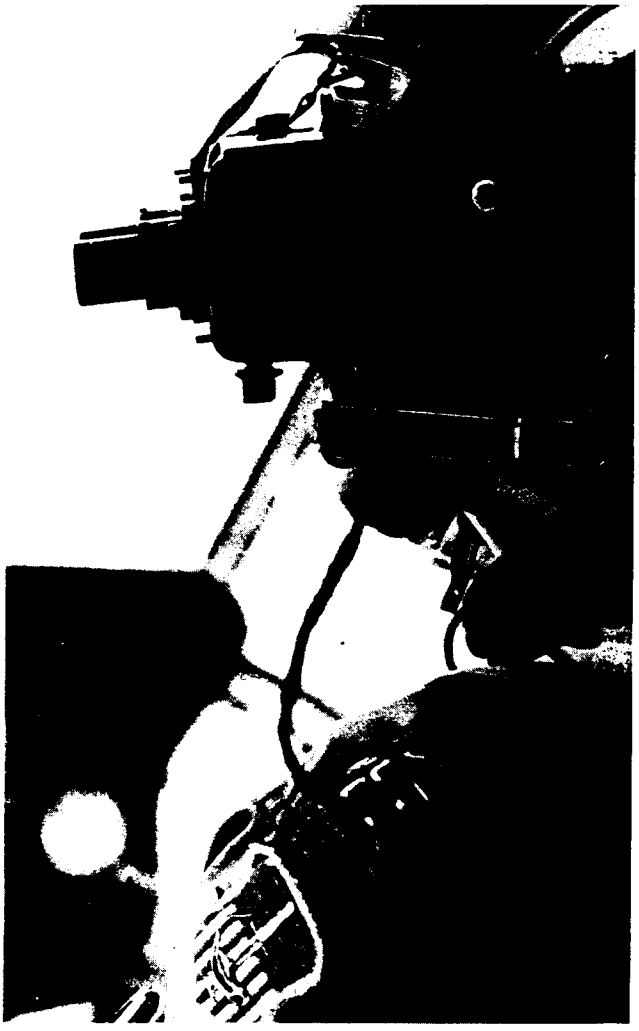
Cockpit and instrument lights are turned on, then all light circuit breakers are pulled. Effectively, there is no light in the aircraft; the crew doesn't need it, and the enemy is denied lights for acquisition.

CREW DUTIES AND RESPONSIBILITIES

All duties remain the same. However, crew coordination becomes extremely important. For example, the pilot can see the altimeter, airspeed indicator, torque gauge, and triple tach (engines and rotor RPM) with enough accuracy to discriminate nominal readings (airspeed 90-100 knots). He cannot, however, clearly read the smaller engine instruments or RMI markings; these become the copilot's responsibility. En-route navigation is accomplished by the copilot giving instructions, "turn right," "turn left," "roll out," much like a no-gyro GCA. The pilot maintains constant airspeed and terrain clearance. The copilot navigates, directs course changes and corrections, and monitors aircraft performance.

Flight mechanics or aerial gunners in the cabin verify navigation, operate weapon systems, and provide normal clearance information for confined area operations. NVGs provide normal clearance information for confined area operations. NVGs provide the capability; training and crew coordination translate that capability into safe and effective missions.

As mentioned previously, the night vision goggles provide a 40° field of vision to the crew



The NVGs, in general use by US Army COBRA aircrews.

member. What one sees is a circle, like using binoculars, with the world portrayed in green and shades of grey. This 40° field of vision eliminates part of the peripheral vision that helicopter crew members are accustomed to using for flight.

How does this loss affect the safe operation of the aircraft? Not at all. The crew compensates for lack of peripheral vision by head movements. You must increase your "field of scan." That is, the crew members move their heads to perceive what they normally would without NVGs. Increasing the field of scan is the last element of successfully utilizing NVGs. Pre-flighting the goggles, preparing the aircraft, solid crew coordination and team work, and head movement combine to give a crew the ability to see and employ practiced low level tactics at night.

J-CATCH

By Captain Joe Vallimont
20th SOS

Photographs
By SRA Donald J. Kiley

"White Two has bandits, three O'Clock...all yours, Green!"

"Green Lead, tally. Cobra in the trees...engaging with cannon. He's on the move now!"

The Cobra and his Scout realize they have been spotted. They attempt to seek cover in a stream bed. Gold Element, on Green's left, picks up the bandit call and completes a delayed 90 degree turn to the right, ending up line abreast to support Green Element. The strategy works. The Cobra and Scout are caught in the pincer as they come to the end of the stream bed and are confronted with a low ridge. Climbing over this low ridge will "skyline" them, however briefly. It's too late for the Scout.

"Gold Two, firing cannon on the Scout 200 meters east of the Cobra. Got him!"

The "knock it off" call goes out on the radio and is acknowledged by all players; Red Forces climb to orbit, and Blue Forces hold position. Then both forces join up and reposition for the next engagement.

Sound vaguely familiar? It is somewhat like aerial combat maneuver (ACM) training at any of our TAC fighter bases. There's one major difference, though: the aerial engagement just described did not involve Tiger IIs, Phantoms or Eagles, but newcomers in the air-to-air area - US Army Cobras and Scouts and TAC Green Hornets - **not** fighters, but **helicopters!**



BLUE FORCE ARMY AH-1S COBRA

JOINT COUNTERING ATTACK HELICOPTERS

The armed attack helicopter emerged recently as a new threat postulated to have great impact on a modern battlefield; the air action described above is part of a joint Army/Air Force test, development and evaluation (TD&E) program to determine the tactical problems associated with engaging this threat in battle. The program is called "J-CATCH", which stands for Joint Countering Attack Helicopters. The purpose of the J-CATCH TD&E is to explore and develop joint tactics necessary for US Forces to counter a growing attack helicopter threat from potential adversaries. Exactly how an opponent might employ its helicopter force in battle in unknown. What is known, however, is that potential adversary forces possess a great deal of strength both in numbers of helicopters and in attack helicopter firepower. Also, it's reasonable to assume that helicopter forces opposing us in future conventional battle will employ some tactics adapted from the most widely advertised, and successful US helicopter operations, i.e., air assault, armor support and special operations.

Previous studies involving helicopter aerial tactics have been fragmented and of the "quick look" variety. One of the first efforts involved the H-19 in a medivac role with Army MASH units. There was justified concern that a medivac helicopter would be easy prey for enemy fighters looking for targets of opportunity. In 1971 the Army's Combat Development Evaluation Center (CDEC) conducted a program with AH-1 Cobras against Navy F-4s. More recently, MAC's Aerospace Rescue and Recovery Service (ARRS) helicopters have become targets in exercise scenarios; many Red Flag events have included the interception of lightly armed rescue helicopters by aggressor fighter forces. The normal course of action for these helicopters was an attempt to evade the fighters. The Army began formally exploring helicopter-versus-helicopter tactics and capabilities during its Air Combat Engagement (ACE) Program. The ACE Program was primarily a one-versus-one test, and it produced some unexpected results in regards to weaponry. A major fallout of ACE was recognition of a definite need for more force-on-force study. Thus, the ACE Program as well as an ARRS initiated simulator effort have been incorporated into the J-CATCH study.

The J-CATCH program began at the Langley NASA Differential Maneuvering Simulator in May 1978. Fixed and rotary wing pilots from the



RED FORCE UH-1N

"Sometimes you eat bear, and sometimes the bear eats you."

Cobra Pilot

J-CATCH joint countering attack helicopters

Army, Marines, MAC and TAC participated. This first Phase took a preliminary look at helicopters (armed and unarmed) against various fighter weapons systems.

This brings us back to the primary TAC player in J-CATCH, the Green Hornets from the 20th Special Operations Squadron, 1st Special Operations Wing at Hurlburt Field, Florida. The Squadron's primary mission is infiltration/exfiltration of unconventional warfare forces. The UH-1N and CH-3E helicopters flown by the 20 SOS are armed with 7.62mm machine guns and 2.75 in. rockets. Pilots are trained in precision low level navigation at altitudes as low as 25 feet above ground level (AGL). This, combined with the Squadron's armed helicoter escort capability, made the 20SOS Green Hornets a natural choice as the Red Force, the J-CATCH aggressor unit.

Since January 1978, 1SOW 20SOS personnel have worked directly with the TAC Directorate of Joint Forces' Air Land Programs Office (XPJ-ALPO) and the Tactical Fighter Weapons Center (TFWC) to assemble a threat helicopter force for J-CATCH. While Squadron CH-3E and UH-1N aircraft were being configured and instrumented, aircrews began learning how to Red Force Aggressors. Intelligence sources were researched for all available information about potential adversaries' attack helicopters, particularly attack helicopter employment concepts and tactics. The result was creation of a J-CATCH Red Force that simulates as closely as possible a potential adversary's attack helicopter armor,



RED FORCE CH-3Es



Capt Joe Vallimont
is this month's
Fleagle T-shirt winner



RED FORCE ON THE MOVE. CH-3Es AND UH-1Ns.

armament, speed and tactics. The Red Force was unveiled for the first time during J-CATCH Phase II at Fort Rucker, Alabama. Six Red Force helicopters (two CH-3Es and four UH-1Ns) were employed against a Blue Force anti-armor team consisting of three AH-1S Cobras and two OH-58A Scouts from the US Army Aviation Board at Fort Rucker.

The J-CATCH project consists of six phases revolving around the three selected scenarios in which US Forces are most likely to encounter attack helicopters.

"...low altitude and comparatively slow speed changes the combat psychology. In this respect the pilots somewhat resemble ground troops such as tankmen, for example, who meet the enemy head-on and see his eyes. Here you see the results of your own work...."

Soviet Helicopter Instructor Pilot

As new as helicopter air-to-air maneuvering (HAAM) is, the role of J-CATCH Red Force (Aggressor) helicopter forces is even newer. There is a lot of "candlelight" tactics development accomplished for J-CATCH after each day's flying. The strategy and tactics used today are adjusted, revamped and incorporated into tommorow's scenarios. The Aggressor crew is given a learning curve, just as the Blue Force learns through experience. J-CATCH Phases I, II, and III are designed for learning and development. Phases IV, is for joint Army/Air Force evaluation and refinement. The fighter world's first look at the Red Force will take place during Phase III. This phase will allow various fighter weapons systems to develop and evaluate anti-helicopter tactics and capabilities. Each system (F-4, A-7,

J-CATCH joint countering attack helicopters

A-10, and F-15) will work against the Red Force for approximately one week. The fighters will start with an unarmed, non-maneuvering threat helicopter and progress to dealing with the entire Red Force working in the context of the scenario. All participants will be instrumented. The lessons learned by the Army in Phase II and by the Air Force in Phase III will be brought together in Phase IV of J-CATCH.

The fighter forces that participate in the various phases of J-CATCH may be in for a surprise. Fighter pilots need not look to past Red Flag experiences with scenarios of unarmed or lightly armed helicopter seeking out a simulated downed airman. The Red Force is not spring-loaded to the evade mode - they will fight back! As with any well trained, close-knit military unit, the Red Force operates with specific objectives in mind and a dogged determination to achieve those objectives. Even though tests previous to J-CATCH were uninstrumented, there were certain underlying tones that could not be denied. One prevading undertone from those tests was that in certain situations armed helicopters can destroy other helicopters and/or fighters. J-CATCH was designed to seek out these situations and quantify them.

The Red Force of the 20SOS is an important part of a life-sized training model for tacticians learning about attack helicopters and how to maximize Friendly Force effectiveness against them. There have already been some unforeseen developments. As in any TD&E, however, there is a working hypothesis. It is assumed that a combined effort, made up of attack helicopters, fighters and air defense can take care of the threat. Just how this combined team is to be made up, and how it will work is dependent on the effectiveness of each member. This is what J-CATCH is all about.

SKY HAZARDS

Your sharp eyes should already have identified these two aircraft. Of course, they're related. The good looking one is the Cessna Hawk XP and the other is the AF version of the basic Cessna 172, the T-41 Mescalero. These aircraft are probably some of the most popular with general aviation enthusiasts. There are a lot of them flying around.

Although the service ceiling on this type aircraft ranges from 14,000 to 17,000', you will probably encounter them below 10,000'. That narrows the airspace considerably. Add some other aircraft with similar performance capabilities such as the Piper Cherokee models, Bellanca Viking and Beechcraft, to mention a few, and the hazard rises even more. (The latter models are all low-wing aircraft)

So keep your eyes out for these, and all other aircraft. The closer you are to the ground, the denser the air traffic. One other point, these aircraft are also some of the smallest in general aviation. If you don't look for them all the time, you may find out too late that it's too late to avoid a....



Cessna Hawk XP



T-41 Mescalero

Mission complete

A formation fly-by here of Army and Air Force helicopters with A-7D aircraft marked the end of another phase of a program in joint-service operations.

The helicopters were from Hurlburt's 20th Special Operations Squadron and the U.S. Army Aviation Board from Fort Rucker, Ala., and the A-7s were from the 355th Tactical Fighter Wing at Davis-Monthan AFB, Ariz. All the aircraft and the flying and support cews were involved in J-Catch.

J-Catch is a short term for Joint Countering of Attack Helicopters, a joint-sponsored test, development and evaluation conducted by TAC and the U.S. Army Training and Doctrine Command to determine the tactics and weapons that Air Force and Army forces would use on the battlefield. Phase IV of these joint operations concluded March 2.

Beginning Feb. 12, Phase IV combined the lessons learned and tactics developed during earlier phases of J-Catch flown at Fort Rucker, in the NASA simulator at Langley AFB, Va., and Hurlburt. The J-Catch TD&E team initially acted out scenarios developed by the TAC Joint Forces Air-Land Programs Office and the USAF Tactical Fighter Weapons Center at Nellis AFB, Nev. Then the team modified the scenarios to better develop the lessons learned during the other J-Catch phases.

"The crews — both Air Force and Army — learned a lot from J-Catch," said Maj. John Puster, TFWC project manager. "The learning curve continued to rise during Phases III and IV to a point where the Army and Air Force crews were working well together," he added. And did they work!

While the pilots and crewmembers of the aircraft were busy viewing video cassettes of their missions, maintenance crews kept the aircraft ready for upcoming missions. The maintenance shifts worked 24 hours a day, seven days a a week to keep the aircraft and helicopters flying.

The CH-3E day shift supervisor, SSgt. Alan Truesdale, said. "The helicopter crews gave an outstanding performance during the demanding operation." He added, "They proved the mission could be done and the equipment was above par throughout J-Catch."

Sgt. Ronnie Hancock, A CH-3E crew chief, said, "J-Catch was a lot of long hours, but ... the crews did a good job." An assistant crew chief, A1C Joy Stern, added, "It couldn't have been done without the efforts of the maintenance crews."

"An interesting experience, a real learning one," said Sgt. Karl Zimmerman, a UH-1N crew chief..

With the ending of Phase IV, Hurlburt Field will see the flightline ramp near the Air Commando hangar quiet down. The unfamiliar helicopters will be gone, the A-10s, A-7Ds, and O-2s will be back to their home bases. Even though J-Catch has ended at Hurlburt, there is more to come, two more phases of J-Catch are in the planning stages.

Following the last missions of the Phase IV, Lt. Col. John R. Roberts, commander of the 20th SOS, commented on how his crews posed as a viable adversary for the tests. He said simply, "We tried to be a good enemy for our friends."



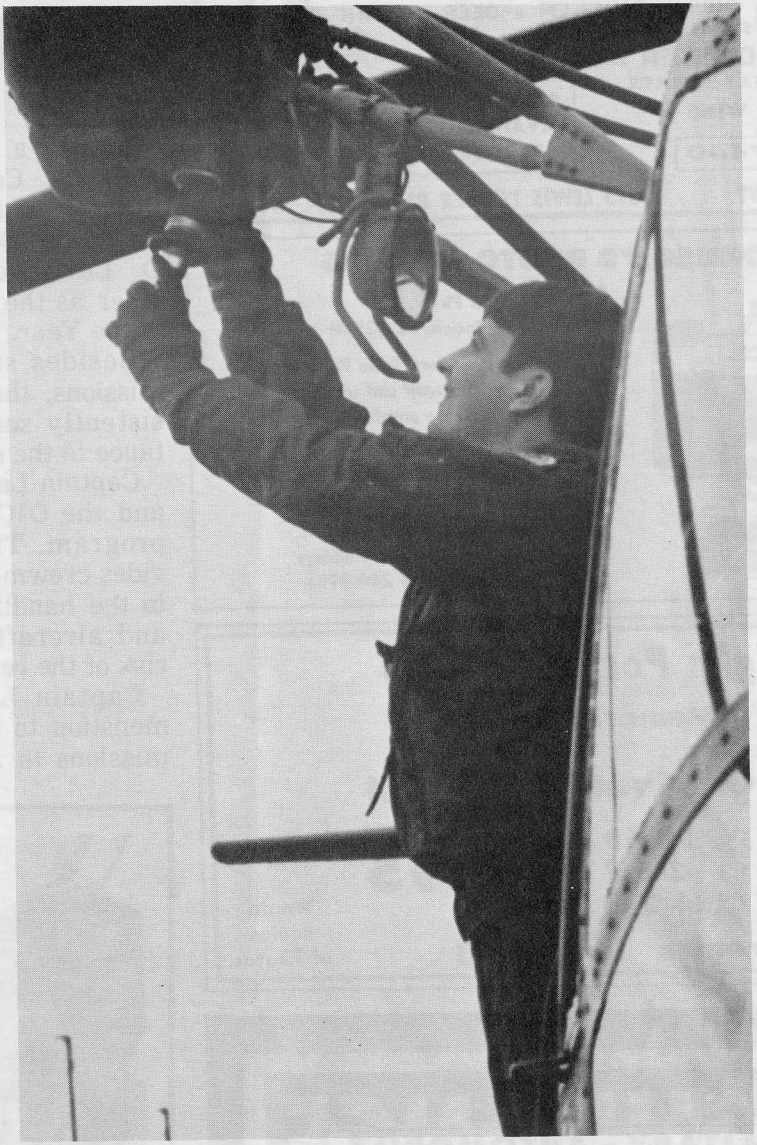
Job done, coming home



Ending of a day during J-CATCH



Viewing a mission on the television



Preflighting for another mission



J-CATCH Phase III underway

12 Jan 79

20th SOS flies against TAC fighters

Sunday, Jan. 7, the aircrews of the 20th Special Operations Squadron (SOS) and the 57th Tactical Training (TTW) from Nellis AFB, Nev., assembled in the squadron conference room to begin Phase III of operation J-CATCH. J-CATCH (Joint Counter Attack Helicopter) is an Air Force and Army joint tactics development and evaluation (TD&E) to determine the tactics and weapons that the Army and the Air Force will use to counter threat attack helicopters.

Phase III of the TD&E is to develop and evaluate tactics to be used by tactical air force aircraft to engage and defeat attack helicopters; determine fighter aircraft capabilities against attack helicopters; and to determine the capabilities of threat attack helicopters. Phase III will run through February 2 involving not only the 20th SOS "Aggressor" helicopters and the F-4E Phantoms and F-15 Eagles of the 57th TTW, but also the A-10 Thunderbolt II's of the 354th Tactical Fighter Wing (TFW) from Myrtle Beach AFB, S.C. and the A-7D Corsair II's of the 355th TFW from Davis-Monthan AFB, Ariz.

In Phase II, the 20th SOS traveled to Fort Rucker, Ala. in November to participate in the role of "Aggressors" and flew over 100 missions against Army Huey, Cobra gunships and OH-58 Scout helicopters. This phase of J-CATCH aided the Army in developing tactics against attack helicopters.

Behind the aircraft and without whom the mission would fail are the maintenance and support personnel. Support for this highly demanding evaluation is provided by the 834th Aircraft Generation Squadron Aircraft Maintenance Unit (helicopter) and the 57th Aircraft Generation Squadron from Nellis AFB, Nev. and other 1st Special Operations Wing units on a seven day a week schedule. MSgt. Charles A. Warren and MSgt. William L. Carl have the crew working around the clock to maintain not only the J-CATCH aircraft, but also the unique mini-TAT weapons system and the cameras and instrumentation necessary to document the evaluation.

Following the conclusion of Phase III, Phase IV will begin at Hurlburt Field with a combined Army and Air Force unit flying against the 20th SOS "Aggressors."

20th SOS helps EPA

13 Apr 79

During a local mission on Monday morning, two helicopters of the 1st Special Operations Wing's 20th Special Operations Squadron were diverted to assist officials in the train derailment area near Crestview, Fla.

The three hour operation included transporting Environmental Protection Agency and railroad officials over the area to survey for water and air pollution. A flight later in the day resupplied an Air Force mobile disaster command post with radios and other equipment.

Aircrews from the 1st SOW included, in one helicopter, Capts. Pete O'Day and Joe Loffler, SSgt. Don Griffin and SrA. Don Kiley.

In the other helicopter were Capts. Rich Gardner, Ken Charfauros and Russ Spahr, 2nd Lt. Frank Wallace, MSgt. Mike Otis, Sgt. Daniel Phelps and SrA. Harry Carter.

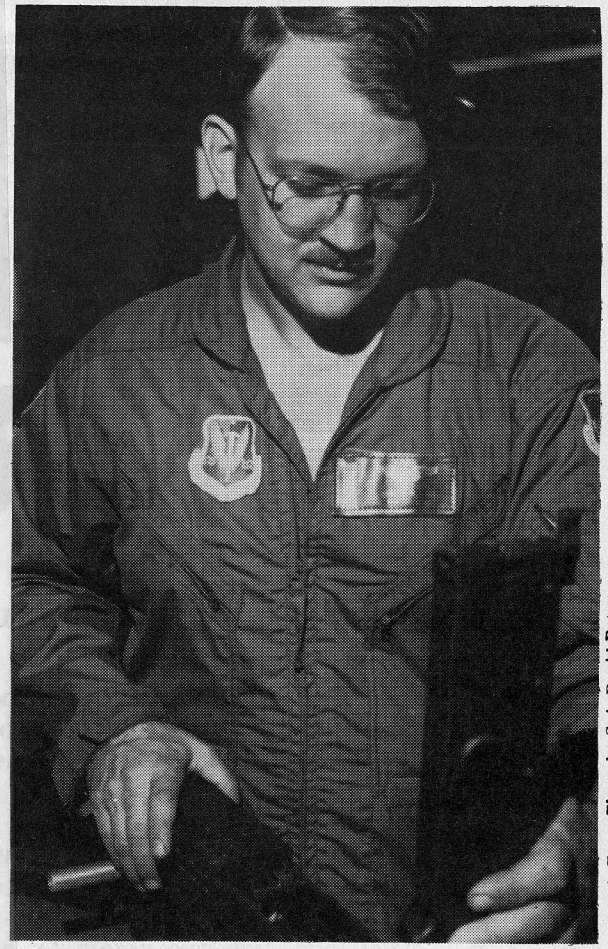
Aerial photographers supporting the mission were TSgt. George Scott and SSgt. Ray Paul.



13 Apr 79

Robeen, Hall — safest in TAC

Mr. Richard Robeen of the 1st Special Operations Wing ground safety office and MSgt. Robert Hall of the 20th Special Operations Squadron were recently selected to receive the TAC Ground Safety Award for 1978 and the Annual Contributor to Weapons Safety Award for 1978, respectively.



U.S. Air Force Photo by SrA. David Petersen

BEST SAFETY CONTRIBUTOR, TSgt. Robert Hall of the 20th SOS checks a weapon from the armory prior to a helicopter mission.

Mr. Robeen was selected for his many accomplishments in the ground safety field. "Mr. Robeen is an energetic innovator whose presence is felt throughout the Wing," stated Col. Richard Dunwoody, 1st SOW commander, in his nomination letter.

Since his assignment as ground safety officer last July he has instituted a safety week, which included events such as a motorcycle rodeo, presentations by state highway and marine patrols, snake demonstrations and first-aid classes. As a result, not a single water sports or vacation-related accident occurred last summer at Hurlburt Field, according to the TAC safety office.

Mr. Robeen was instrumental in including a course in safety in the Hurlburt NCO leadership school. He was also hand-picked as a work group chairman for a TAC-wide ground safety workshop. Following a management effectiveness inspection in July 1978, Mr. Robeen's ground safety program was rated excellent. The inspection team requested that the 1st SOW's safety education and publicity packages be forwarded to TAC for possible dissemination command-wide.

General W. L. Creech, TAC commander, noted, "His hard work and superior management of the wing's ground mishap prevention efforts made significant contributions to TAC's mishap prevention program."

Sergeant Hall, an aerial gunner with the 20th SOS standardization and evaluation section, was selected for his extraordinary contributions to the 1st SOW weapons safety program.

During 1978, Sergeant Hall has had eight weapons safety suggestions approved, ranging from modification of aerial gunner's flight clothing for aircrew protection to painting of rocket warhead fuse tips different colors to allow a more reliable check of hung rockets and changing the 2.75 inch rocket warhead and decreasing their numbers on training missions. These suggestions have earned the Air Force an estimated savings of $480,000 a year.

He is frequently called upon for advice on safety and reliability testing of various munitions and weapon systems by higher headquarters, other commands and the chief, helicopter section, engineering and reliability branch, Warner Robins AFB, Ga.

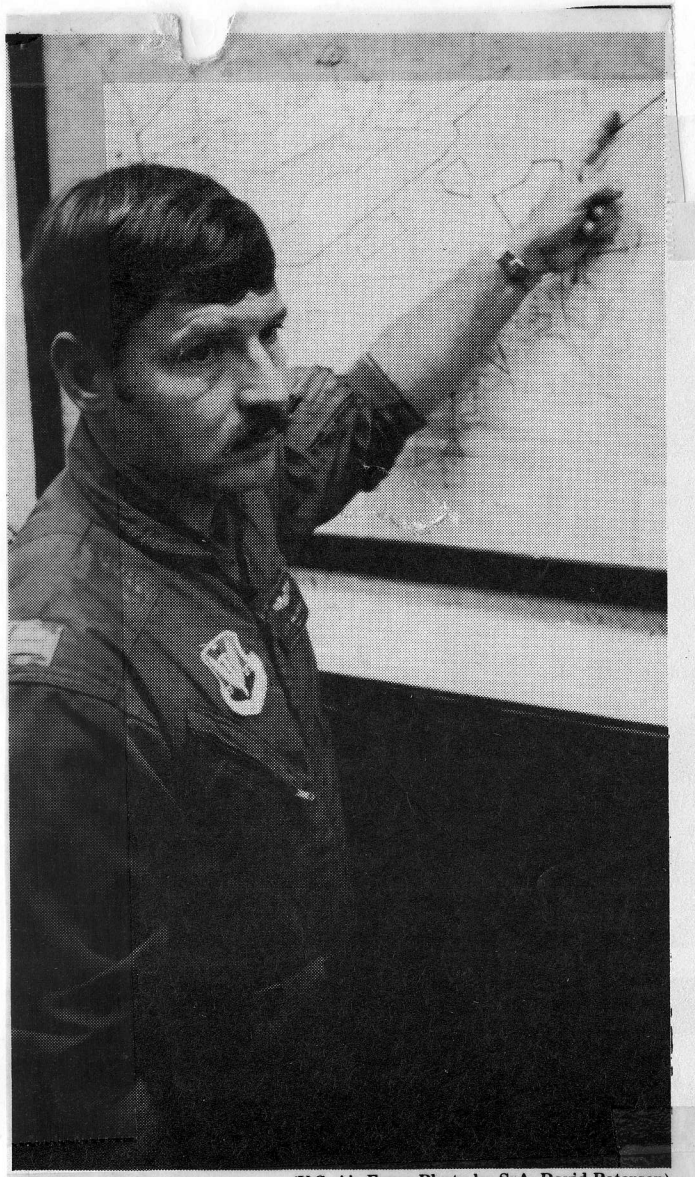


U.S. Air Force Photo by SrA. David Petersen

TOPS IN TAC, Mr. Richard Robeen watches as a young airman cuts a board in the 834th Civil Engineering Squadron carpentry shop, checking his safety techniques.

Aircrewmembers of the Year named

30 Nov 79



(U.S. Air Force Photo by SrA. David Petersen)

Capt. Joseph Vallimont, 20th SOS

Earlier this month, three officer and three enlisted aircrewmembers were nominated for selection as the 1st Special Operations Wing Aircrewmember of the Year for 1978. Two of the six were selected, one officer and one enlisted aircrewmember.

Capt. Joseph Vallimont, of the 20th Special Operations Squadron and SMSgt. Atwell Wiley of the 8th Special Operations Squadron were selected as the 1st SOW Aircrewmember of the Year for 1978.

The other nominees for the honor were Capt. Gregory Colvin, 8th SOS; TSgt. Robert Hall, 20th SOS; Capt. James Lawrence and MSgt. Sherman Eller, both of the 16th SOS.

Captain Vallimont, a combat crew commander and chief, weapons and tactics for the 20th SOS, was selected for his outstanding contributions to his unit and wing which have directly and significantly increased the combat readiness of all Air Force helicopter units. He was the first Air Force instructor to be qualified for night vision goggle flying and developed the Air Force NVG training. His work with the NVG has greatly improved the unit capability for night low-level unconcentional warfare missions.

In his nomination letter Lt. Col. John Roberts, commander, 20th SOS, wrote, "He does it all – thinking, writing, speaking and flying."

Sergeant Wiley, the 1st SOW chief loadmaster of the Standardization/Evaluation section, was selected as the enlisted aircrewmember of the year. He is the Air Force single point-of-contact for the Combat Talon, MC-130E, unconventional warfare aerial delivery systems. Sergeant Wiley was selected because of his many contributions to the enhancement of the Combat Talon employment capabilities which have significantly improved the flexibility of the 1st SOW response to national command authority tasking.

23 Feb 1979



20th SOS 1979 golf champs

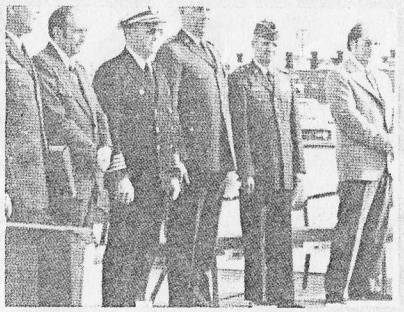
1978 BASE INTRAMURAL CHAMPIONS — (left to right) Gary Weikel, Ed Gymrek, Dave Greer, Stets Cowan and Pete O'Day watch Jim Greider demonstrate his putting form which helped him set a course record 69 during the 1978 playoffs. All are members of the 20th Special Operations Squadron intramural golf team which finished with an undefeated 16-0 season including the playoffs. Not pictured is Joe Vallimont. (U.S. Air Force Photo by SSgt. Edward Rasco)

So others may live

by Marge Sanders
NARF public affairs officer

Air Force HH-53C helicopters being modified by the Naval Air Rework Facility to HH-53H models, a night and adverse weather search and rescue vehicle, bear Black Knight insignia and carry the motto, "That others may live."

The motto is appropriate for the Sikorsky-built helo equipped with "see-in-the-dark" systems which enable search and rescue operations to be conducted at night and in adverse weather conditions. The H-53 was used in Vietnam for rescue operations but without the added capabilities of the night and adverse weather search and rescue systems now available.



PHAN Kathy Riffel

A distinguished panel await the arrival of the first production Black Knight HH-53H helo — (L-R) Col. William Craven, Maj. Gen. Ralph Saunders, the Hon. Earl D. Hutto, Capt. John Mallory, Lt. Gen. Lawrence Skantze, Maj. Gen. Robert Bond, and Mayor Pro Tem Al Klein.

Ceremonies marking completion of the first production HH-53H model were hosted last week by Capt. John S. Mallory, Commanding Officer, NARF. Taking part in the commemorative program were the Hon. Earl D. Hutto (D-Fla), Lt. Gen. Lawrence A. Skantze, Commander, Air Force Systems Command's Aeronautical Systems Division, Maj. Gen. Ralph S. Saunders, Commander, Aerospace Rescue Service and Col. William E. Craven, Program Manager, Specialized Systems, Aeronautical Systems Division.

The need for the Black Knight helicopter had its roots in Vietnam where military personnel downed behind enemy lines couldn't be rescued at night or in low visibility weather. Downed airmen either hid out until dawn awaiting rescue or were captured by the enemy. Craven, a Gunship pioneer and veteran of numerous night-time AC-130 missions in Vietnam, stated the best estimates are that if the Black Knights had been available during Vietnam, the number of POWs captured would have been cut in half.

Hutto voiced optimistic support for the Black Knight helicopter with hopes it would never be put into use for rescue operations during wartime. He stated the rescue capabilities of such a system could be put to use during natural disasters rescuing stranded individuals. "That others may live," Hutto stated, "is appropriate for this program."

The HH-53H has a terrain following/avoidance radar, augmented by a forward looking infrared set which makes safe operation possible during search at very low altitudes. This enables the helicopter to avoid detection by ground-based enemy radars. There is a doppler/inertial subsystem and a projected map display for precision navigation. All the subsystems are integrated through a central avionics computer.

Modification of the eight HH-53C models to the HH-53H model by the NARF amounts to a workload interservice agreement with the Air Force of approximately $2 million. The last of the eight models is scheduled for completion in the spring, 1980.

Marking completion of the first production model, Lt. Gen. Skantze accepted the log books on behalf of his command from Capt. Mallory. The Aeronautical Systems Division is the developer and program director for the Black Knights. General Skantze in turn released the log books symbolizing release of the helicopter to General Saunders, ARRS, the using command.

Following the ceremony, the aircraft was placed on static display with systems operating and the audience viewed first-hand the infrared monitoring screen which to them was like watching live TV.



PHAN Kathy Riffel

The guest of honor for the ceremony was the Black Knight helicopter.

EXHIBIT 36



Sgt. Juanita Orme assists a 20th Special Operations Squadron crewmember, 1st Lt. Stephen Roark, in fitting a survival vest.

(U.S. Air Force Photo by A1C Curt McGinnis)

TAC ATTACK

NOVEMBER 1979



NIGHT WORK
...Pg 10



NIGHT WORK

By Capt Pete O'Day
1 SOW/PA

"Our Hornet escort just checked in--they're standing by if things get hot."

"Tracers, small arms, four o'clock--no threat."

"I have intermittent strobes at two o'clock--keep her low on the trees."

It's a good night, scattered middle clouds and clear half-moon. The helicopter maneuvers gently at treetop level, rising and falling as the pilots use the terrain for concealment. It is not visible in the darkness. No exterior lights are on, the cockpit is dark.

"Come left five, we're looking for big rocks in the river at twelve."

"Small arms fire at three--shooting at the sound--they can't find us."

"Two minutes out from Foxtrot."

"Should be power lines in 20 seconds."

"Tower at one."

"Coming right."

One hour prior, an enemy radar site disappeared in an explosion. The special forces team has completed its mission. Twelve men are now moving carefully and swiftly toward a point identified by eight digit coordinates. So was the CH-3E. Chances are things will not remain quiet--if the enemy finds the team, the night could get exciting. The CH-3E had the task of getting the team out--from deep in enemy territory.

"One minute to Foxtrot. Team call sign: Cougar. The team will authenticate FE with PA. Heading's good, instruments are good."

"Still no concentrated fire on us--random--they can't see us."

How do we make this mission happen? We know the enemy threat--tough, deep, and sophisticated. However, we are keenly aware of its limitations; we use them. Radar is subject to line of sight and ground clutter problems. Standard optics don't fare too well at night. The tactical solution is obvious. Fly low, hide behind trees and rocks; fly at night, using the darkness to advantage. Obvious? Yes. Easy? It can be.

The "Star Wars" look-alikes in the accompanying photographs are crew members of the 20th Special Operations Squadron of the 1st Special Operations Wing at Hurlburt Field, Florida. Their job is unconventional warfare, a joint force-multiplier that depends on a high level of training, planning, and innovation to achieve success. Success, in this business, is measured by getting in (and out) of enemy territory undetected, unharmed, and with a full complement of crew and passengers. The 20 SOS is charged with that concise mission.

Their helicopters, CH-3Es and UH-INs, are

Photos by SSgt Clifford Nation



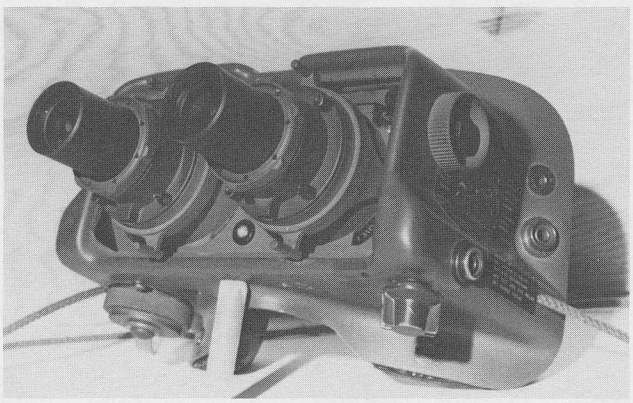
Capt Pete O'Day
is this month's
Fleagle T-shirt winner

relatively unsophisticated, low and slow, machines that hold no surprises or answers. How to beat the threat then? The answer is not a new one--good people, thorough training, and a lot of "can do" attitude. Add a device called Night Vision Goggles (NVG) to the "advantages" of low speed machines and the answer begins to appear. Not new, but it works, it's simple, it's cheap, and it's here.

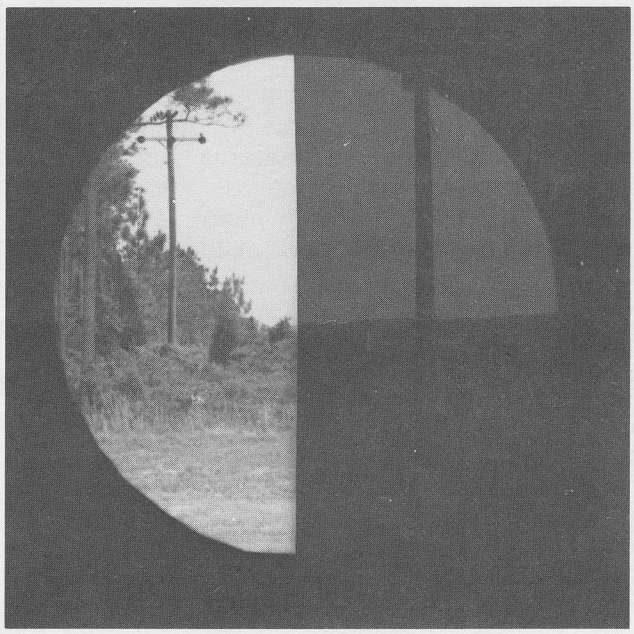
The NVGs (officially AN-PVS-5) are light amplification devices fitted into a battery-powered unit consisting of two monocular assemblies. The goggles are fitted to a standard Air Force helmet and weigh 28 ounces. Providing passive vision at night, the NVGs amplify existing astral illumination (starlight and/or moonlight) giving the pilot and crew the ability to discriminate obstacles and terrain features during the hours of darkness just as they would in the daytime.

The world is seen through a 40° field of view, as with binoculars. Images are sharp and clear. Depth perception is good in flight at 200 feet above ground level (AGL) and below. Most pilots feel comfortable flying at very low altitudes, due to increased clarity of the terrain. Prominent terrain features are recognizable at up to two miles. Depth of perception and resolution allow crews to perform all tactical maneuvers exactly as they would in the daytime. Defeat the threat--fly at night, but do it very low level and hide behind those rocks and trees.

There are specific steps in preparing for a night flight with NVGs, but it is important to emphasize that normal flying procedures and techniques are not changed--only new ones added that are required for effective employment of



Night Vision Goggles (NVG)



LEFT- A night view through NVGs.
RIGHT- A night view unaided by NVGs.



A 20 SOS "GREEN HORNETS" UH-1N Pilot wearing NVGs.

NIGHT WORK

NVGs. Since the copilot is the only one who will have access to a map for navigation, special attention is paid to planning the route and marking the map. The entire four-man crew must be familiar with turnpoints, hazards, and threats. Next, the goggles themselves are checked. Lenses are cleaned and minor adjustments made for comfort and focus, accommodating individual differences.

The goggles are checked in a dark room and a spare battery is tucked into the flight suit sleeve pocket. Due to the light amplification abilities of the NVGs, no aircraft lighting is used. Lights that routinely illuminate during flight (landing gear, aux fuel low, and AFCS) are covered with tape. (A small hole or slit is used to allow sufficient light for identification.)

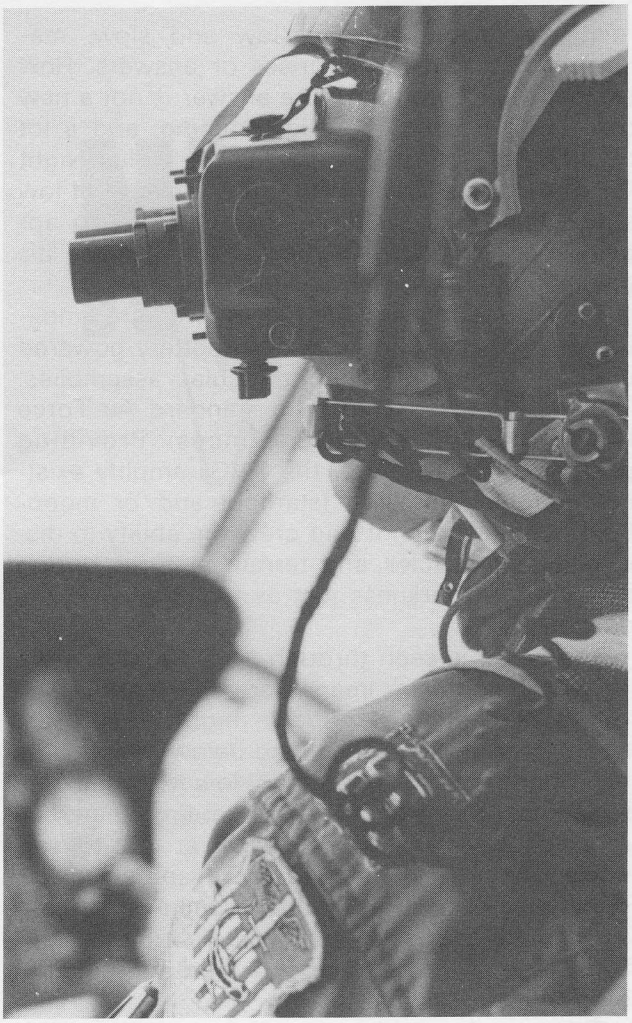
Cockpit and instrument lights are turned on, then all light circuit breakers are pulled. Effectively, there is no light in the aircraft; the crew doesn't need it, and the enemy is denied lights for acquisition.

CREW DUTIES AND RESPONSIBILITIES

All duties remain the same. However, crew coordination becomes extremely important. For example, the pilot can see the altimeter, airspeed indicator, torque gauge, and triple tach (engines and rotor RPM) with enough accuracy to discriminate nominal readings (airspeed 90-100 knots). He cannot, however, clearly read the smaller engine instruments or RMI markings; these become the copilot's responsibility. Enroute navigation is accomplished by the copilot giving instructions, "turn right," "turn left," "roll out," much like a no-gyro GCA. The pilot maintains constant airspeed and terrain clearance. The copilot navigates, directs course changes and corrections, and monitors aircraft performance.

Flight mechanics or aerial gunners in the cabin verify navigation, operate weapon systems, and provide normal clearance information for confined area operations. NVGs provide normal clearance information for confined area operations. NVGs provide the capability; training and crew coordination translate that capability into safe and effective missions.

As mentioned previously, the night vision goggles provide a 40° field of vision to the crew



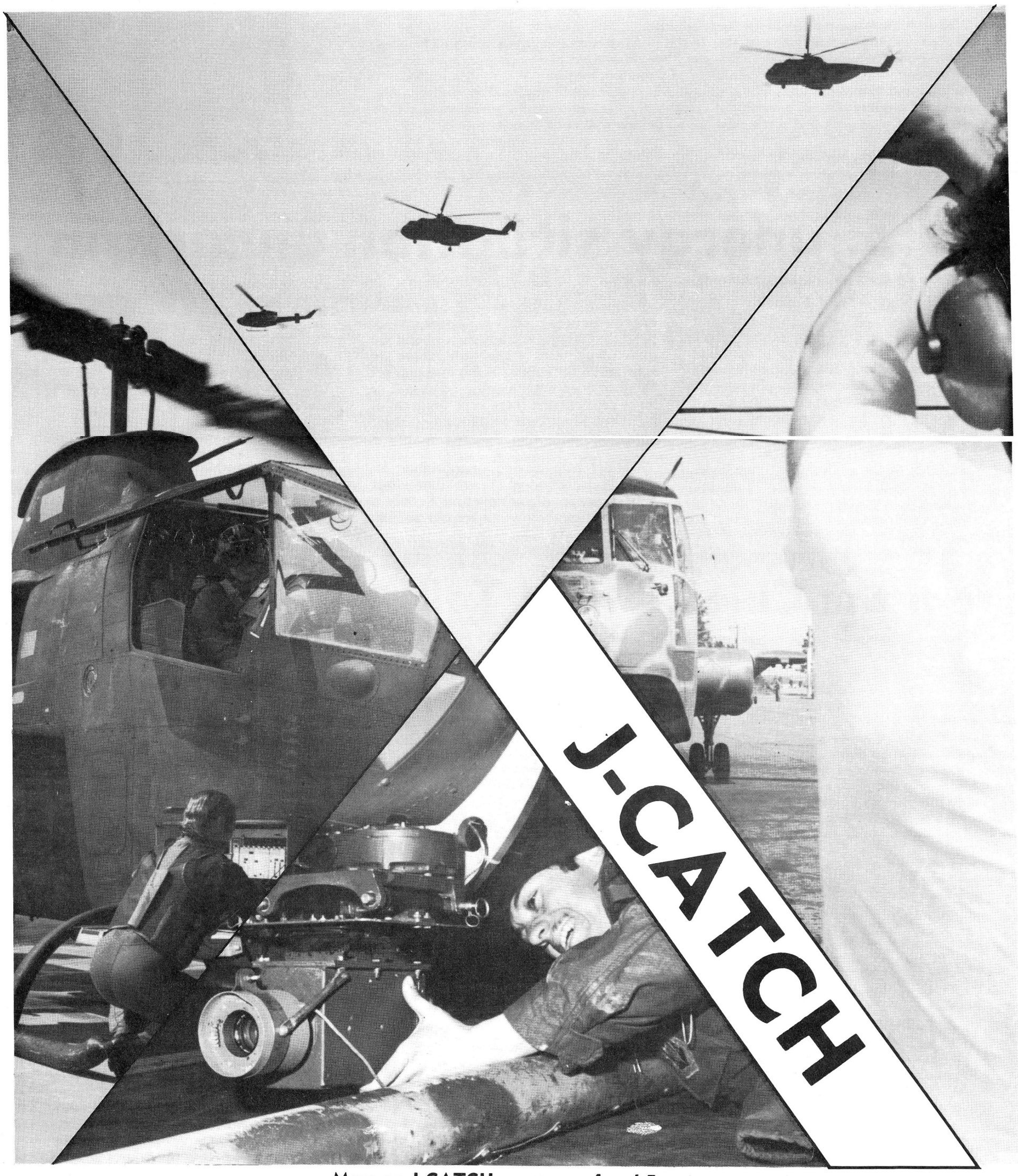
The NVGs, in general use by US Army COBRA aircrews.

member. What one sees is a circle, like using binoculars, with the world portrayed in green and shades of grey. This 40° field of vision eliminates part of the peripheral vision that helicopter crew members are accustomed to using for flight.

How does this loss affect the safe operation of the aircraft? Not at all. The crew compensates for lack of peripheral vision by head movements. You must increase your "field of scan." That is, the crew members move their heads to perceive what they normally would without NVGs. Increasing the field of scan is the last element of successfully utilizing NVGs. Pre-flighting the goggles, preparing the aircraft, solid crew coordination and team work, and head movement combine to give a crew the ability to see and employ practiced low level tactics at night.

sof hi-lites

Vol. 18, No. 9 Fort Walton Beach, Florida March 9, 1979



More on J-CATCH on pages 4 and 5.

The SOF HI-LITES is an unofficial newspaper published Fridays in the interest of personnel at Hurlburt Field of the Tactical Air Command. It is published by the Southern Publishing Company, a private firm, in no way connected with the Department of the Air Force. Opinions expressed by publishers and writers herein are their own and are not to be considered an official expression by the Department of the Air Force. The appearance of advertisements, including supplements and inserts, in this publication does not constitute an endorsement by the Department of the Air Force of products or services advertised.