

301  
21 May 85

**THIRD ENDORSEMENT** on CO, HMA-269 (-) (REIN) ltr 1500 over 302 dtd 11 Feb 85

**From:** Commanding Officer, Marine Aircraft Group 29 Second Marine Aircraft Wing, MCAS(H) New River, Jacksonville

**To:** Commanding Officer, Marine Attack Helicopter Squadron 269 (-) (REIN) Second Marine Aircraft Wing, MCAS(H) New River, Jacksonville

**Subj:** DESIGNATION OF FORT BENNING GEORGIA AS A SECOND MARINE AIRCRAFT WING TERF AREA

1. Returned approved.
2. This approval will suffice as authorization to fly TERF/NOE in the Fort Benning Range Area for all MAG-29 flying squadrons.

*Km Duhe*

K. M. DUHE  
By direction

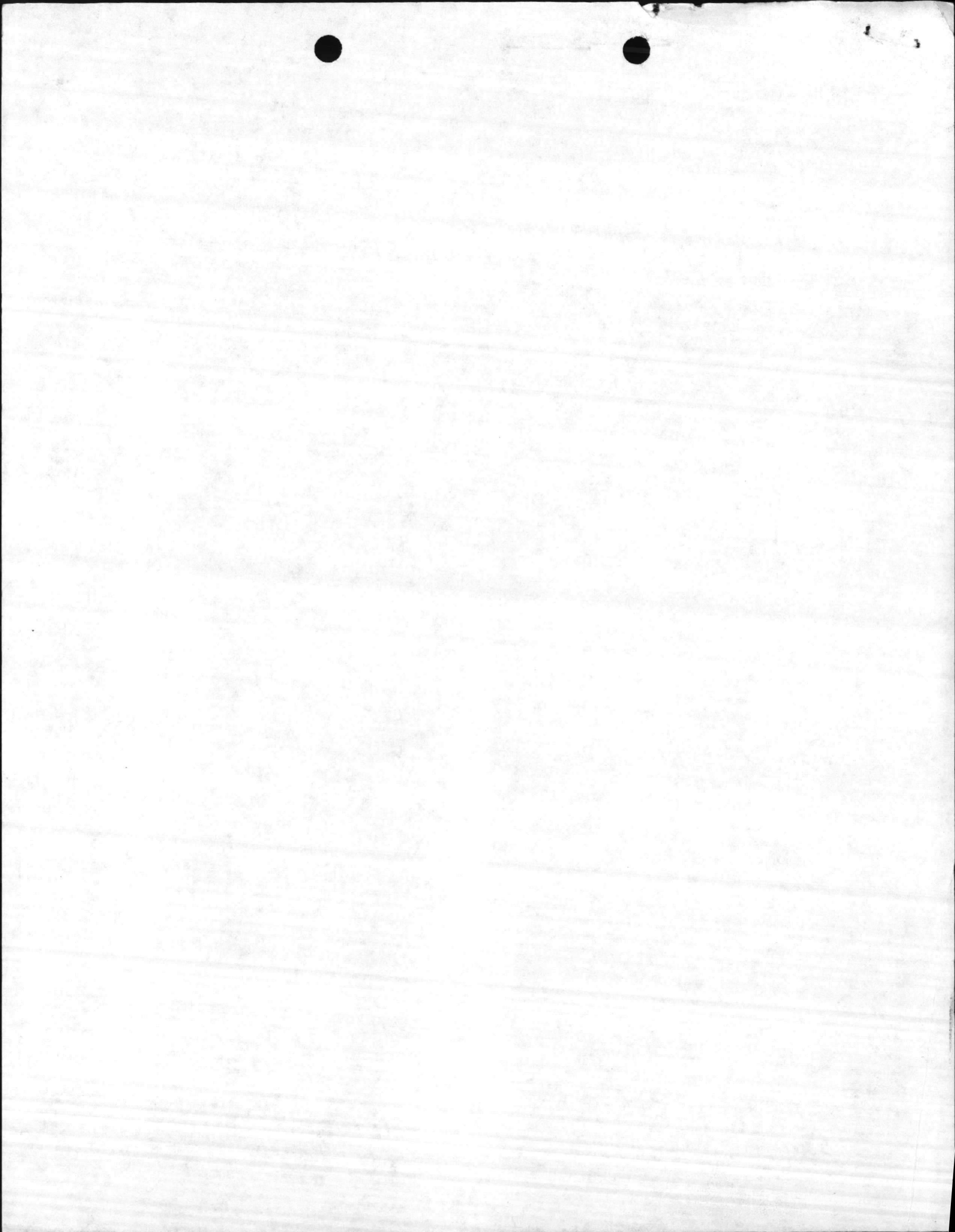
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HMH-464 S-3 ROUTING

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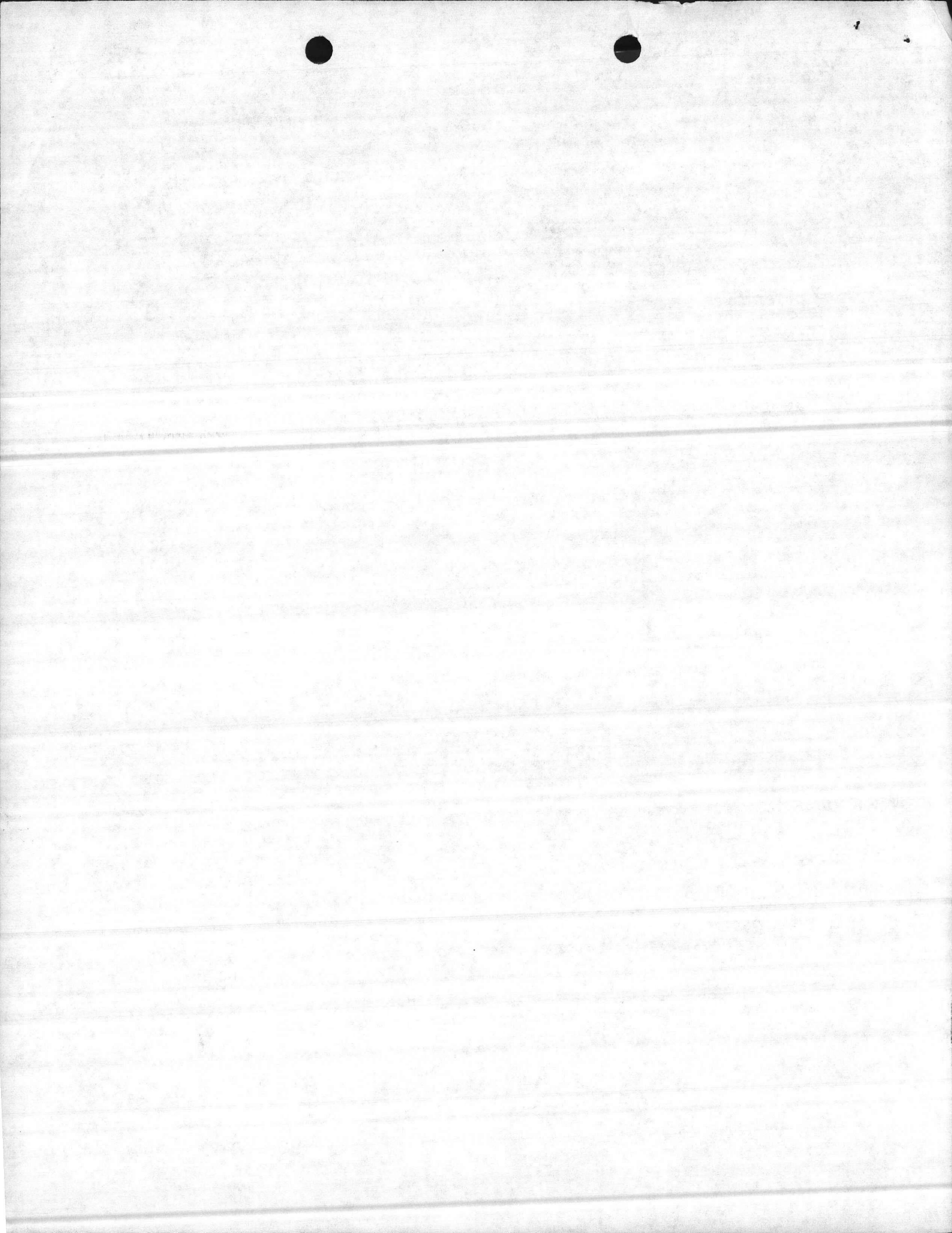
*27 May 85*



REQUISITION OF THE ARMY, GEORGIA AS A TROPICAL AREA  
TERF AREA

1. Returned, approving request to designate TERF Area at Fort Benning,  
Georgia.

*W. J. Sublette*  
W. J. SUBLETTE  
By direction



1500  
302  
11 Feb 85

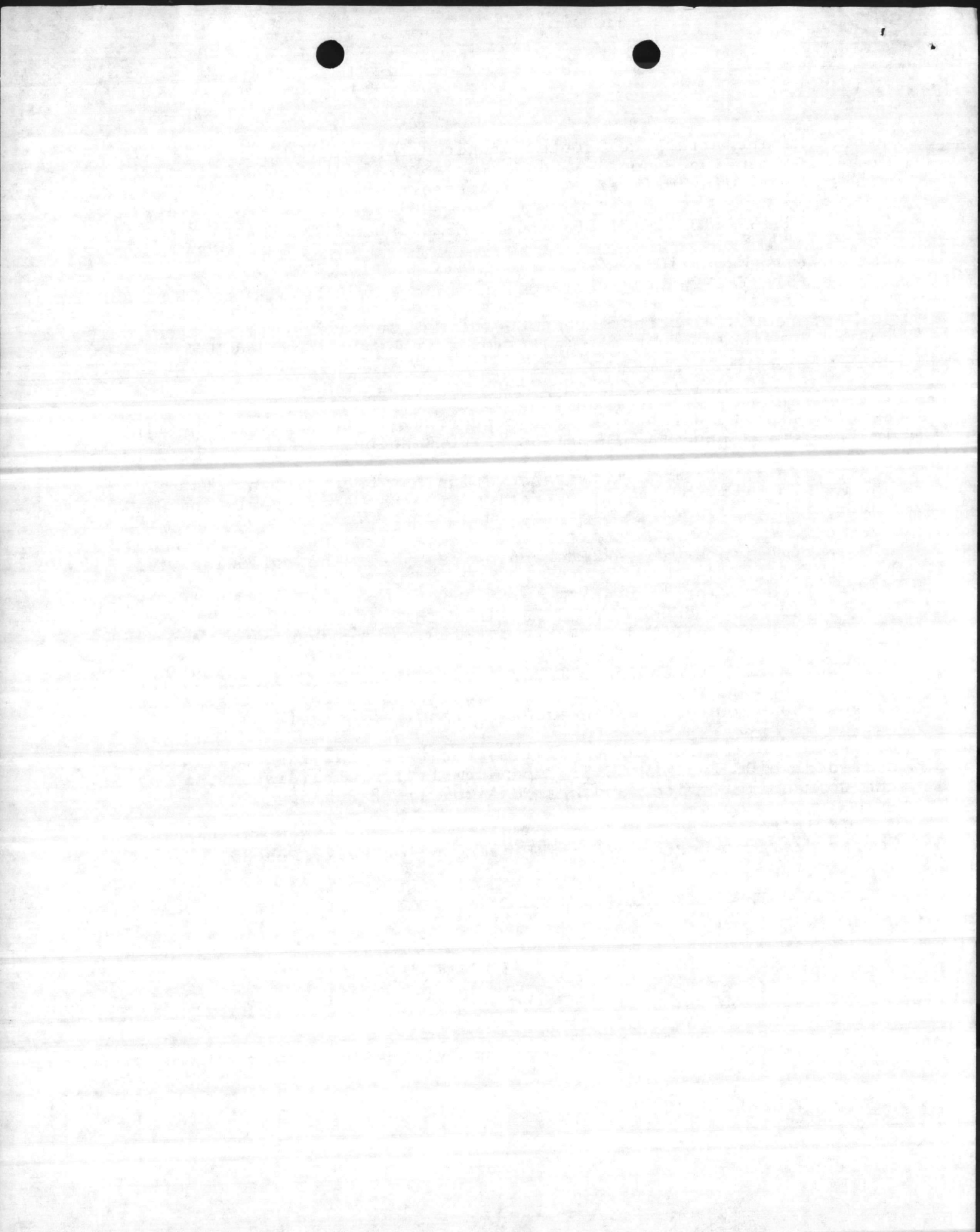
From: Marine Attack Helicopter Squadron 269 (-) REIN  
To: Commanding General, 2nd Marine Aircraft Wing, SC 314  
Via: Commanding Officer, Marine Aircraft Group 29

Subj: DESIGNATION OF FT BENNING GA AS A 2ND MAW TERF AREA

Ref: (a) WgO 3710.27A  
(b) MAG-29 Frag 02-25-A

1. Reference (a) directs that CG 2nd MAW approve all TERF area/routes not included in ref (a) prior to their use by 2nd MAW aircraft.
2. Reference (b) is a Frag to support 2nd Lav Battalion at Ft Benning Ga. 25-28 Feb 85. This support will require terrain flight in the ranges and training areas at Ft Benning.
3. Ft. Benning Ga. military reservation has been designated an authorized TERF/NOE flight operating area per Army regulation 95-1 and Ft Benning regulations 95-1.
4. In compliance with AR/Ft Benning reg 95-1, The following will be adhered to:
  - a. Receive local area FAM
  - b. Have an updated hazard map in each cockpit
  - c. Have a qualified TERF crew/instructor in each aircraft
5. The entire Ft Benning military reservation is depicted on the 1:50,000 Ft Benning special. This map shows flight routes, firing ranges, no fly areas, and hazards as required by ref (a).
6. A copy of Ft Benning special master route/hazard map will be provided to CG 2nd MAW SC 314 upon completion of liaison visit by the Commanding Officer and WTI, HMA-269 11-12 Feb 85.
7. It is requested that upon completion of the above, Ft Benning Ga. be designated a 2nd MAW TERF area, prior to 25 Feb 85.

*M. L. Olson*  
M. L. OLSON  
By direction





Marine Aircraft Group 29  
 2d Marine Aircraft Wing, FMF, Atlantic  
 Marine Corps Air Station, (Helicopter)  
 New River, Jacksonville, NC 28542-6068

IN REPLY REFER TO:  
 3710  
 301  
 21 May 85

THIRD ENDORSEMENT on CO, HMA-269 (-) (REIN) ltr 1500 over 302 dtd 11 Feb 85

From: Commanding Officer, Marine Aircraft Group 29 Second Marine Aircraft Wing, MCAS(H) New River, Jacksonville

To: Commanding Officer, Marine Attack Helicopter Squadron 269 (-) (REIN) Second Marine Aircraft Wing, MCAS(H) New River, Jacksonville

Subj: DESIGNATION OF FORT BENNING GEORGIA AS A SECOND MARINE AIRCRAFT WING TERF AREA

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2. This approval will suffice as authorization to fly TERF/NOE in the Fort Benning Range Area for all MAG-29 flying squadrons.

*KmDube*

E. M. DUHE  
 By direction

HMM 464 3 3 ROUTING

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UNITED STATES MARINE CORPS  
Marine Heavy Helicopter Squadron 464  
Marine Aircraft Group 29  
2d Marine Aircraft Wing, FMF, Atlantic  
Marine Corps Air Station (Helicopter)  
New River, Jacksonville, N. C. 28545-6087

3500  
3  
23 Oct 84

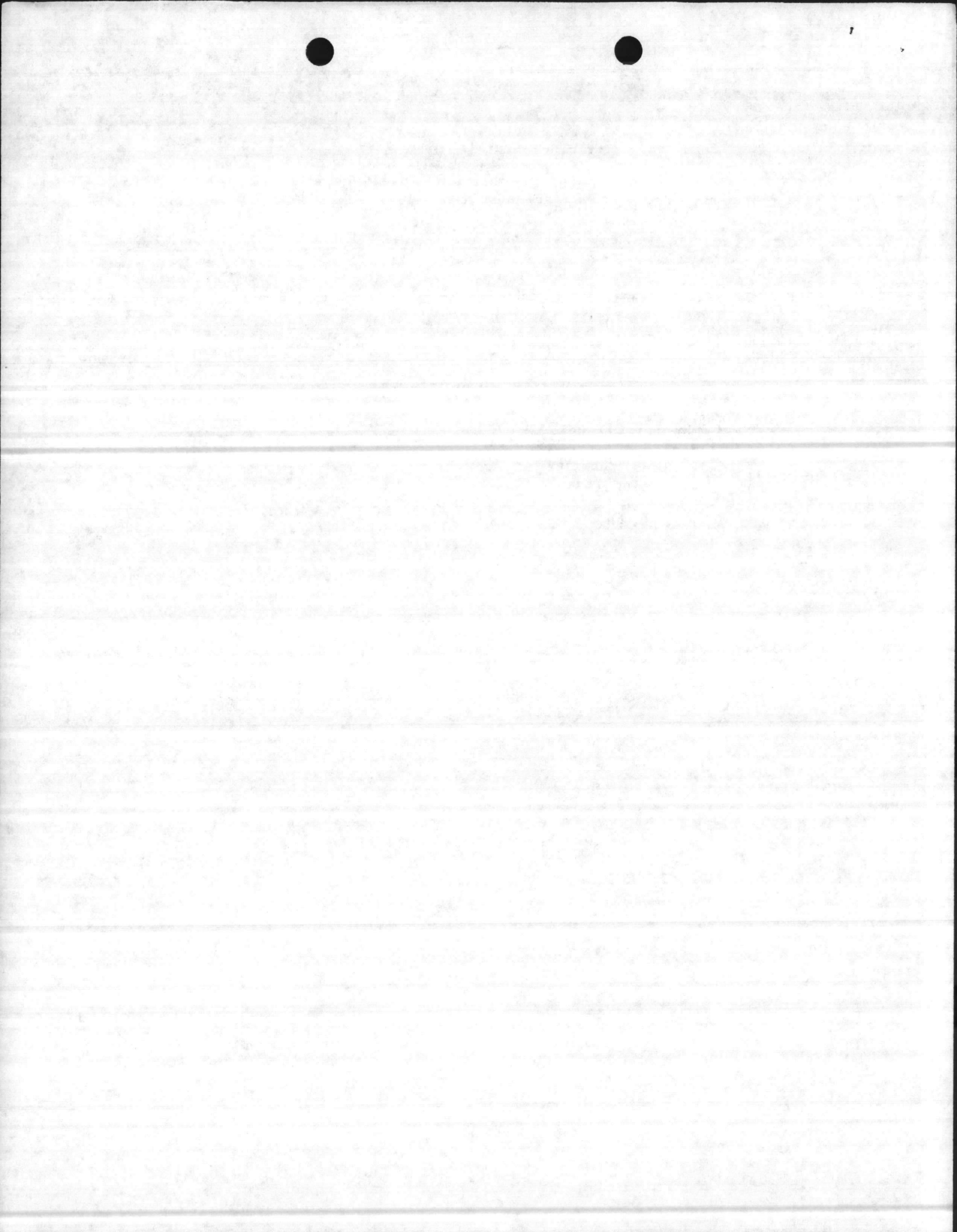
From: Commanding Officer, Marine Heavy Helicopter Squadron 464  
MCAS(H) New River  
To: Commanding Officer, Marine Aircraft Group 29, MCAS(H) New  
River

Subj: AFTER ACTION REPORT FOR EXERCISE AGILE STALLION

Encl: (1) Commanding Officer's Comments  
(2) Chronology of Events  
(3) Operational Summary  
(4) After Action Items

1. Enclosures (1) through (4) are provided for information.

W. H. HOFF



Operation Agile Stallion proved to be a valuable exercise provided HMH-4 with a unique opportunity to meet the challenges and to answer some of the questions which are posed by over water flight by rotary winged aircraft. The successful trans-Caribbean flight of four CH-53E aircraft from NAS Key West to Palmerola Air Base, Honduras (a distance of 911 nautical miles) demonstrated the feasibility of inter-theater self deployment of the CH-53E. The variety of missions which were flown by the squadron while it was in Honduras provided the aircrews involved with an unprecedented opportunity to conduct external and internal

systems. In addition, ensuring that all necessary SAR equipment was aboard each aircraft. In addition, each aircraft was modified to permit in flight servicing of the hydraulic systems. A hand wobble pump was procured for each aircraft for use in the event that the electric fuel transfer pumps in the range extension tanks failed.

Extensive briefings were held with flight planners from VMGR-252. Fuel requirements were thoroughly reviewed to ensure both the tanker and the helicopter communities were in agreement with regards to helicopter fuel burn rates, the amount of fuel to be taken at each refueling, and the exact location of each refueling point. Emergency procedures and inadvertent IFR procedures were discussed at length with VMGR-252. The mission was planned to give the helicopters maximum flexibility if an emergency abort situation should occur. To facilitate this, considerable thought was given to exploring all available options should an emergency divert become necessary.

Three days prior to departure from New River, a full refueling rehearsal was conducted. Four CH-53E's rendezvoused with five KC-130 tankers and demonstrated that such a large formation was manageable. A round robin navigation flight was then conducted to increase pilot proficiency with the OMEGA/Inertial navigation systems. Consequently, by the time the aircraft departed New River on 5 October, most of the uncertainties regarding the flight had been either thoroughly briefed or demonstrated to be manageable.

The actual ferry flight provided to be an unqualified success both going to Honduras and returning to Key West. All join-ups at the aerial refueling control points (ARCP's) were conducted without incident and none of the helicopters experienced any difficulty taking fuel. The quantities of fuel taken by the helicopters were in line with the planning figures and appeared to validate the planned fuel burn rate of 3300 pounds per hour. Both the LTN-211 and the LTN-2 proved to be exceptionally accurate and all of the pilots who were involved in the mission are now comfortable with the system's

Although the entire mission was conducted under VMC conditions, for penetration, as a flight, of limited IFR

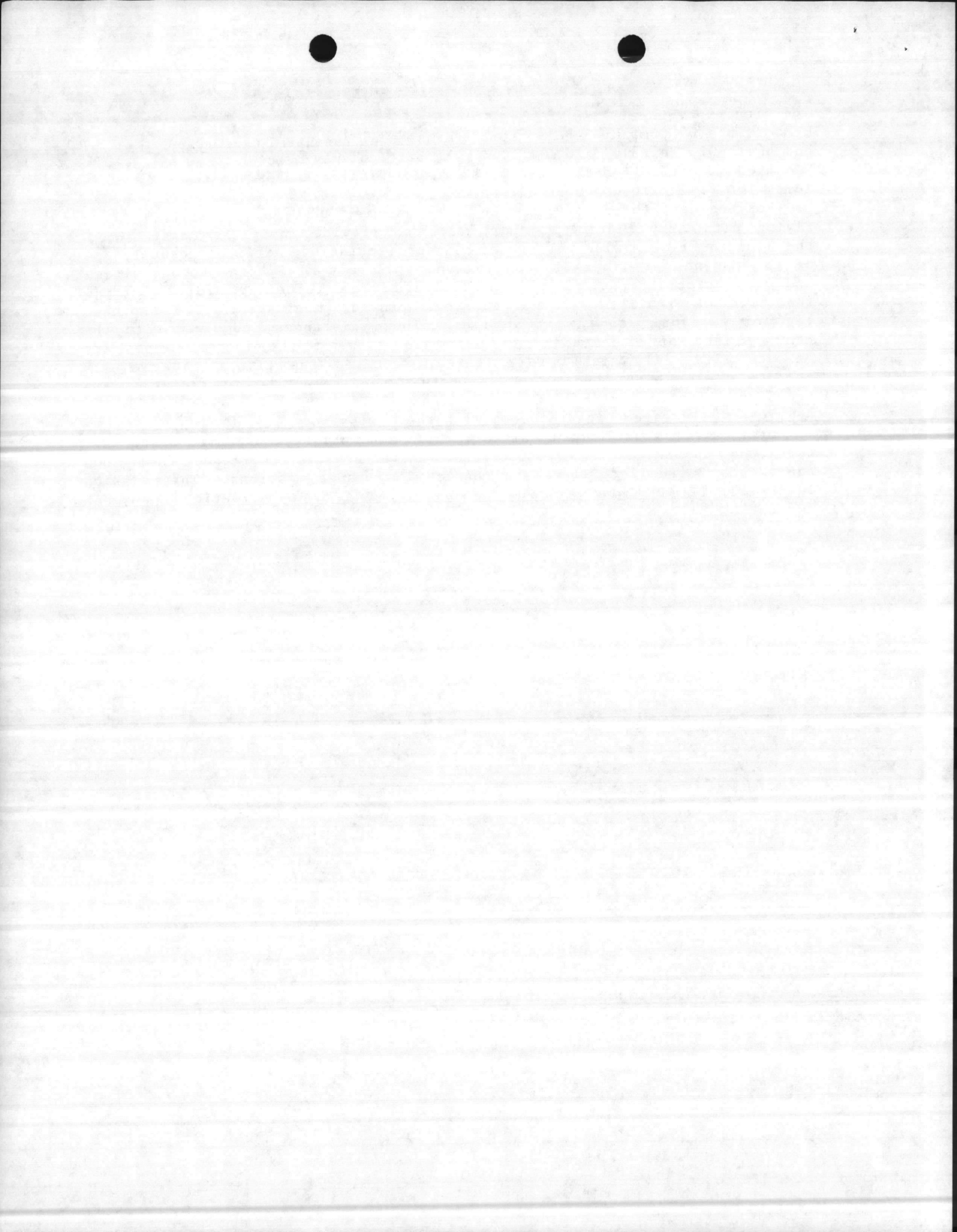
to be conducted without using internal fuel. All aircraft were successful



The missions that were conducted in Honduras proved to be a valuable learning experience. The squadron received a warm welcome from JTF-Bravo. Members of "D" Company 34th Support Battalion of the Sixth Cavalry Brigade and their OIC Captain BETH GARNITY, were particularly helpful. The Squadron received a briefing on the CH-47 detachment's mission and on the special rules for flying in Honduran airspace.

For the next three days, the Squadron assumed "D" Company's mission. Flying with Army pilots in jump seats to provide navigation assistance, the Squadron flew a wide variety of missions to include external resupply of the Marines at Tiger Island, external resupply of Special Forces sites, and the establishment of a FARP (forward area refueling point) outside the town of Trujillo. These missions proved invaluable. The shortest leg for external loads was 65 miles. These distances, combined with the heavy weight of the loads, the high elevation of the landing zones and enroute altitudes which were involved, required the pilots to carefully compute their weight and balance and fuel requirements. In addition, the Squadron pilots experienced the challenges of dealing with several different services while attempting to accomplish their mission.

Overall, this deployment was worthwhile and must be considered a success. Both the CH-53E and the C-130 crews have greatly increased their own confidence in their abilities to conduct long range missions. This mission was a significant step towards demonstrating a trans Atlantic deployment for the CH-53E.



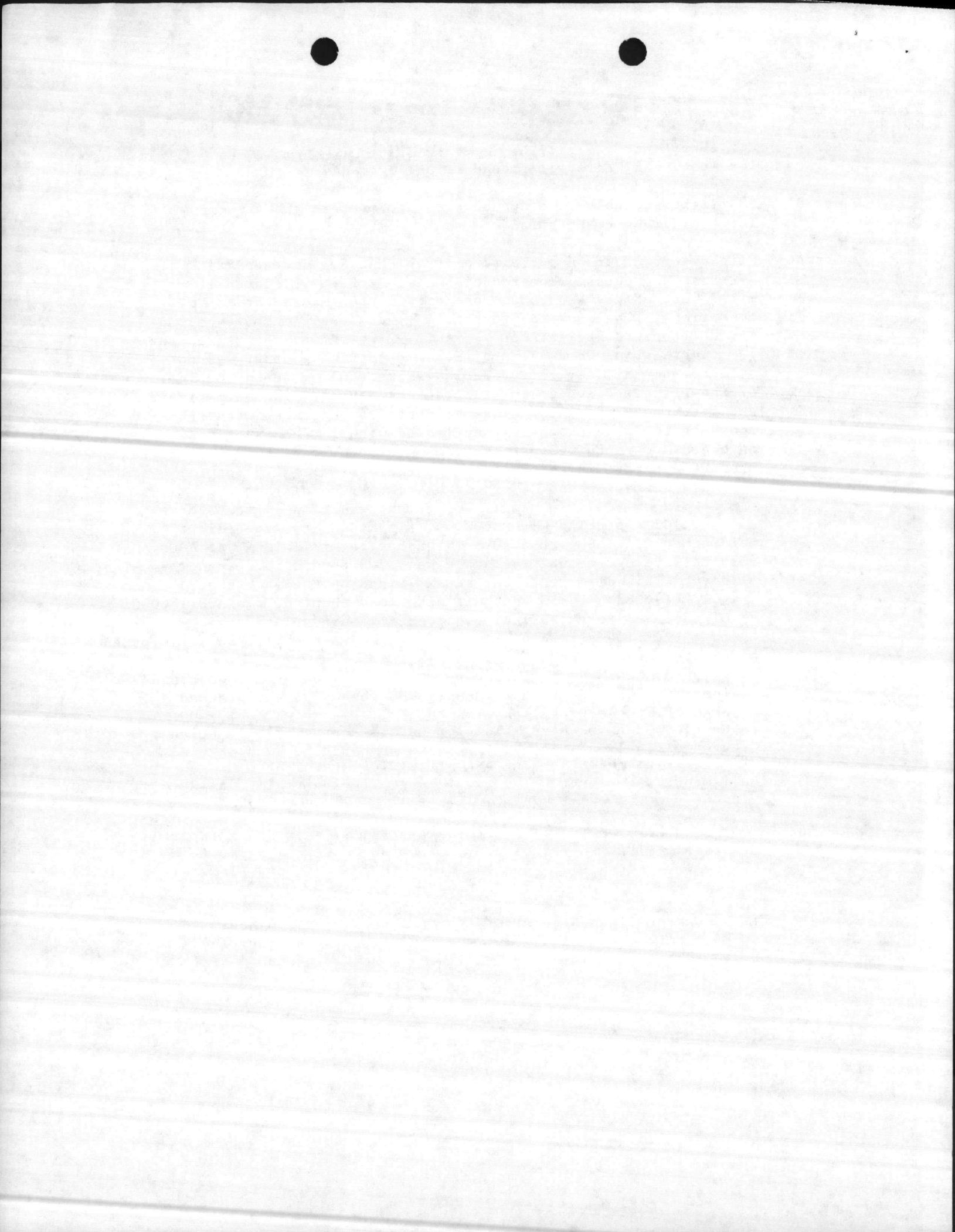
Chronology of Events

- 5 Oct 84 Six CH-53E aircraft flight ferry from MCAS(H) New River to NAS Key West. All aircraft ground refueled at NAS Cecil.
- 6 Oct 84 No flight scheduled; maintenance day to prepare the aircraft for the flight to Honduras.
- 7 Oct 84 Flight ferry four CH-53E aircraft from NAS Key West to Palmerola Air Base, Honduras. The rendezvous at ARCP # 1, located 150 miles west of Key West, was conducted without incident in VMC conditions. The tankers, four primary and one backup, escorted the helicopters at 120 knots to ARCP #2 which was located approximately 50 miles east of Cozumel, Mexico. Once again, weather was not a factor and all aircraft refueled successfully. Upon completion of the refueling evolution, the tankers departed the formation and returned to Key West. The helicopters continued without incident to Honduras where they landed with 3 1/2 hours of fuel on board. Enroute weather services were provided by C-130 maintenance support aircraft which overflew the route of flight prior to the main formation and reported the weather conditions.

A word on fuel planning. The flight was planned for a best case of 142 knots TAS with no wind. In actuality, the flight maintained 135 TAS with a 10 - 15 quartering tailwind. At ARCP # 1, the average actual fuel take was 1700 pounds more than was planned. This difference can be explained by the fact that:

- (1) Each CH-53 took off with less than the planned 15,000 #s of fuel due to extra fuel required for turn up and taxi.
- (2) The climb to altitude required a higher than anticipated burn rate.
- (3) Each helicopter topped off at 14,500 - 15,000 pounds of fuel at each ARCP rather than 14,000 pounds as was planned. At ARCP #2, the average take for the helicopters was only 400 pounds less than planned. This amounts to approximately seven minutes of fuel. Since the time between ENDAR # 1 and ARCP # 2 was 2 + 10, fuel planning was off by less than three and one half minutes per hour. This would appear to partially validate a planned cruise fuel burn rate of 3300 pounds per hour.

- 8 Oct 84 The Squadron flew two aircraft for a total of 12.8 hours in support of JTF-B. Highlights include internal and external delivery of engineering supplies and equipment to Tiger Island along with passengers.
- 9 Oct 84 The Squadron flew three aircraft for a total of 14.6 hours in support of JTF-B. An attempt was made to external four fuel tankers from Palmerola to Truillo on the Caribbean Coast (a distance of 1500 miles). The attempt was aborted enroute due to weather. The Squadron delivered supplies Tiger Island with fuel, water and additional engineering equipment.





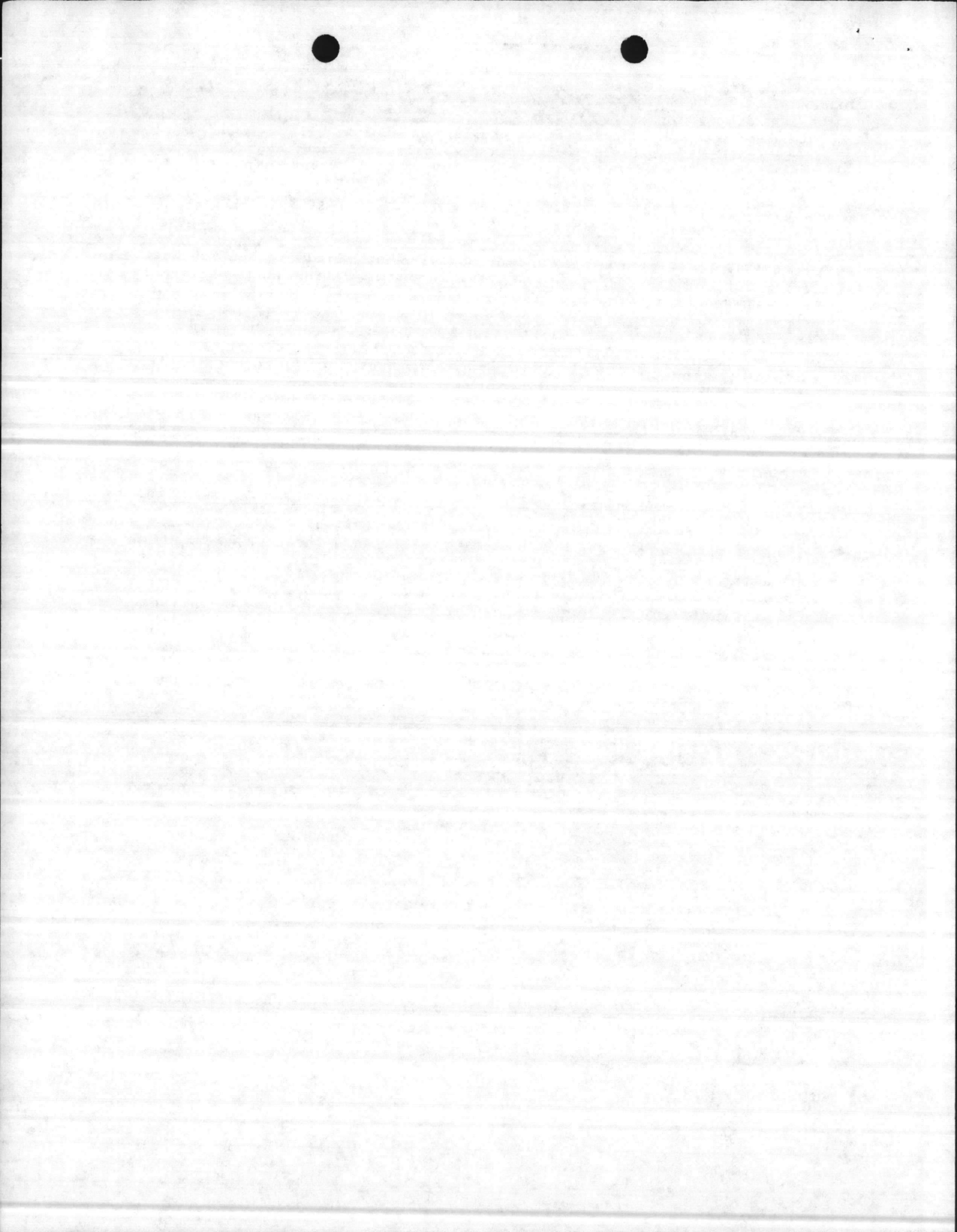
10 Oct 84 The Squadron flew three aircraft for a total of 12.5 hours in support of JTF-E. Highlights include the successful completion of the previously aborted mission to Trujillo, the continued resupply of fuel, food and water to Tiger Island, and the delivery of engineering supplies to an Army Special Forces camp.

11 Oct 84 No flight scheduled; maintenance day to prepare the aircraft for the return flight to NAS Key West.

12 Oct 84 Flight ferry four CH-53E aircraft from Palmerola to NAS Key West. The entire flight was conducted in VMC conditions and was largely uneventful. The five tankers departed Key West at 1450Z in order to arrive at ARCP #3, located at 18°53' and 86°13'W, just prior to the helicopter flight's arrival. This ARCP was 307 miles from Palmerola and in the event that a helicopter could not take fuel, a return to Palmerola was not possible. Bingo airfield was to be Cozumel, Mexico in this case.

The helicopters had planned to depart Palmerola at 0900 local time. Departure was delayed when the flight plan was not passed by the coordinating agency at TFB to appropriate Honduran ATC authorities. The helicopters eventually departed at 0925 and arrived at ARCP #3 15 minutes late. The pick up and refueling evolution was conducted without incident. ARCP #4, located at 18°24'N and 86°29'W, was reached on time and the refueling evolution was once again conducted without incident. All helicopters arrived in Key West 2 1/2 hours and 45 minutes after departure, once again with an excess of three hours fuel on board. Three of the helicopters had only 2 1/2 hours fuel remaining because one of the intended fuel tanks failed to transfer.

Once again, fuel consumption figures seemed to validate the planned fuel burn rate of 1000 pounds per hour. The total fuel for the helicopters was approximately 5000 pounds more per aircraft than was anticipated. The fuel deficit was due to 45 minutes ground time at the refueling sites and to a slight delay in departure.



10 Oct 84 The Squadron supported the operations of support of JTF-B. Highlights include the completion of the previously aborted mission to Trujillo, the resupply of fuel, food and water to Tiger Island, and the delivery of engineering supplies to an Army Special Forces camp.

11 Oct 84 No flight scheduled; maintenance day to prepare the aircraft for the return flight to NAS Key West.

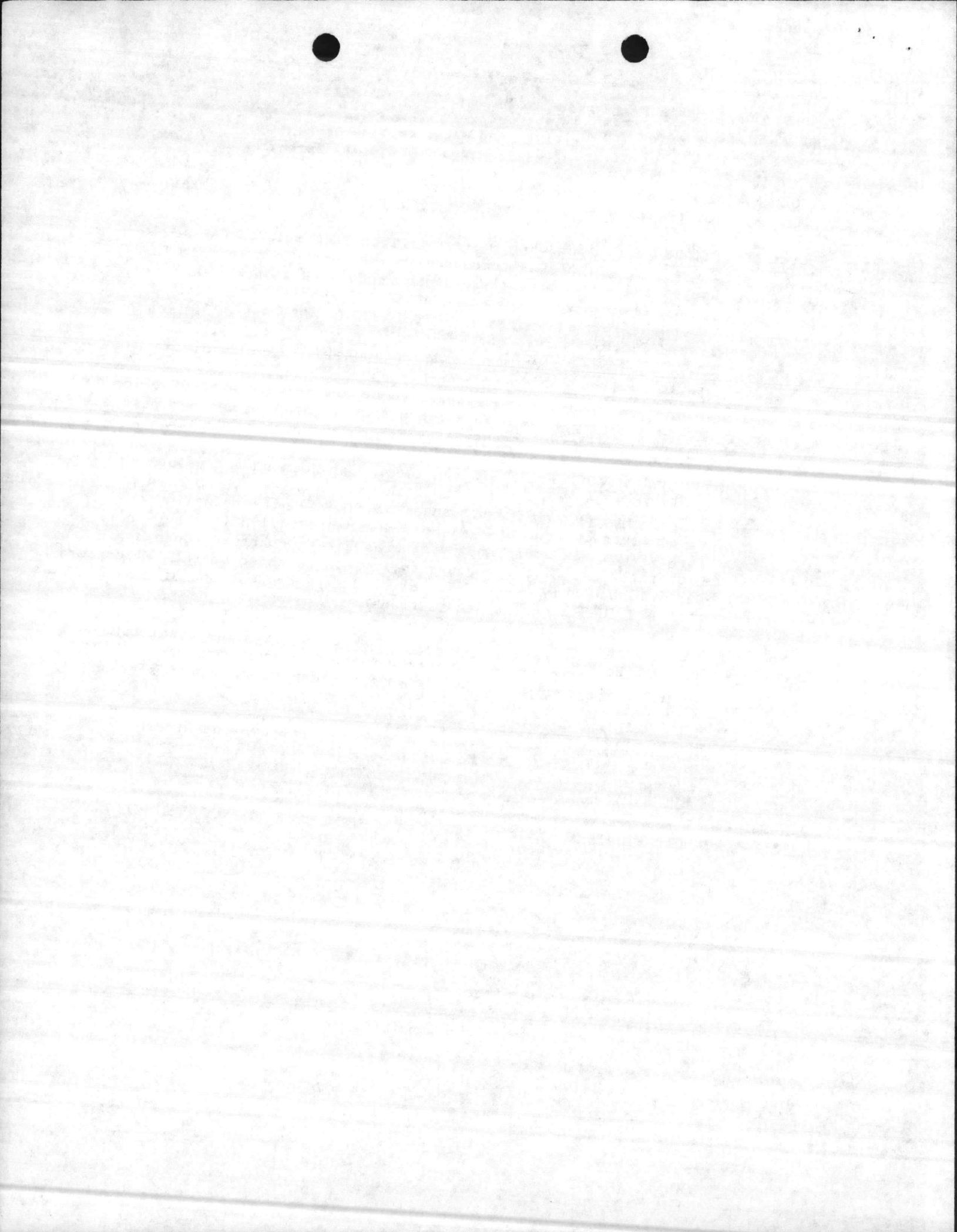
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The helicopters had planned to depart Palmerola at 0900 local time. Departure was delayed when the flight plan was not passed by the coordinating agency at JTF-B to appropriate Honduran ATC authorities. The helicopters eventually departed at 0925 and arrived at ARCP #3 15 minutes late. The join up and refueling evolution was conducted without incident. ARCP #4, located at 22°24'N and 86°29'W, was reached on time and the refueling evolution was once again conducted without incident. All helicopters arrived in Key West six hours and 35 minutes after departure, once again with an excess of three hours fuel on board three of the helicopters. Dusty 13 had only 2 ½ hours fuel remaining because one of its internal fuel tanks failed to transfer.

Once again, fuel consumption figures seemed to validate the planned fuel burn rate of 3300 pounds per hour. The total take for the helicopters was approximately 500 pounds more per aircraft than was anticipated. Much of this was due to 45 minutes ground time awaiting clearance to depart Palmerola.

13 Oct 84 No flights scheduled; Maintenance day to prepare the aircraft for the return trip to New River. All aircraft were thoroughly washed.

14 Oct 84 Flight ferry from Key West to New River. All aircraft refueled at MCAS Beaufort.



Item: Fuel Planning

Discussion: One of the primary derivatives of this mission was the establishment of a data base for fuel consumption for the CH-53E when configured for long-range flight. Fuel was planned for an average burn of 3300 pounds per hour. Although each helicopter carried approximately 3700 pounds of fuel in its internal range extension tanks, this fuel was planned as an emergency reserve only. The entire mission was planned assuming that this fuel would not be available. The fuel consumption figures for each helicopter indicated that planning for a burn rate of 3300 pounds per hour is reasonably accurate for 120 IAS cruise.

Recommendation: The next time a similar mission is flown, helicopter crews need to keep detailed notes regarding fuel consumption to further validate the above fuel consumption rate. Even though all aircraft arrived at destination at both ends of the mission with over three hours of fuel on board, it must be remembered that part of that reserve was based on internal fuel which may not always be available. In addition, this entire flight was flown under ideal VMC weather conditions with favorable winds. Adverse winds or deviation from course or planned altitude due to adverse weather would have adversely affected the helicopter's fuel reserve. Care must be taken not to reduce tanker assets or planned fuel takes due to the relative ease with which this mission was accomplished.

Item: Use of the LTN-211 and the LTN-72

Discussion: Both the VLF/OMEGA and the palletized inertial navigation system (PINS) exceeded the expectations of all the pilots concerned. All of the pilots who were involved in this mission now understand how to operate the systems and equally as important, they have confidence in the system's reliability.

Recommendation: Since the use of these, or similar, systems is a must for long range, over water flight, efforts must continue to exercise the system to further ensure its reliability and to continue to bolster user confidence.

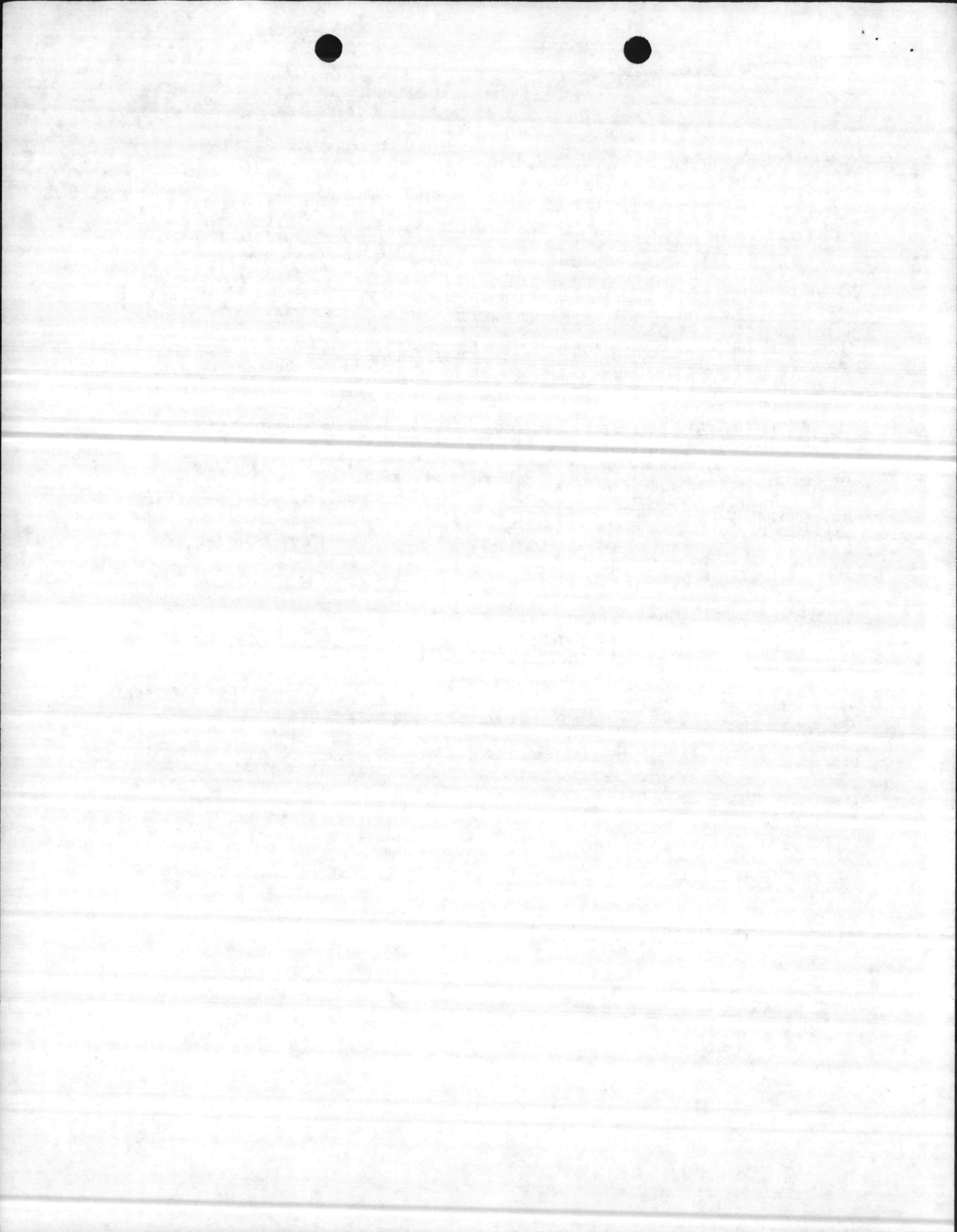
Item: Adverse Weather

Discussion: The effects of adverse weather remains the single largest unknown variable which could influence the success or failure of this type of mission. Although both inadvertent and planned IFR penetrations have been briefed in detail, these plans have not been tested under actual conditions.

Recommendation: That every effort be made to ensure that reconnaissance weather aircraft be made available to provide the helicopter/tanker formation along the route of flight.

Item: Lack of Stated Helicopter Mission

Discussion: The lack of stated helicopter mission was a significant factor in the mission's success.



**Discussion:** This mission was disrupted during the planning process. As a result, squadron personnel frequently had difficulty getting the necessary support from higher headquarters personnel who did not know the nature of the mission.

**Recommendation:** That necessary members of higher headquarters staff be informed of the nature of such missions to facilitate the planning process.

**Item: Security at Palmerola**

**Discussion:** Based on a report written by an Air Force counterintelligence SNCO which delineated poor security at Palmerola, the squadron requested that additional security assets be made available. This request was subsequently denied by higher headquarters. Security did not appear to be a high priority at Palmerola. Despite the presence of Honduran guards and a roving MP patrol, the base appeared to be accessible to anyone who really wanted to enter.

**Recommendation:** The volatility of the Central American region indicates that the threat situation can change rapidly. If a unit such as this is to be sent to Central America for any length of time, careful consideration should be given to the necessary security requirements.

**Item: Arming of Helicopters and Aircrews**

**Discussion:** Both the weapons for the aircraft and for the aircrews were taken to Palmerola. However, they remained in their storage crates and were not used. The squadron flew most of its missions in section and was careful to avoid any known hostile areas. This, coupled with the minimal threat, prompted the decision to fly unarmed.

**Recommendation:** Once again, due to the volatility of the region, aircrews should have their weapons available should there be a change to the mission or an escalation of the threat.

**Item: Denial/Customs Inspection/Cleaning of Aircraft**

**Discussion:** The environment at Palmerola was both muddy and dusty. Extended operations would require facilities to wash the aircraft. None currently exist. This was particularly evident when the squadron was required to clean the aircraft prior to departing Palmerola. Without water wash facilities, it is predicted that the maintenance program

will be severely impacted. It is recommended that a facility for washing the aircraft be made available at Palmerola. This facility should be made available to all units operating at Palmerola.

