HMH FOUR SIX ONE

<u>ՄՈ</u>ՍՍԱՄԱՍԱՍԱՍԱՍԱՍԱՍԱՍԱՍԱՍԱՍԱՍԱՍԱՍԱՍԱԱՄԱ UNCLASSIFIED

FOR OFFICIAL USE ONLY

3. CIRCUMSTANCES

A. ORIGIN. MCAS(H) NEW RIVER, NC

- MISSION. NIGHT VISION GOGGLE TRAINING
- C. FLIGHT PURPOSE CODE. 1A1 TYPE OF FLIGHT PLAN. VFR
- DESTINATION. MCAS (H) NEW RIVER, NC
- F. AIRCRAFT EVOLUTION. HOVER -
- MISHAP CATEGORY. FLIGHT MISHAP AIRCRAFT WAS IN-FLIGHT AND DAMAGE EXCEEDED 10,000 DOLLARS.
- DAMAGE AND COSTS.
 - A. AIRCRAFT.

FOUR TAIL POTOR BLADES \$46,720 ONE HYDRAULIC LINE \$. 15 MAN- HOURS TO REPAIR 56 TOTAL \$46.791

- NON-ZOD PROPERTY DAMAGE. В. NONE
- PERSONNEL INFORMATION, INJURIES AND COSTS. 6.

SOULS ON BOAPD. FOUR A.

- B. CREW.
 - (1) PIC/PAC. CAPT REDMAN, JAMES M., 039361164, 7564, USMC HMH-461, ON DUTY, GOLF, TOTAL FLIGHT HOURS: 1098, IN-TYPE: 878, LAST 30 DAYS: 30, TOTAL NVG TIME: 42.9, NVG TIME LAST 30 DAYS: 3.6.
 - (2) COPTLOT. CAPTAIN SEIPEL, DAVID W., 508729607, 7564, USMCR, HMH-461, ON DUTY, GOLF, TOTAL FLIGHT HOURS: 667, IN-TYPF: 449, LAST 30 DAYS: 4, TOTAL NVG TIME: 0.
 - (3) CREW CHIEF. LCPL RYDBERG, TIMOTHY A., 262137620, 6113, UCMC, HMH-461, ON DUTY, GOLF.
 - (4) FIRST MECHANIC. LCPL TURNER, STEPHEN L., 440763914, 6113, USMC, HMH-461, ON DUTY, GOLF.
- 7. MISHAP INVESTIGATION. AIRCRAFT HAS BEEN REPAIRED AND RETURNED TO SERVICE.
- 8. JAG MANUAL INVESTIGATION. THIS MISHAP DOES NOT MEET THE REQUIREMENTS OF REFERENCE (B) FOR A JAG MANUAL INVESTIGATION.
- 9. POINTS OF CONTACT.
 - AIRCRAFT MISHAP BOARD.
 - AVIATION SAFETY/SENIUR MEMBER: MAJ. V.L. MCMINN, HMH-461 (919)451-6640/\AV)484-6640
 - (2) ATRORAFT OPERATIONS: MAJ. M.J. DOLEZAL
 - AIRCRAFT MAINTENANCE: MAJ. G.F. MILLER (3)
 - (4) FLIGHT SUPGEON: LT. J.R. DEVOLL

491466/7945/029 CSN: RNRS0122

2 OF 4 M1 0121 029/03:292

282324Z JAN 85 HMH FOUR SIX ONE

FOR OFFICIAL USE ONLY CLASSIFIED

10. EVIDENCE

A. ENCLOSURES. THE FOLLOWING ENCLOSURES TO THIS REPORT HAVE BEEN MAILED TAW PARAGRAPH 708 OF REFERANCE (A).

- (1) FLIGHT SUPGEON'S STATEMENT
- (2) AIRCREW STATEMENTS
- (3) MISHAP SKETCHES ...
- B. SUMMARY OF EVIDENCE.
 - (1) CAPT. REDMAN, A WEAPONS AND TACTICS INSTRUCTOR, WAS SCHEDULED TO INSTRUCT CAPT SEIPEL ON HIS FIRST NVG HOP.
 - (2) THE HOP WAS TO CONSIST OF LOW WORK AND PATTERN WORK.
 - (3) THE PILOTS BRIEF WAS THOROUGH AND PRECISE.
 - (4) THE ENLISTED AIRCREW BRIEF WAS CONDUCTED AFTER A NORMAL PREFLIGHT AND INCLUDED OPERATION OF THE NVG'S.
 - 15) BOTH CREWMEN WERE FAMILIAR WITH THE OPERATION AND USE OF
 - (6) THE GUNNERS WINDOW, THROUGH WHICH LCPL TURNER WOULD BE CLEARING ATRCRAFT, WAS DIRTY.
 - (7) CAPT REDMAN DIRECTED THE WINDOW TO BE CLEANED OR REMOVED, NEITHER OF WHICH WERE ACCOMPLISHED.
 - (8) AFTER PUTTING ON GOGGLES AND COMPLETING INITIAL DEMONSTRATIONS, CAPT REDMAN TOOK CONTROL OF THE AIRCRAFT TO PRACTICE LOW WORK.
 - (9) THE AIRCRAFT WAS LOCATED ON THE APPROACH THIRD OF THE RUNWAY.
 - (10) CAPT REDMAN PERFORMED SOME LOW WORK THEN ALIGNED THE AIPCRAFT ON CENTERLINE FOR RUNWAY 36 AND BEGAN A BACK TAXI.
 - (11) LCPL RYDBERG WAS INITIALLY OBSERVING THE BACK TAXI
 THROUGH THE OPEN RAMP DOOR BUT SHIFTED HIS LOOKOUT VANTAGE TO
 THE OPEN PERSONNEL DOOR WINDOW.
 - (12) LCPL TURNER WAS CLEARING THE AIRCRAFT THROUGH THE CLOSED GUNNER'S WINDOW.
 - (13) BOTH CREWMEN WERE LOOKING THROUGH NVG'S, DURING THE BACK TAXI.
 - (14) IN CLEARING THE AIRCRAFT THROUGH THESE TWO WINDOWS AND NOT SCANNING THROUGH THE RAMP DOOR, THERE IS APPROXIMATELY A 14 DEGREE BLIND SPOT TO THE REAR OF THE AIRCRAFT THAT IS APPROXIMATELY 28 FEET WIDE AT THE TAIL OF THE AIRCRAFT.

 (15) CAPT REDMAN NOTICED A CIRCLE PAINTED ON THE RUNWAY AND
 - INQUIRED "HOW ARE WE DOING BACK THERE?"
 - (16) THE SOUTHERN EDGE OF THE CIRCLE IS 48 FEET FROM THE END OF THE RUNWAY.
 - (17) LCPL RYDRERG LOOKED THROUGH THE OPEN RAMP DOOR, NOTED THE PROXIMITY OF THE TREES TO THE TAIL ROTOR AND YELLED

BT

491466/7945/029 CSN:RNRS0122

3 OF 4 M1 0121 029/03:29Z

282324Z JAN 85 HMH FOUR SIX ONE

TOP OFFICIAL USE ONLY

PRIORITY

P 2823247 JAN 85

FM HMH FOUR SIX ONF

TO CNO WASHINGTON DC NAVSAFECEN NORFOLK VA CG SECOND MAW MCAS H NEW RIVER NO

CMC WASHINGTON DC CG FMFLANT MAG TWO SIX

INFO COMNAVAIRSYSCOM WASHINGTON DC AFISC NORTON AFB CA//SEF// NAVPGSCOL MONTEREY CA

BT UNCLAS FOUR

FINAL SECTION OF 02 //N03000//

"STOP" OVER THE ICS AT THE SAME TIME THAT LCPL TURNER, FROM THE GUNNER'S WINDOW, TRANSMITTED A WARNING TO STOP OVER THE ICS.

(18) IN THE RESULTING CONFUSION, THE TAIL ROTOR STRUCK A

(19) THE TREE WAS APPROXIMATELY 30 FEET TALL, AND STOOD 68 FEET FROM THE RUNWAY.

(20) AT THE TIME OF THE IMPACT, THE END OF THE RUNWAY WAS APPROXIMATELY DIRECTLY UNDER THE PILOT STATION.

(21) THE TREES AT THIS PART OF CAMP DAVIS BEGIN AT THE END OF THE RUNWAY, STARTING AT 15 FEET, AND INCREASE IN HEIGHT TO APPROXIMATELY 50 FEET TALL APPROXIMATELY 140 FEET FROM THE RUNWAY'S FND.

(22) CAPT REDMAN TAXIED FOWARD AND LANDED ON THE RUNWAY WITHOUT FURTHER INCIDENT.

(23) MCOLF CAMP DAVIS IS LEASED BY THE U.S. GOVERNMENT FROM INTERNATIONAL PAPER CO.. CLEARING THE RUNWAY ENVIRONMENT OF TREES OUT TO 90 FEET FROM THE RUNWAY'S EDGE IS COORDINATED THROUGH MCAS\H) NEW RIVER, NC..

(24) THE ONLY END MARKERS ON RUNWAY 36 ARE YELLOW CIRCLES, 58 FEET IN DIAMETER. THE EDGES OF THESE CIRCLES ARE 48 FEET FROM THE ENDS OF THE RUNWAY.

(25) THERE WAS 100% ILLUMINATION AT THE TIME OF THE MISHAP.

11. ANALYSIS.

DLVR:HMH FOUR SIX ONE(3)...ORIG DLVR:MAG TWO SIX(3)...ACT DLVR:MCAS H NEW RIVER NC(8)...ACT

RTD:000-000/COPIES:0014

491471/7946/029 CSN:PNPS0123 1 OF 3 M1 0122

M1 0122 029/03:30Z

282324Z JAN 85 HMH FOUR SIX ONE

TOR OFFICIAL USE ONLY

OUTPUT OFFICIAL USE ONLY

OUTPUT OFFICIAL USE ONLY

OUTPUT OFFICIAL USE ONLY

A. FACILITIES. THAT THE AIRCRAFT WAS BEING OPERATED OVER A RUNWAY CENTERLINE IS SIGNIFICANT. THE PROXIMITY OF TREES TO THE ENDS OF THE RUNWAY POSES A HAZARD TO AIRCRAFT USING THAT RUNWAY. THOUGH OBSTACLE CLEARANCE IS ULTIMATELY THE RESPONSIBILITY OF THE AIRCRAFT COMMANDER, HAD THE APPROACH END OF THIS RUNWAY BEEN CLEAR OF TREES, THE PILOT COULD HAVE SEEN THAT HE WAS NO LONGER OVER THE RUNWAY AND WOULD HAVE HAD OPPORTUNITY TO STOP THE TAXI. A PERIODIC CLEARING OF TREES WOULD PRECLUDE THIS MISHAP FROM RECURRING.

B. PERSONNEL FACTORS.

- (1) BOTH PILOTS. ALTHOUGH BOTH PILOTS ARE FAMILIAR WITH OPERATIONS AT CAMP DAVIS, NEITHER APPARENTLY CONSIDERED THE PROXIMITY OF TREES TO THE END OF THE RUNWAY NOR THE FACT THAT THE END OF THE RUNWAY IS MARKED ONLY BY A CIRCLE. THIS LACK OF SPATIAL ORIENTATION WAS ABETTED BY A FEELING OF COMPLACENCY CAUSED BY THE AIRCRAFT'S LOCATION OVER A RUNWAY CENTERLINE.
- (2) BOTH CREWMEN. AT THE BEGINNING OF THE BACK TAXI, THE CREWMEN WERE IN PROPER POSITIONS. WHEN THE CREW CHIEF SHIFTED HIS POSITION TO LOOK OUT THE PERSONNEL DOOR, HE PUT THE TAIL OF THE AIRCRAFT IN A BLIND SPOT. FROM THEIR POSITION AT THE WINDOWS, IT WOULD HAVE BEEN DIFFICULT TO SEE UNDER THE SPONSONS AND EXTERNAL FUEL TANKS AND OBSERVE THE END OF THE RUNWAY APPROACHING. THAT THE GUNNER'S WINDOW HAD NOT BEEN CLEANED OR REMOVED AS DIRECTED BY THE AIRCRAFT COMMANDER IS CONSIDERED SIGNIFICANT BUT NOT TO THE OUTCOME OF THIS MISHAP. THE FIRST MECHANIC, LOOKING THROUGH THIS WINDOW, SHOUTED A WARNING TO THE PILOT AT THE SAME TIME AS THE CREW CHIEF DID, WHO WAS LOOKING THROUGH THE OPEN PERSONNEL DOOR.
- 12. CONCLUSIONS. MISHAP CAUSE FACTORS.

 A. FACILITIES. THE ENDS OF THE RUNWAYS AT MCOLF CAMP DAVIS ARE NOT KEPT FREE OF OBSTACLES. IC.

 B. PILOTS. FAILED TO RECOGNIZE A DANGEROUS SITUATION AND TAXIED OFF THE RUNWAY.

 C. AIRCREWMEN. FAILED TO MAINTAIN ADEQUATE LOOKOUT. IC
- A. THAT MCAS(H) NEW RIVER COORDINATE THE REMOVAL OF ALL TREES WITHIN 90 FEET OF THE RUNWAYS AT MCOLF CAMP DAVIS.

 B. THAT MCAS(H) NEW RIVER PROVIDE FOR THE PERIODIC REMOVAL OF TREES WYTHIN 90 FEET OF THE RUNWAYS AT MCOLF CAMP DAVIS.

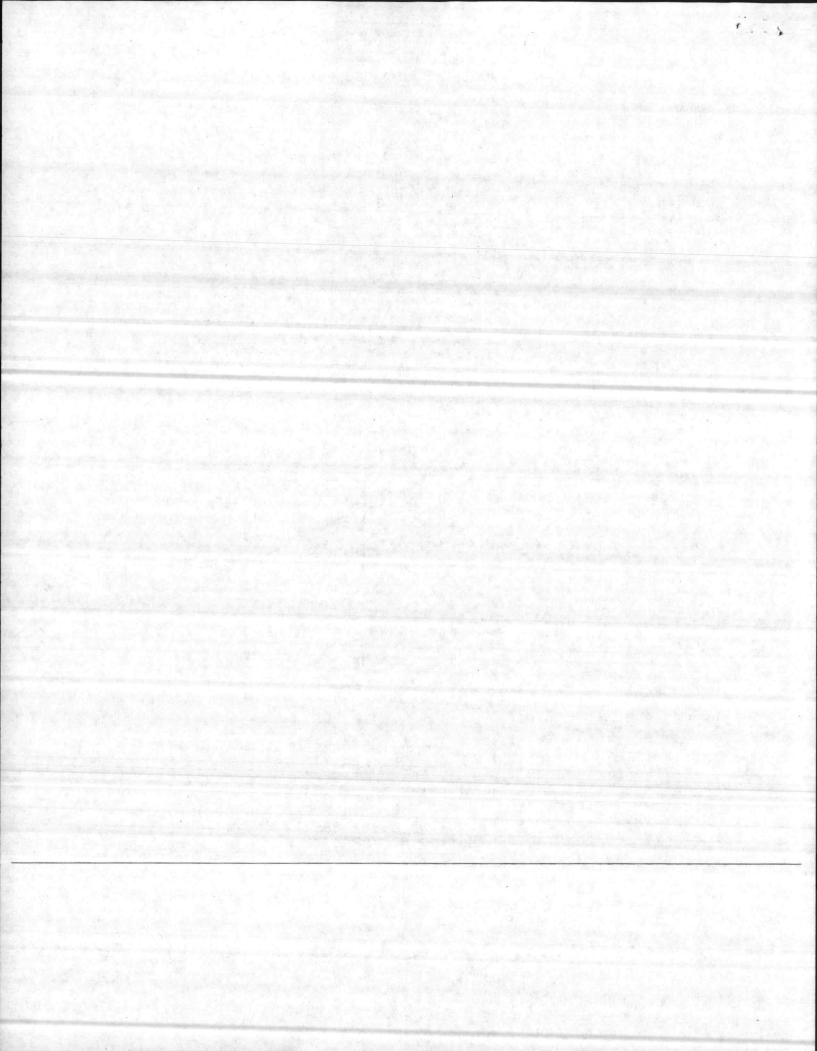
 C. THAT HMH-461 CONTINUE TO BRIEF PROPER LOOKOUT DOCTRINE.

 D. THAT HMH-461 PILOTS CONDUCTING NIGHT OPERATIONS AT OUTLYING FIELDS REVIEW RUNWAY DIAGRAMS AND PICTURES TO REFRESH THEMSELVES ON VISUAL CUES AVAILABLE AT NIGHT.

491471/7946/029 CSN:RNPS0123

2 OF 3 M1 0122 029/03:30

029/03:30Z 282324Z JAN 85 HMH FOUR SIX ONE



RECEIVEL

30 JAN 1985

PRIORITY

P 2923227 JAN 85

HAS BEEN SENT

FM HMH FOUR SIX ONF

TO CNO WASHINGTON DC NAVSAFECEN NORFOLK VA CG SECOND MAW MCAS H NEW RIVER NO

INFO COMNAVAIRSYSCOM WASHINGTON DC AFISC NORTON AFB CA//SEP//

NAVPGSCOL MONTEREY CA

CMC WASHINGTON DC

CG FMFLANT

MAG TWO SIX

... UNCLAS FOUD //N03752//

THIS IS A LIMITED USF NAVAL ACFT MISHAP INVESTIGATION REPORT LIMITED DISTRIBUTION AND SPECIAL HANDLING REGD IAW OPNAVINST 3750.6N HMH 461 ENDORSEMENT OF HMH 461 CLASS C FLIGHT MISHAP 1-85 7 JANUARY 1985 CH 53D 157732 REPORT SYMBOL OPNAV 3752-1

OPNAVINST 3750.6N

- 1. THIS ENDORSEMENT CONCERNS A ROUTINE HAZARD TO NAVAL AVIATION. FURTHER ENDORSEMENT NOT REQUIRED. SUMMARY: WHILE HOVERING WITH PILOTS USING NIGHT VISION GOGGLES, AIRCRAFT TAIL ROTOR STRUCK A TREE.
- CONCUR WITH CONCLUSIONS AND RECOMMENDATIONS OF THE AIRCRAFT MISHAP BOARD WITH THE FOLLOWING COMMENTS.

A. THE REQUIREMENTS TO CLEAR THE TREES FROM THE 90 FOOT BUFFER ZONE AROUND THE RUNWAY HAVE BEEN SUBMITTED TO MCAS(H) NEW RIVER VIA SEPARATE CORRESPONDENCE. ACT

B. THE REQUIREMENT TO PERIODICALLY CLEAR THE BUFFER ZONE HAS BEEN SUBMITTED TO MCAS(H) NEW RIVER AS AN AGEND% ITEMS-44 BE

C. WE WILL CONTINUE TO STRESS BRIEFS THAT INCLUDE TO STRESS BRIEFS DOCTRINE, COURSE RULES, CREW COORDINATION AND ALL OTHER ASPECTS %F A THOROUGH NATOPS PROGRAM. BT

DLVR:HMH FOUR SIX ONE(3)...ORIG DLVR: MAG TWO SIX(3) ... ACT DLVR: MCAS H NEW RIVER NC(8) ... ACT

(4) AVMORD COMMISSARY SAFETY S-4 CHIEF ACTION DATE

RTD:000-000/COPIES:0014

494243/8243/029 2 · M1 0313 OF 029/23:262 CSN:RNRS0300

292322Z JAN 85 HMH FOUR SIX ONE

<u>ບັບປຸ່ນບັນບັນບັນບັນປາທານຄອນຄອນຄອນປ່ຽນໃນປ່ຽນໃຕ້ເປັນບັນປາຄອນ</u> UNCLASSIFIED S-1 5-3 S-4 COMP DAAC DISB **P&HS** CEO GEO SUPO JRC CHAP ASO NAVY SJA PAO FILE

INIT

INFO

REMARKS:

