



DEPARTMENT OF THE NAVY
COMMANDER NAVAL AIR FORCE, PACIFIC
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5830
Ser N01J/1934
20 Dec 10

FIFTH ENDORSEMENT on CDR (b)(6), (b)(3) , USN, ltr of 8 Oct 10

From: Commander, Naval Air Force, Pacific
To: File

Subj: COMMAND INVESTIGATION OF THE INADVERTENT WATER LANDINGS
OF HSM-41 AIRCRAFT BUNO #166533 AND #166520 ON 13 SEP 10

1. After careful review of the subject investigation, the findings of fact, opinions, and recommendations of the investigating officer, as endorsed by Commander, Helicopter Maritime Strike Wing, U.S. Pacific Fleet, are approved.
2. The mishap was entirely preventable. Hovering without sufficient power caused these helicopters to drop without warning and placed all ten crewmembers at mortal risk. Use of required engine performance calculations would have alerted the aircraft commanders of that peril. Moreover, I am especially concerned by their decision to not wear floatation equipment during a flight over Lake Tahoe. The investigation pointedly demonstrates that leaders in the aviation community at all levels must continue to stress vigilance and operational risk management in our daily operations.
3. Punitive action is not warranted, and I am satisfied that appropriate administrative measures were taken to address the actions of the officers and airmen involved in the mishap. The aircrew, however, lacked a proper respect for the dangers of violating flight safety norms, and the Commanding Officer failed to have procedures in place to ensure that aircrew followed the required directives in the conduct of cross-country flights. To

(b)(5)

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4. The aviation community was lucky this day, and a horrific loss of life was narrowly avoided. The expeditious implementation of the remedial measures outlined in recommendations 6 through 14 of the third endorsement are important to demonstrate our commitment to preventing these types of incidents in the future. To ensure timely completion, Commander, Helicopter Maritime Strike Wing, U.S. Pacific Fleet shall provide monthly updates to the point of contact until these recommendations are fully implemented.

5. For consistency, Commander, Helicopter Maritime Strike Wing, U.S. Pacific Fleet letter 5830, Ser 00/249 of 10 November 2010 has been renumbered as page 18; Commander Naval Air Force, Pacific letter 5830 Ser N00/1736 of 17 November 2010 is renumbered as page 19; CDR (b)(6), (b)(3), USN, letter of 30 November 2010 is renumbered as pages 20-30; Commander, Helicopter Maritime Strike Wing, U.S. Pacific Fleet letter 5830 Ser 00/ of 30 November 2010 is renumbered as page 31.

6. My point of contact is LCDR (b)(6), JAGC, USN, who can be reached by phone at (b)(6) or by E-mail at

(b)(6)



A. G. MYERS

Copy to:
COMHSMWINGPAC
CDR (b)(6), (b)(3)



DEPARTMENT OF THE NAVY
COMMANDER
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5830
Ser 00/
30 Nov 10

FOURTH ENDORSEMENT on CDR (b)(6), (b)(3) , USN, ltr of 8 Oct 10

From: Commander, Helicopter Maritime Strike Wing, U.S. Pacific Fleet
To: Commander, Naval Air Force, Pacific

Subj: COMMAND INVESTIGATION OF THE INADVERTENT WATER LANDINGS OF
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1. I concur with the findings of fact, opinions, and recommendations of the Investigating Officer.
2. HSM-41's command cross-country management process was inadequate in providing the necessary oversight and guidance to squadron aircrew. Squadron leadership should have taken a more active and supervisory role in the mission planning process and that policy compliance for planning and in-flight execution fully met expectations. While the Commanding Officer is ultimately responsible for the actions of his aircrews, the policy non-compliance actions taken by the pilots in command were neither directed nor sanctioned by command leadership and represented a departure from the trust and confidence placed in those that hold this qualification. Nothing was revealed in the course of this investigation that would indicate that accountability lies solely with the Commanding Officer.
3. Areas where policy ambiguity or misperceptions exist have been actively addressed by Wing and squadron leadership. Of note, to prevent future policy misinterpretation, the Wing SOP minimum altitude for overwater flight has been amended to ensure intent and expected action is clearly presented to all Wing aircrew. Additional guidance regarding non-mission related photography from aircraft and policy compliance reiteration for flight plan filing requirements are forthcoming.
4. HSM-41 has been directed to institute a more comprehensive cross-country program to ensure that out of area operations are planned and conducted with the same rigor, discipline and accountability as those of local FRS instructional flights. A clear understanding of the function and responsibility of the FRS to support pilot, aircrew and maintainer training for new and transitioning personnel has been reinforced. The numerous lessons learned for supervisors and aircrews from this incident have been formally presented to all HSM commands and will be reviewed frequently for implementation compliance.

(b)(3), (b)(6)

30 Nov 10

THIRD ENDORSEMENT on CDR (b)(6), (b)(3) , USN, ltr of 8 Oct 10

From: CDR (b)(6), (b)(3) USN

To: Commander, Helicopter Maritime Strike Wing, U.S. Pacific Fleet

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Ref: (h) CNAP letter Ser N00/1736 dated 17 Nov 10

- Encl: (46) Suspect's Rights and Acknowledgement/Statement and questionnaire
ICO CDR (b)(6), (b)(3) , USN (b)(6), (b)(3) HSM-41,
dated 22 NOV 2010
- (47) Suspect's Rights and Acknowledgement/Statement and questionnaire
ICO CDR (b)(6), (b)(3) USN (b)(3), (b)(6)
(b)(3), (b)(6) HSM-41, dated 21 NOV 2010
- (48) Summary of email interview and questionnaire with LT (b)(6), (b)(3)
(b)(6), (b)(3) USN (b)(3), (b)(6) HSM-41, dated 21 NOV
2010
- (49) Summary of phone interview and questionnaire ICO LT (b)(6), (b)(3)
USN (b)(3), (b)(6) HSM-41, dated 20 NOV 2010
- (50) Summary of Phone interview and questionnaire ICO LT (b)(6), (b)(3)
(b)(6), (b)(3) USN (b)(3), (b)(6) HSM-41, dated 20
NOV 2010
- (51) Summary of Phone interview and questionnaire ICO LT (b)(6), (b)(3)
(b)(6), (b)(3) USN (b)(3), (b)(6) HSM-
41, dated 20 NOV 2010
- (52) Copy of HSM-41 Annual Officer Training Plan
- (53) Copy of HSM-41 Standardization Board Agenda for 13 JAN and MAY
2010
- (54) HSM-41 MH-60R Instructor Under Training (IUT) Syllabus Guide
- (55) Copy of email summary of HSM-41 Safety Stand-downs and topics
covered and record of Human Factor Councils (HFC) held from LCDR
(b)(6), (b)(3) HSM-41 (b)(3), (b)(6) dated 23 NOV 10.
- (56) Copy of email citing HSM-41 completion dates of bi-annual Safety
Center surveys and cultural workshops from LCDR (b)(6), (b)(3)
CHSMWP (b)(3), (b)(6) dated 23 NOV 10
- (57) Copy of HSM-41INST 3710.2V Aircraft Standard Operating Procedures
(ASOP) dated 25 MAR 10
- (58) Summary of Out of Area Flight events in FY 10 completed by CDR
(b)(6), (b)(3) , USN, (b)(3), (b)(6) HSM-41 dated 22 NOV 10
- (59) Summary of CDR (b)(6), (b)(3) , USN (b)(3), (b)(6) HSM-41
Leave and TAD travel CY 2010

Subj: COMMAND INVESTIGATION OF THE INADVERTENT WATER LANDINGS OF HSM-41
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Preliminary Statement

1. Per reference (h) Commander, Naval Air Force, Pacific directed "additional inquiry into whether the leadership of HSM-41 played a causal role in the subject incident". As instructed, interviews were completed with the Commanding Officer, Executive Officer, Operations Officer, and former Operations Officer. Additionally, I elected to interview the Assistant Training Officer, Instructor Standardization Officer/Instructor Under Training (IUT) Phase Officer to get a perspective of the Command's climate and culture as it related to safety, instructor training, and standardization.

2. I encountered no difficulties through the course of the investigation. All relevant evidence has been reviewed and all directives of the Convening Order have been met.

4. I consulted multiple times with LCDR (b)(6) JAGC, USN during the course of the investigation. I utilized Article 31b Suspect's Rights Acknowledgement/Statement Forms for all interviews with the squadron Commanding Officer and Executive Officer. Interviews with the (b)(3), (b)(6) (b)(3), (b)(6) CDR (b)(6), (b)(3) were completed via telephone and email due to his transfer of duty to the Naval War College in Newport, Rhode Island. CDR (b)(6), (b)(3) elected to seek the advice of legal counsel prior to providing a statement. Interviews with CDR (b)(6), (b)(3), the (b)(3), (b)(6) (b)(3), (b)(6) of HSM-41 were completed via telephone and email since (b)(3), (b)(6). The interview conducted with LT (b)(6), (b)(3) was completed via email due to his transfer of duty and current assignment as an Individual Augmentee (IA) in Iraq. I requested only a Witness statement from LT (b)(6), (b)(3) and LT (b)(6), (b)(3). All Social Security Numbers were obtained from official sources.

Findings of Fact

90. In LT (b)(6), (b)(3) statement, he relayed that he did not think of the Lake Tahoe area as a possible route of flight until his conversation with LT (b)(6), (b)(3) the former (b)(3), (b)(6) on approximately 08 SEP 10, two days before they departed for the CAL CAP Airshow. [Encl (34)]

91. In LT (b)(6), (b)(3) statement he said that he did not specifically recommend Lake Tahoe or any particular route of flight to LT (b)(6) but gave multiple route options to LT (b)(6), (b)(3) in the case of poor weather. Encl [(48)]

92. Finding of Fact 90 and Finding of Fact 91 conflict in their accounts.

93. In LT (b)(6), (b)(3) statement he said that from what he recalls of the conversation with LT (b)(6), (b)(3) that the discussion was not from his position as the (b)(3), (b)(6) (which he had turned over the month

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prior) but as a peer that had been to the CAL CAP airshow in previous years. [Encl (48)]

94. Based on a review of completed Safety Stand-downs, Human Factor Councils, Safety Culture work shops and survey requirement periodicity; HSM-41's Safety Department was in compliance with mandatory Safety programs, training and reporting. [Encl (55), (56)]

95. The (b)(3), (b)(6) CDR (b)(6), (b)(3) felt proud of the Safety culture within HSM-41. He cited the command's receipt of the 2008 SECDEF and CNO Awards for Safety Excellence Ashore and the command surpassing over 150,000 mishap-free flight hours. He also stated that he had great confidence in his flight and ground safety programs and the officers who ran them. [Encl (46)]

96. The (b)(3), (b)(6) CDR (b)(6), (b)(3) felt in relation to the Safety culture of HSM-41, that the command was good at execution but needed to focus more on mission completion. Specific examples included more attention to detail on everyday tasks such as timely completion of required documentation. [Encl (47)]

97. HSM-41 did not have a Deliberate Operational Risk Management (ORM) Tool or process in place specifically for cross-country flight events. The command utilized the HSL-40/HSM-41 Flight Operations ORM worksheet, which, has a list of missions and the type of environment (VMC/IMC, day/night) expected. It is up to the Instructor Pilot to assign a risk level of "low" or "medium" for the mission of a cross-country. There is no category for "high-risk" in relation to a cross-country flight. [Encl (46), (47)]

98. The Commanding Officer felt he had a strong Instructor Standardization Program and cited as an example the holding of monthly Instructor Standardization meetings to discuss trends in FRP performance. No specific documentation was available to list dates or topics discussed. [Encl (46)]

99. The Executive Officer felt that the command had a strong Standardization Program with a recent update to the Instructor Under Training (IUT) syllabus and initiatives such as the Flight Leader concept that were being adopted to aid in quality production and standardization. [Encl (47)]

100. HSM-41 Standardization Board Agendas for January and May 2010 did not cover cross-country or out of area training flights. [Encl (53)]

101. HSM-41's Annual Officer Training Plan does not cover cross-country requests/flight procedures, out of area flight procedures, performance calculations, or flight in high elevation/mountainous terrain. [Encl (52)]

102. HSM-41's Instructor Under Training (IUT) Syllabus Guide does not address cross-country training flights or the compatibility of MH-60R

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training syllabus events with cross-country flights for new Instructor Pilots. [Encl (54)]

103. HSM-41 did not have a command policy, written or unwritten, concerning the practice of taking in-flight pictures or photography for non-mission related interests. [Encl (46), (47), (49), (50), (51)]

104. The Commanding Officer and Executive Officer were both aware of the practice of taking candid, non-staged pictures in flight by HSM-41 aircrews. [Encl (46), (47)]

105. The CO did encourage the posting of pictures on the command's official Facebook website from events in which the squadron participated in such as air shows, re-enlistments and community outreach projects. [Encl (46)]

106. The CO maintained what he considered tight control on who had authority to post pictures on the Facebook site. Authority was limited to CO, XO, Public Affairs Officer and a command IT professional. [Encl (46), (47)]

107. Pictures posted on the official HSM-41 website concerning air show events were limited to static displays with aircrew members and event participants. [Encl (46), (47)]

108. It was common practice to not wear personal aircrew survival /flotation vests during out of area, overland flights such as ferry flights, cross-country flights, and training detachments to El Centro, CA. [Encl (46), (47), (49), (50), (51)]

109. The CO and XO had both flown overland without wearing their personal survival/flotation vests. [Encl (46), (47)]

110. It was not considered common practice to fly without completing a NATOPS Brief, ORM brief sheet or performance calculations. [Encl (46), (47), (49), (50), (51)]

111. It was not unheard of, prior to the mishap of 13 Sep 10, for cross-country flight return legs to depart without filing a flight plan. The rationalization was that the cross-country flight was listed on the HSM-41 flight schedule. [Encl (49), (50)]

112. HSM-41 participated in approximately 25 cross-country flight events for calendar year 2010. [Encl (46)]

113. There was a general perception that weekend cross-country flights had become routine. [Encl (49), (50), (51)]

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114. The Commanding Officer was a major proponent of the squadron's participation in cross-country flights and airshow events for the following reasons:

- A. They kept Instructor Pilots motivated by offering them an opportunity to go on cross-country flight and participate in air shows;
- B. It offered Instructors and students the opportunity to enhance their professional aviation competency by experiencing flying outside the local area;
- C. It supported CNO Diversity goals through the participation in CHINFO sponsored events (recruiting, ROTC, community outreach); and
- D. It created an opportunity to promote the aviation community and recruit from within our own ranks. [Encl (46)]

115. HSM-41 (b)(3), (b)(6), CDR (b)(6), (b)(3) participated in multiple cross-country and Out/In flight events in 2010. [Encl (46), (58)]

116. The (b)(3), (b)(6) CDR (b)(6), (b)(3) had previously participated in the "Lake in the Sky" airshow in South Lake Tahoe Airport in August 2009. [Encl (46)]

117. The (b)(3), (b)(6) CDR (b)(6), (b)(3) en-route to the 2009 South Lake Tahoe air show did fly over Lake Tahoe at an altitude of approximately 200 feet but stated he did not take in-flight pictures or perform an out of ground effect hover over the water. [Encl (46)]

118. LT (b)(6), (b)(3) confirmed that during his flight with the Commanding Officer over Lake Tahoe that he did not recall any in-flight pictures being taken or a hover of the aircraft over the water. [Encl (48)]

119. HSM-41 participated in the 2010 Lake in the Sky air show at Lake Tahoe Airport 28 Aug, approximately two weeks prior to the mishap. [Encl (46), (47)]

120. Other than the aforementioned "Lake in the Sky" airshow in South Lake Tahoe, the Commanding Officer did not know of any other flights of HSM-41 aircraft in the Lake Tahoe area. [Encl (46)]

121. Neither the Commanding Officer nor Executive Officer was aware of the mishap crew's route of flight over the Lake Tahoe area. [Encl (46), (47)]

122. In follow-up questions with the (b)(3), (b)(6) CDR (b)(6), (b)(3) (b)(6), (b)(3) she was asked if there were any particular flight event or action of the Commanding Officer that may have been construed as non-

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standard to the wardroom. She cited two out of area flight events, which included the (b)(3), (b)(6) CDR (b)(6), (b)(3) that were perceived as non-standard in their execution.

A. The first example was a cross-country flight to Monterey, CA in 2009, where it was perceived that the CO violated weather minimums for VFR flight.

B. The second was an Out/In flight to Santa Barbara, CA where it was perceived that the CO mismanaged fuel requirements necessitating an unplanned divert for fuel to PT Mugu, CA and the returning of the aircraft 3 hours later than scheduled. Encl [(47)]

123. During follow-up questions concerning the perceived non-standard actions by the (b)(3), (b)(6) CDR (b)(6), (b)(3) he provided the following:

A. During the Monterey, CA cross-country in 2009. "We were flying IFR but cancelled and continued VFR. We were proceeding to Santa Maria Airport. Weather was getting worse but the tower had reported that helicopter traffic had been flying in the area." He stated that he "pushed to get to the airfield." They went below the cloud layer in an attempt to fly into the airport but as they approached, the terrain began to rise as the ceiling came down. They did go inadvertent IMC for a few seconds. They made their way back to VFR conditions, regrouped and discussed their options and ultimately aborted the flight. He stated that admittedly he was aggressive to try and make it into the airfield but once their options were exhausted they aborted the mission.

B. During the Santa Barbara Out/In flight of April 2010, "Our primary aircraft went down and our back-up bird only had 2500 lbs of fuel (just over a half tank). I thought we had enough fuel to reach Santa Barbara and Point Mugu was an intended delay for practice approaches along the route. Once we got to Point Mugu for our approaches we had used more fuel than planned due to a headwind component so, I elected to stop for fuel prior to proceeding on to Santa Barbara. I had my NC1 on board as a passenger and this was a requested flight to do her re-enlistment. I decided to continue on to Santa Barbara, complete the re-enlistment, and eat a meal then return to the squadron. I do not recall if there was a flight scheduled after mine." [Encl (46)]

124. Finding of Fact 122 and Finding of Fact 123 conflict in their accounts.

125. There was a general perception among Instructor Pilots that there was little leadership oversight and control both at the mid-level Lieutenant Commander Level (OP-T Department Heads) and the senior leadership (CO/XO) in place for cross-country flights events. [Encl (48), (49), (50), (51)]

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126. Neither the CO nor XO were aware that the CAL CAP airshow cross country request package had not been received by CHSMWP until two days before the event and had to be hand-carried to the Wing for approval. [Encl (46), (47)]

127. The expectation from the CO and XO was that if there was an airshow or cross-country event that an Instructor Pilot (IP) wanted to participate in, that the IP was fully entrusted with the safe and efficient completion of the event. The Instructor was expected to do all the research, flight planning, review of compatible syllabus training events, and routing of the cross-country request in accordance with the CHSMWP cross-country instruction. [Encl (46), (57)]

128. The CO was not aware of the actual route of flight planned by the mishap crews as it differed from their cross-country request form. His expectation was that any changes from what had been approved would be brought to his attention. [Encl (46)]

129. The CO "did not review specific details of each cross-country flight plan." He did expect to be notified of all take-offs and landings. [Encl (46)]

130. There were no command specific controls in place for Instructor Pilots who wanted to participate in cross-country or airshow events other than what is delineated in the CHSMWP cross-country instruction. [Encl (46), (47)]

131. There was no requirement or expectation that an Instructor Pilot needed to personally brief his/her plan of action to any member of the Chain of Command for the planning, route of flight and execution of a cross-country or airshow event. Encl [(46), (47)]

132. While both the CO and XO reviewed and signed the CAL CAP airshow cross-country request form, neither the CO nor XO personally briefed the aircrews of the CAL CAP airshow on their expectations. The CO stated that he thought his expectations were well known. Encl [(46), (47)]

133. Neither the CO nor XO at the time of the CAL CAP airshow cross-country request, were aware that two members of the mishap crews were from the Sacramento, CA area. The XO did state that she recalled later that LT (b)(3), (b)(6) was from the area. Encl [(46), (47)]

134. There was a general perception in the wardroom among Instructor Pilots that the (b)(3), (b)(6) CDR (b)(6), (b)(3), USN was personally absent from the squadron often towards the end of his command tour, either on leave or TAD away from the command. They viewed this as disinterest in the general day-to-day operations of the squadron and at times as a hindrance in the completion of routine tasks that required his notification or signature. [Encl (49), (50), (51)]

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135. The (b)(3), (b)(6) CDR (b)(6), (b)(3) was aware of the perception that he was absent often from the command. He felt that he showed a good example to his sailors by taking time off to spend with family and to participate in conferences and cross-country events. He also stated that he conferred with his ISIC, CHSMWP Commodore; concerning his time away from the squadron and that he continued to meet his Commodore's expectation for staying in communications with his Executive Officer and the Wing when away. Encl [(46)]

136. Administrative record of HSM-41's (b)(3), (b)(6) CDR (b)(6), (b)(3) (b)(6), (b)(3). USN TAD/leave dates away from the squadron for 2010: [Encl (59)]

A. 2010 Leave:

1. 01 to 10 APR
2. 21 to 22 JUN
3. 01 to 15 JUL
4. 16 to 23 AUG

B. 2010 TAD:

1. 29 to 31 MAR San Antonio, TX- CNATRA Production Alignment Conference
2. 24 to 26 MAY Jacksonville, FL- Naval Helicopter Association Symposium
3. 17 to 18 JUN Great Lakes, IL- Recruit Division sponsorship
4. 08 to 09 AUG Tucson, AZ- Delivery of Aircraft to Boneyard
5. 11 to 12 AUG Monterey, CA- McCall Motorworks Airshow

137. There was a general perception in the Wardroom that the CO and XO did not get along personally and that there were barriers to communication. There were no specific examples given as to why they felt that way. Encl [(49), (50), (51)]

138. The (b)(3), (b)(6) CDR (b)(6), (b)(3) expressed that she maintained a professional relationship with the CO and that the CO had a strong sense of how he wanted to run the squadron and that he did not solicit input from others. Encl [(47)]

139. The Commanding Officer and Executive Officer both expressed challenges with their OP-T Department Heads. While they noted them as well-intentioned officers, they often felt disadvantaged with their lower level of flight experience, personal performance, and leadership skills when compared to a Wardroom full of front running Lieutenants. Encl [(46), (47)]

140. Cross country request forms were scrutinized in the Operations Department only for flight hour execution and crew assignment not the actual type of training syllabus events that were to be completed. [Encl (49)]

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141. The 10-13 Sep 10 CAL CAP air show cross-country request form routed by LT (b)(6), (b)(3), USN was not routed through the HSM-41 Training Department for a review of proposed training syllabus events and their compatibility with the route of flight. [Encl (2)]

Opinions

20. HSM-41 had a robust weekend cross-country participation culture. There were many professional benefits to the program as it related to HSM-41. The emphasis in cross-country flights was multi-tiered in that they supported CHINFO endorsed recruiting events, aided in CNO's Diversity efforts, provided professional enrichment for Aircrews and could be completed in concert with production goals. [FF (114), (115)]

21. HSM-41 did not have adequate controls in place to manage the command's expectations for the execution of cross-country flight events. [FF (97), (125), (126), (127), (129), (130), (131), (132), (133), (139), (141)]

22. HSM-41 perceived weekend cross-country flights as routine and therefore, did not consider adding a deliberate Operational Risk Management (ORM) tool or process to aid in the identification of potential hazards and aid in the adherence to standards. [FF (97)]

23. HSM-41 Commanding Officer and Executive Officer did not provide enough personal oversight in the planning and execution of flight events that departed the local San Diego area. While the CAL CAP airshow cross-country administrative request was routed and approved, there was no one in the HSM-41 chain of command either at the Department Head Level or Command level that personally briefed the crews, reviewed the route of flight or set the command expectations. [FF (127), (129), (131), (134)]

24. The CO and XO both expressed multiple challenges with the caliber of their OP-T Department Heads. The CO and XO felt at a disadvantage in that many issues that they had to commonly deal with could and should have been resolved at the Department Head level but were routinely elevated to the CO/XO. This took valuable time away from the CO/XO that could have been applied elsewhere within the command. [FF (125), (131), (139)]

25. There were two examples given of what was considered non-standard actions in flight by the (b)(3), (b)(6) CDR (b)(6), (b)(3). Specifically, a cross-country flight to Monterey and an Out/In flight to Santa Barbara. During a follow-up interview, the CO had a reasonable explanation of the two examples and while they were both out of the ordinary, there was no reason to believe that he purposely violated any standard. [FF (122), (123), (124)]

26. The CO's flight at 200 ft AGL over Lake Tahoe en route to the 2009 "Lake in the Sky" airshow was not within the intent of Section O-9 of

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CHSMWP SOP Low-Level Flight Procedures. There was no valid training or operational reason to fly below the prescribed minimum altitude as required by reference (e). [FF (117), (118)]

27. The mishap crews were aware of prior HSM-41 flights to the South Lake Tahoe airport "Lake in the Sky" airshow, and likely rationalized that a flight route over Lake Tahoe was not out of the ordinary. [FF (33), (34), (112), (114), (115), (116), (119)]

28. There was encouragement and a well-known expectation developed by the Commanding Officer to document with pictures, events participated in by the squadron to include airshow static displays, re-enlistments and community relation projects. Many of these pictures were posted on the command's Facebook web page. There was no expectation or previous examples that could be found of cross-country crews staging in-flight pictures for use on the command's official Facebook web page. [FF (103), (104), (105), (106), (107)]

29. The command climate fostered by the Commanding Officer at HSM-41 during the time leading up to the CAL CAP Airshow was a contributing factor to the mishap of 13 Sep 10. Specifically, the lack of command oversight in the planning and execution of cross-country flight events, perception of disinterest by the Commanding Officer, CO's participation in multiple air show events (including Lake Tahoe), and the commonly known practice of taking pictures in flight all contributed to the mishap crews misperception of what was acceptable. [FF (103), (104), (105), (111), (112), (113), (114), (125), (126), (127), (128), (129), (130), (131), (132), (133), (134), (135), (140), (141)]

Recommendations

6. For HSM-41, recommend a review of the FRS pilot/aircrew training syllabus to identify training events that are compatible with cross-country flights.

7. For HSM-41, recommend the formulation of a deliberate Operational Risk Management process for the review and hazard identification of future cross-country flight events.

8. For HSM-41, recommend the addition of the Training Department Head to the routing forms of future cross-country flight requests in order to add a layer of oversight and scrutiny.

9. To date, HSM-41 Instructor Standardization meetings have been an informal forum for discussing student trends and Instructor techniques. For HSM-41, recommend the adoption of a more formal Instructor Standardization meeting process with a feedback mechanism to adopt lessons learned and to maintain a record of the proceedings.

Subj: COMMAND INVESTIGATION OF THE INADVERTENT WATER LANDINGS OF HSM-41
AIRCRAFT BUNO #166533 AND BUNO #166520 ON 13 SEPTEMBER 2010

10. For HSM-41, recommend the submission of a change to OPNAVINST 3710 series to clarify in simple terms the required use and wear of personal survival/flotation vests for helicopter crews.
11. For HSM-41, recommend cross-country flight topics be added to the Annual Officer Training Plan and Instructor Under Training (IUT) Syllabus.
12. For CHSMWP, recommend adopting a Standard Aircraft Operating Procedure policy on photography and the taking of non-mission related pictures from squadron aircraft.
13. For CHSMWP, recommend further exploration into the performance of OP-T Department Heads within Fleet Replacement Squadrons and whether these billets should be filled by only top performing officers.
14. Although process improvement is warranted, disciplinary action is not recommended against any member of the chain of command as a result of the subject incident.

(b)(6), (b)(3)

CDR USN



DEPARTMENT OF THE NAVY
COMMANDER NAVAL AIR FORCE, PACIFIC
BOX 357051
SAN DIEGO, CALIFORNIA 92135-7051

5830
Ser N00/1736
17 Nov 10

SECOND ENDORSEMENT on CDR (b)(6), (b)(3) , USN, ltr of 8 Oct 10

From: Commander, Naval Air Force, Pacific
To: Commander, Helicopter Maritime Strike Wing, U.S. Pacific
Fleet

Subj: COMMAND INVESTIGATION OF THE INADVERTENT WATER LANDINGS
OF HSM-41 AIRCRAFT BUNO #166533 AND #166520 ON 13 SEP 10

1. Returned for additional inquiry into whether the leadership of HSM-41 played a causal role in the subject incident.
2. I am particularly interested in the command's safety culture and the Commanding Officer's influence on the exercise of safety oversight. This case dictates that we ensure a complete investigation, a good process for accountability review, corrective action, and future preventative measures as warranted. In light of the foregoing, investigate the performance, training, and doctrine of HSM-41 as it relates to the inadvertent water landings of BUNO #166533 and #166520 on 13 September 2010. Specifically, the additional inquiry should include interviews of the Commanding Officer, Executive Officer, Operations Officer and any other members of the operational chain of command as may be required to accurately assess accountability, level of supervision and adherence to policy and standard operating procedures. Report your findings of fact, opinions and recommendations in letter form by 1 December 2010, unless an extension of time is granted.


A. G. MYERS

Copy to:
CDR (b)(6), (b)(3)



DEPARTMENT OF THE NAVY
COMMANDER
HELICOPTER MARITIME STRIKE WING
U.S. PACIFIC FLEET
P.O. BOX 357137
SAN DIEGO, CALIFORNIA 92135-7137

5830
Ser 00/249
10 Nov 10

FIRST ENDORSEMENT on CDR (b)(6), (b)(3) , USN, ltr of 8 Oct 10

From: Commander, Helicopter Maritime Strike Wing, U.S. Pacific Fleet
To: Commander, Naval Air Force, Pacific

Subj: COMMAND INVESTIGATION OF THE INADVERTENT WATER LANDINGS
OF HSM-41 AIRCRAFT BUNO #166533 AND #166520 ON 13 SEP 10

1. Forwarded, I concur with the findings of fact, opinions, and recommendations of the Investigating Officer. The following is a brief summary of relevant facts:

At approximately 1040, 13 September 2010, two MH-60R helicopters assigned to Helicopter Maritime Strike Squadron FOUR ONE (HSM-41) attempted unplanned hovers inside Emerald Bay, Lake Tahoe at 70 feet above ground level and shortly thereafter began to settle inadvertently into the water. After touching down in the lake, each aircraft regained sufficient power to once again take flight and safely landed at a nearby airfield. It will cost \$505,751 to repair both aircraft.

2. HSM-41 has already addressed the recommendations provided in the investigation report. Punitive action is not recommended; however, appropriate measures were taken for each member of the aircrew. The actions of all aviators in this matter are currently under examination by Field Naval Aviator Evaluation Boards.

4. My point of contact is Mr. (b)(6) He may be reached at
(b)(6) or by E-mail at (b)(6)

(b)(3), (b)(6)

Copy to:
CDR (b)(6), (b)(3)

45196

8 October 2010

From: CDR (b)(6), (b)(3) USN
To: Commander, Helicopter Maritime Strike Wing, U.S. Pacific Fleet
Subj: COMMAND INVESTIGATION OF THE INADVERTENT WATER LANDINGS OF HSM-41
AIRCRAFT BUNO #166533 AND BUNO #166520 ON 13 SEPTEMBER 2010

Ref: (a) JAGMAN
(b) OPNAV 3710.7U NATOPS General Flight and Operating Instruction dated 23 NOV 2009
(c) NATOPS Flight Manual Navy Model MH-60R Helicopter A1-H60RA-NFM-000 dated 01 JUN 2008, Change 1 15 APR 2009
(d) COMHSMWINGPACINST 3710.3 Cross-Country, Fly-Over/Aerial Demonstrations, Orientation Flights, Static Displays, and Dependents/Tiger/Family Day Flight Demonstrations dated 29 JUL 05
(e) CHSMWPINST 3710.7B/COMHSMWLINST 3710.1B Helicopter Maritime Strike (HSM) Aircraft Standard Operating Procedures dated 16 JUN 10
(f) HSM41INST 3710.2V Aircraft Standard Operating Procedures dated 25 MAR 10
(g) HSM-41INST 3710.5H HSM-41 Normal and Emergency Maneuver Description Guide dated 12 MAY 09

Encl: (1) Convening Order, dated 27 SEP 10
(2) Copy of Cross Country flight Request from CO HSM-41 to CHSMWP
(3) Witness Statement from LT (b)(6), (b)(3) USN, HSM-41 (b)(3), (b)(6) (b)(3), (b)(6) dated 28 SEP 10
(4) Witness Statement from LT (b)(6), (b)(3) , USN, CHSMWP (b)(3), (b)(6) (b)(3), (b)(6) dated 29 SEP 10
(5) Copy of email from LT (b)(6), (b)(3) CHSMWP (b)(3), (b)(6) to LT (b)(6), (b)(3) LT (b)(3), (b)(6) CC: LT (b)(6), (b)(3) HSM-41 (b)(3), (b)(6) and LT (b)(6), (b)(3) HSM-41 (b)(3), (b)(6) dated 09 SEP 10
(6) Memorandum from JAGMAN Investigating Officer documenting Mishap Crews Flight Time Summary dated 28 SEP 10
(7) Copies of NATOPS Flight Personnel Training/Qualification Jacket Documents ICO LT (b)(6), (b)(3) , USN, HSM-41
(8) Copies of NATOPS Flight Personnel Training/Qualification Jacket Documents ICO LT (b)(6), (b)(3) USN, HSM-41
(9) Copies of NATOPS Flight Personnel Training/Qualification Jacket Documents ICO LT (b)(6), (b)(3) USN, HSL-45
(10) Copies of NATOPS Flight Personnel Training/Qualification Jacket Documents ICO LTJG (b)(6), (b)(3) USN, HSM-41
(11) Copies of NATOPS Flight Personnel Training/Qualification Jacket Documents ICO LTJG (b)(6), (b)(3) USN, HSM-41
(12) Copies of NATOPS Flight Personnel Training/Qualification Jacket Documents ICO LTJG (b)(6), (b)(3) USN, HSM-41
(13) Copies of NATOPS Flight Personnel Training/Qualification Jacket Documents ICO AWR1 (b)(6), (b)(3) USN, HSM-41
(14) Copies of NATOPS Flight Personnel Training/Qualification Jacket Documents ICO AWR2 (b)(6), (b)(3) , USN, HSM-41

Subj: COMMAND INVESTIGATION OF THE INADVERTENT WATER LANDINGS OF HSM-41
AIRCRAFT BUNO #166533 AND BUNO #166520 ON 13 SEPTEMBER 2010

- (15) Copy of HSM-41 Flight Schedule dated 10 SEP 10
- (16) Witness Statement from LT (b)(6), (b)(3) . USN, HSM-41 (b)(3), (b)(6)
(b)(3), (b)(6) dated 29 SEP 10
- (17) Copies of HSM-41 Tactical Syllabus Grade sheets (TAC-5, TAC-6)
- (18) Copy of DD FORM 175 Flight Plan dated 10 SEP 10
- (19) Copy of LT (b)(6), (b)(3) kneeboard card, Flight Performance
Calculations utilized on 10 SEP 10
- (20) Copy of CHSMWPINST/CHSMWLINST 3500.9 HSL-40/HSM41 Flight
Operations ORM Worksheet completed 10 SEP 10
- (21) Copy of Weight and Balance Clearance Form F- Tactical for
BUNO 166533
- (22) Copy of Weight and Balance Clearance Form F- Tactical for
BUNO 166520
- (23) Copy of Aircraft Discrepancy Book (ADB) BUNO 166533, MODEX 413
- (24) Copy of Aircraft Discrepancy Book (ADB) BUNO 166520, MODEX 416
- (25) Copy of HSM-41 Flight Schedule dated 11SEP10 through 13 SEP 10
- (26) Copy of Aviation MDR, DTG: 280222ZSEP10
- (27) Compact Disc (CD) containing copy of "You Tube" video of HSM-41
mishap on 13 SEP 2010
- (28) Compact Disc (CD) containing pictures to document Post Mishap
damage to BUNO 166520 and BUNO 166533
- (29) Compact Disc (CD) containing HSM-41 NALCOMIS System Back-up dated
13 SEP 2010
- (30) Suspect's Rights and Acknowledgement/Statement ICO LTJG (b)(6), (b)(3)
(b)(6), (b)(3)USN dated 29 SEP 2010
- (31) Suspect's Rights and Acknowledgement/Statement ICO LTJG (b)(6), (b)(3)
(b)(6), (b)(3) USN dated 29 SEP 2010
- (32) Suspect's Rights and Acknowledgement/Statement ICO AWR1 (b)(6), (b)(3)
(b)(6), (b)(3), USN dated 29 SEP 2010
- (33) Suspect's Rights and Acknowledgement/Statement ICO LT (b)(6), (b)(3)
(b)(6), (b)(3) USN dated 30 SEP 2010
- (34) Suspect's Rights and Acknowledgement/Statement ICO LT (b)(6), (b)(3)
(b)(6), (b)(3) USN dated 30 SEP 2010
- (35) Suspect's Rights and Acknowledgement/Statement ICO LT (b)(6), (b)(3)
(b)(6), (b)(3) USN dated 30 SEP 2010
- (36) Suspect's Rights and Acknowledgement/Statement ICO LTJG (b)(6), (b)(3)
(b)(6), (b)(3) USN dated 29 and 30 SEP 2010
- (37) Suspect's Rights and Acknowledgement/Statement ICO AWR2 (b)(6), (b)(3)
(b)(6), (b)(3) USN dated 01 OCT 2010
- (38) Witness Statement of ATAN (b)(6), (b)(3) USN, dated 01 OCT 10
- (39) Witness Statement of AM2(b)(6), (b)(3)USN, dated 01 OCT 10
- (40) Los Angeles Sectional Aeronautical Chart Scale, 1:500,000 and Los
Angeles VFR Terminal Area Chart Scale 1:250,000
- (41) San Francisco Sectional Aeronautical Chart, Scale 1:500,000 and
San Francisco VFR Terminal Area Chart, Scale 1:250,000
- (42) Pictures of Aircraft 416 hovering in front of Golden Gate
Bridge on 10 SEP 10, provided by AWR2 (b)(6), (b)(3)
- (43) Pictures of Aircraft 413 in Emerald Bay, Lake Tahoe just prior to
mishap on 13 SEP 10 provided by LTJG (b)(6), (b)(3)

Subj: COMMAND INVESTIGATION OF THE INADVERTENT WATER LANDINGS OF HSM-41
AIRCRAFT BUNO #166533 AND BUNO #166520 ON 13 SEPTEMBER 2010

- (44) Investigating Officer's Post Mishap Performance Calculations dated 30 SEP 10
- (45) Investigating Officer's depiction of Emerald Bay and approximate aircraft positions based from statements and hand drawn figures by LT (b)(6), (b)(3) USN and LT (b)(6), (b)(3) USN

Preliminary Statement

1. Per reference (a) and pursuant to enclosure (1), this reports the completion of the Command Investigation into the circumstances leading to the inadvertent water landing of HSM-41 Aircraft BUNO 166533 and BUNO 166520 on 13 September 2010.

2. I encountered no difficulties through the course of the investigation. All relevant evidence has been reviewed and all directives of the Convening Order have been met.

3. I consulted multiple times with (b)(6) LCDR (b)(6) (b)(6) JAGC during the course of the investigation. I also consulted with LT (b)(6), (b)(3) USN, HSM-71's (b)(3), (b)(6) for a review of my post mishap performance calculations [Encl (44)]. I utilized Article 31b Suspect's Rights Acknowledgement/Statement Forms for all interviews with mishap pilots and aircrewmembers. LTJG (b)(6), (b)(3) elected to evoke his right to have counsel present during questioning and he obtained the services of LTJG (b)(6) JAGC, from NASNI NLSO. I requested only a Witness statement from the two passengers. All Social Security Numbers were obtained from official sources.

4. For the organization of this report I have placed all enclosures, findings of fact, and opinions in chronological order to aid in the understanding of events as they unfolded.

Findings of Fact

1. LT (b)(6), (b)(3) submitted a CHINFO approved airshow cross-country and static display request form IAW Ref(d) to the HSM-41 chain of command on 16 AUG 2010. [Encl (2), (4)]

2. The intended flight plan provided with LT (b)(6), (b)(3) airshow cross-country and static display request consisted of the following:

- a. 10 SEP 10- VFR flight plan from NAS North Island (KNZY) to Bakersfield (KBFL), distance 188 miles, 2+00 time en route, stop for fuel.
- b. 10 SEP 10- VFR flight plan from Bakersfield (KBFL) to Mather Airfield (KMHK), distance, 215 miles, 2+00 en route, remain overnight.
- c. 13 SEP 10- VFR flight plan from Mather Airfield (KMHK) to Santa Barbara (KSBA), distance, 257 miles, 2+00 en route, stop for fuel.
- d. 13 SEP 10- VFR flight plan from Santa Barbara (KSBA) to NAS North Island (KNZY), distance 167 miles, 2+00 time en route, Return to Base. [Encl (2)]

Subj: COMMAND INVESTIGATION OF THE INADVERTENT WATER LANDINGS OF HSM-41
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3. The only flight crew personnel listed on the cross-country request form were the Aircraft Commanders for each aircraft, LT (b)(6), (b)(3) and LT (b)(6), (b)(3). All other crew positions were listed as TBD. [Encl (2)]
4. LT (b)(6), (b)(3) was later replaced by LT (b)(6), (b)(3) USN, as an Aircraft Commander for one of the aircraft. [Encl (34)]
5. Included in the cross-country request package was LT (b)(6), (b)(3) plan for the secure storage of aircraft classified PCMCIA cards. The form stated that the 168th AV Regiment, National Guard H-60 Unit out of Mather Airfield had agreed to store the PCMCIA cards. [Encl (2)]
6. The CAL CAP Airshow cross-country flight and static display request was signed by HSM-41 (b)(3), (b)(6) CDR (b)(6), (b)(3) on 24 AUG 2010 and routed to CHSMWP for final approval IAW Ref (d). [Encl (2)]
7. On Tuesday 07 SEP 10 HSM-41 (b)(3), (b)(6) LT (b)(6), (b)(3) had not received the final CAL CAP cross country approval from CHSMWP and wrote an email to LT (b)(6), (b)(3) CHSMWP (b)(3), (b)(6) to inquire if the request had been approved. [Encl (3)]
8. On Wednesday morning 08 SEP 10, LT (b)(6), (b)(3) CHSMWP (b)(3), (b)(6) (b)(3), (b)(6) informed HSM-41 (b)(3), (b)(6) LT (b)(6) that the CAL CAP airshow cross-country request had not been received. [Encl (3), (4)]
9. At approximately 1500 Wednesday 08 SEP 10, LT (b)(6), (b)(3) hand carried the CAL CAP cross country request to LT (b)(6), (b)(3) CHSMWP (b)(3), (b)(6) for Commodore CHSMWP approval. [Encl (3), (4), (34)]
10. LT (b)(6), (b)(3) did not modify the intended route of flight or crewmembers assigned in the airshow cross-country request. [Encl (34)]
11. On Thursday morning 09 SEP 10, LT (b)(6), (b)(3) hand carried the HSM-41 CAL CAP cross-country request to CAPT (b)(6), (b)(3), CHSMWP (b)(3), (b)(6) for signature and final approval (Commodore was out of town on official TAD orders). [Encl (2), (4)]
12. At 1004 Thursday 09 SEP 10, LT (b)(6), (b)(3) sent an email to LT (b)(6), (b)(3), LT (b)(6), (b)(3) CC: LT (b)(6), (b)(3) and LT (b)(6), (b)(3) to notify them that the CAL CAP Airshow cross-country had been approved. [Encl (3), (4), (5), (34)]
13. By approximately 1545 on Thursday 09 SEP 10, HSM-41's flight schedule for Friday 10 SEP had been routed and signed by the Commanding Officer, which provided two MH-60R aircraft for the California Capital (CAL CAP) Airshow located at Mather Airport near Sacramento, CA. [Encl (3), (15)]

Subj: COMMAND INVESTIGATION OF THE INADVERTENT WATER LANDINGS OF HSM-41
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14. All Mishap Pilot and Aircrewmembers NATOPS Flight Personnel Training/Qualification Jackets reflected at least the minimum required qualifications for the missions scheduled and positions assigned from 10 - 13 SEP 10. [Encl (7), (8), (9), (10), (11), (12), (13), (14)]

15. All Mishap Pilots and Aircrewmembers were considered current for minimum flight hours required to accomplish the assigned missions scheduled from 10-13 SEP 10. [Encl (6)]

16. The two HSM-41 aircraft assigned for the cross-country flight to/from the CAL CAP airshow were Aircraft 413 BUNO 166533 and Aircraft 416 BUNO 166520. [Encl (6), (18), (19), (20), (21), (22), (33), (34)]

17. The flight crew for Aircraft 413 BUNO 166533 was LT (b)(6), (b)(3) USN, HSM-41 Helicopter Aircraft Commander; LTJG (b)(6), (b)(3) USN copilot/observer; HSM-41 CAT I Fleet Replacement Pilot (FRP); LT (b)(6), (b)(3) (b)(6), (b)(3), USN, copilot/observer, HSL-45 CAT II Fleet Replacement Pilot; AWR2 (b)(6), (b)(3), USN, Sensor Operator, HSM-41; ATAN (b)(6), (b)(3) (b)(6), (b)(3) USN, passenger. [Encl (6), (15), (20), (25)]

18. The flight crew for Aircraft 416 BUNO 166520 was LT (b)(6), (b)(3) USN, HSM-41 Helicopter Aircraft Commander; LTJG (b)(6), (b)(3) USN, copilot/observer, HSM-41 CAT I Fleet Replacement Pilot; (b)(6), (b)(3) (b)(6), (b)(3) USN, copilot/observer, HSM-41 CAT I Fleet Replacement Pilot, AWR1 (b)(6), (b)(3) USN, Sensor Operator, HSM-41; AM2 (b)(6), (b)(3) USN, passenger. [Encl (6), (15), (20), (25)]

19. At approximately 1400 on 09 SEP all Mishap Pilots (LT (b)(6), (b)(3), LT (b)(6), (b)(3), LT (b)(6), (b)(3), LTJG (b)(6), (b)(3), LTJG (b)(6), (b)(3) and LTJG (b)(6), (b)(3) met in HSM-41 Wardroom for flight planning and drafted a flight plan from NAS North Island to Mather Airfield near Sacramento. [Encl (30), (33), (34), (35), (36)]

21. At the 09 SEP 10 flight planning meeting, there was discussion among the pilots for return routes from Sacramento to NAS North Island, but no definitive route of flight was determined or return flight plan drafted. [Encl (30), (33), (34), (35), (36)]

22. At the 09 SEP 10 flight planning meeting, there was no discussion of flight in the Lake Tahoe area. [Encl (30), (33), (34), (35), (36)]

23. Late afternoon on 09 SEP LT (b)(6), (b)(3) had a discussion with another HSM-41 squadron Instructor Pilot, LT (b)(6), (b)(3) concerning his route of flight to/from Sacramento. LT (b)(6), (b)(3) had participated in the CAL CAP Airshow in 2009. It was during this discussion that LT (b)(6), (b)(3) made his first reference to flight in the Lake Tahoe area as a possible return route through the Sierra Mountain range. [Encl (34)]

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24. The 10 SEP 10 HSM-41 Flight schedule listed the Mishap crews as independent events 7 and 8 respectively and not as a formation flight. [Encl (15), (16)]
25. The 10 SEP 10 HSM-41 Flight schedule did not identify a flight leader for events 7 and 8. [Encl (15), (16)]
26. There was no training requirement or intention by the HSM-41 Operations Department for the Mishap aircrews to fly in formation to/from the CAL CAP Airshow in Sacramento, CA. [Encl (15), (16), (17)]
27. The Mishap aircrews and passengers all mustered at approximately 0800 on 10 SEP 10 in the HSM-41 Briefing space per the HSM-41 Flight Schedule for preflight briefing. [Encl (15), (30), (31), (32), (33), (34), (35), (36), (37), (38), (39)]
28. At the pre-flight briefing on 10 SEP 10 the Mishap Aircrew completed a NATOPS Brief, Formation Brief, Weather Brief, Operational Risk Management (ORM) Brief, and reviewed NOTAMS. [Encl (30), (32), (33), (34), (35), (36), (37)]
29. At the pre-flight briefing on 10 SEP 10, LT (b)(6),(b)(3) identified himself as the Flight Leader for Aircraft 413 and 416. [Encl (33), (34), (35)]
30. On 10 SEP 10 preflight briefing, the Flight Operations ORM Worksheet listed Lake Tahoe Airport in the route of flight for the return leg to NASNI. [Encl (20), (33)]
31. On 10 SEP 10, the Flight Operations ORM Worksheet listed the "3 Highest Risks" for the flight as "1. Mid Air, 2. CFIT, 3. Flight Violation". There was no mention of high altitude or mountainous terrain flight. [Encl (20)]
32. On 10 SEP 10 the Mishap crews filed a combined VFR flight plan listing both Aircraft 413 and 416. [Encl (18)]
33. On 10 SEP 10, the Mishap crews completed performance calculations. [Encl (19)]
34. On 10 SEP 10 the route of flight flown from NAS North Island to Mather Airfield was the following:
 - a. Leg 1- NAS North Island north up the coast to Los Angeles turn inland towards Bakersfield to Fresno
 - b. Leg 2- Fresno westbound towards Monterey to the coast, northbound up the coast to San Francisco Bay, northeast towards Sacramento to Mather Airfield [Encl (18), (30), (33), (34), (35), (36), (40), (41)]

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35. During the second leg of the 10 SEP 10 flight to Mather Airfield, Aircraft 413 and 416 pulled into a hover in front of the Golden Gate Bridge for the purposes of taking a picture of the aircraft with the bridge in the background. [Encl (32), (33), (34), (35), (36), (37), (38), (39), (42)]

36. LT (b)(6), (b)(3) in his witness statement of 30 SEP 10 remarked that "there was a sense of needing to take plenty of pictures of the aircraft for the PAO and HSM-41 Facebook page. This attitude seemed to continue the entire weekend, during the flight and airshow." [Encl (35)]

37. At approximately, 1730 on 10 SEP 10 Aircraft 413 and 416 arrived at Mather Airfield. [Encl (30)]

38. Following aircraft shutdown, the mishap crews secured the aircraft and prepared them for the following day airshow static display. [Encl (34), (38), (39)]

39. Over the course of 11-12 SEP the Mishap crews and passengers rotated duties over various times to cover the airshow static display. [Encl (32), (33), (34), (35), (36), (37), (38), (39)]

40. LTJG (b)(6), (b)(3) maintained personal custody of Aircraft 413 and 416 Personal Computer Memory Card International Association (PCMCIA) cards (2 per aircraft) from 10-13 SEP 10. [Encl (34), (45)]

41. During the course of the CAL CAP airshow from 10-12 SEP, LT (b)(6), (b)(3) visited with friends and family from the Sacramento area. [Encl (34)]

42. LTJG (b)(6), (b)(3) visited with his family in Corning, CA (approximately 1+45 minutes away from Mather Airfield) from approximately 1600 on 11 SEP until approximately 1700 12 SEP. [Encl (30)]

43. On Sunday evening 12 SEP 10, LT (b)(6), (b)(3) received a text message from HSM-41 (b)(3), (b)(6) LT (b)(6), (b)(3) directing that only Military fuel be utilized on the return trip to NAS North Island. [Encl (34)]

44. At approximately 0700 on 13 SEP 10, all Mishap Aircrew and passengers, with the exception of AWR2 (b)(6), (b)(3) who arrived late, met in the restaurant of their hotel to discuss the return flight route to NAS North Island. [Encl (30), (31), (32), (33), (34), (35), (36), (37), (38), (39)]

45. During the 0700 preflight meeting, LT (b)(6), (b)(3) asked and confirmed that all Mishap crew members and passengers had enough sleep the night before and that no one had consumed alcohol past the OPNAV 3710 limit. [Encl (34)]

Subj: COMMAND INVESTIGATION OF THE INADVERTENT WATER LANDINGS OF HSM-41
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46. During the 0700 preflight meeting, LT (b)(6), (b)(3) determined the first leg of the return flight would stop in Lemoore for fuel vice Santa Barbara due to the need to purchase military fuel vice civilian contract fuel. [Encl (33), (34), (35)]

47. No NATOPS brief, formation brief, weight and balance/performance calculations, or ORM brief was completed for the return flight on 13 SEP 10. [Encl (30), (31), (32), (34), (35), (37)]

48. LT (b)(6), (b)(3) stated that he completed performance calculations for environmental conditions at Mather Airfield (Elevation 99 feet, Density Altitude of approx 1000 feet) the morning of 13 SEP 10. He did not have a copy to provide to the Investigator. [Encl (33), (41)]

49. Weather and NOTAMS were checked via smart phones (iPhone) applications "AirWX" and "AeroWeather" and by utilizing internet website "pilotweb.nas.faa.gov" and "airnav.com". [Encl (33), (34), (35)]

50. On 13 SEP 10, no flight plan was filed for the return trip to NAS North Island for either Aircraft 413 or 416. [Encl (30), (33), (34), (35)]

51. The route of flight for the first leg of the return trip to NAS North Island on 13 SEP 10 was to depart Mather Airfield, fly Highway 50 northeast to Lake Tahoe, circle Lake Tahoe counter-clockwise then retrace the flight path southwest on Highway 50 then south towards NAS Lemoore, CA. [Encl (30), (33), (34), (35)]

52. During the preflight of Aircraft 413 and 416, LT (b)(6), (b)(3) was approached by a U.S. Air Force LtCol to inquire how long it would be before Aircraft 413 and 416 departed because his aircraft, a U2, could not depart until they had left based on where the aircraft were parked on the ramp. [Encl (30), (34)]

53. Prior to take-off from Mather Airfield on 13 SEP 10, LT (b)(6), (b)(3) instructed all Mishap crewmembers and passengers that they did not need to wear their Air-Save Survival Vests which included a flotation collar / Personal Flotation Device (Horse collar for passengers). [Encl (33), (34)]

54. Prior to take-off from Mather Airfield on 13 SEP 10, LT (b)(6), (b)(3) found no issues of concern with the airworthiness of Aircraft 413 BUNO 166533 as signified by his signature on the aircraft A-sheet. [Encl (23), (34)]

55. Prior to take-off from Mather Airfield on 13 SEP 10, LT (b)(6), (b)(3) found no issues of concern with the airworthiness of Aircraft 416 BUNO 166520 as signified by his signature on the aircraft A-sheet. [Encl (24), (33)]

56. Between approximately 0940 to 0945 on 13 SEP 10, HSM-41 Aircraft 413 and 416 departed Mather Airfield in section and completed satisfactory in flight Engine Health Indicator Test (HIT) checks. [Encl (30), (31), (33), (34)]

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57. On 13 SEP 10 the Mishap Flight followed their planned route northeast along Highway 50 towards Lake Tahoe at approximately 500 feet AGL. [Encl (30), (32), (33), (34), (36)]

58. Upon reaching Lake Tahoe, LT (b)(6), (b)(3) in Aircraft 413 tuned up South Lake Tahoe Airport Automated Weather Observation System (AWOS). He recalled in his statement remembering a reading of 14 degrees C on the aircraft OAT gauge. [Encl (30), (34)]

59. LTJG (b)(6), (b)(3) in Aircraft 413 recalled in his statement that South Lake Tahoe AWOS was reporting a Density Altitude of 7,900 feet and wind gusts up to 19kts. [Encl(30)]

60. LT (b)(6), (b)(3) in Aircraft 416 recalled South Lake Tahoe Airport reporting a Density Altitude of 8,000 feet. [Encl (33)]

61. The Mishap Flight descended to approximately 50-100 feet AGL and approximately 100 KIAS in section over Lake Tahoe and flew to the east then northbound side of the Lake in a counter-clockwise direction. [Encl (30), (32), (33), (34), (36), (41)]

62. The Mishap crews had no mission/training requirement listed on the TAC-5/6 grade sheets that required aircraft flight at 50 to 100 feet AGL over Lake Tahoe. [Encl (17), (25)]

63. Upon reaching the Southwest corner of Lake Tahoe, LT (b)(6), (b)(3) in Aircraft 413 discussed with LT (b)(6), (b)(3) in Aircraft 416 over the radio about flying into Emerald Bay for a picture. [Encl (30), (31), (33), (34), (35)]

64. Both LT (b)(6), (b)(3) in Aircraft 413 and LT (b)(6), (b)(3) in Aircraft 416 thought that the winds were coming from the mouth of Emerald Bay and that orientation of the nose of the aircraft while in a hover towards the mouth of the Bay would provide an "escape route" in the event that they needed to wave-off. [Encl (33), (34), (45)]

65. The mouth of Emerald Bay is oriented approximately 035 degrees magnetic on the San Francisco Bay VFR Sectional Chart. [Encl (41), (45)]

66. Prevailing winds in the Lake Tahoe area were from 210 at 7 knots with gusts up to 17 knots. [Encl (26), (45)]

67. LT (b)(6), (b)(3) in Aircraft 413 and LT (b)(6), (b)(3) in Aircraft in 416 decided to have both of their aircraft pull into a hover in order to take the picture near a small island in the bay. [Encl (30), (33), (34), (35), 43), (45)]

68. At approximately 1040, both Aircraft 413 and Aircraft 416 pulled into a hover inside Emerald Bay at 70 feet AGL oriented with the nose of each aircraft towards the East. [Encl (30), (33), (34), (36), (45)]

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69. LT (b)(6),(b)(3) crew in Aircraft 416 was the first to inadvertently land in the water. [Encl (33), (34)]

70. LT(b)(6),(b)(3) in aircraft 416 reported in his statement that he flew an approach to a 70 foot hover, completed hover checks (note torque, TGT), and reported remembering a torque reading between 92-94% and stabilizing for about 45 seconds. [Encl (33)]

71. The crew of Aircraft 416 reported a "Low Rotor RPM" Warning Light and hearing the audible change of noise levels, gauges in the yellow region and an Nr (rotor RPM) reading of 86% just prior to the aircraft settling towards the water. [Encl (32), (33), (36)]

72. LT(b)(6),(b)(3) recognized Aircraft 416 was descending, turned on Contingency Power and attempted to transition to forward flight by lowering the nose of the aircraft. [Encl (32), (33), (36)]

73. LT(b)(6),(b)(3) decided that the aircraft did not have sufficient altitude to transition to forward flight and flared the nose slightly followed by setting a level attitude. He accepted the water landing with a slight rotation towards the right. [Encl (32), (33), (36)]

74. After Aircraft 416 landed in the water, Nr (rotor RPM) returned to 100% in approximately 2-3 seconds and LT(b)(6),(b)(3) executed a Maximum Gross Weight Take-off procedure (transition to forward flight in low ground effect) flying the aircraft out of the water. [Encl (32), (33), (36)]

75. The pilots of aircraft 413 reported flying to a stabilized 70 feet AGL hover with Contingency Power on and noting engine instruments in the green and a hover torque percentage of approximately low to mid 90s, completing hover checks and maintaining the hover for approximately 20-30 seconds. [Encl (30), (34)]

76. The crew of Aircraft 413 reported seeing Aircraft 416 descend into the water shortly after completing hover checks. [Encl (30), (34), (37)]

77. A short time after witnessing 416 land in the water, Aircraft 413 began to settle into the water [Encl (30), (34), (37)]

78. LTJQB(b)(6),(b)(3) copilot in Aircraft 413, recalled seeing an AFCS Degraded Caution Light, Low Rotor RPM warning, high engine torque and high engine TGT as Aircraft 413 settled towards the water [Encl (30)]

79. LT (b)(6),(b)(3) in his statement, attempted to fly Aircraft 413 into forward flight, unsuccessful; he leveled the aircraft attitude and pulled power to cushion the landing into the water. [Encl (34)]

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80. Aircraft 413 spun to the right for approximately 360 degrees before it landed in the water. After a few seconds the aircraft lifted out of the water. [Encl (27), (30), (34), (37)]

81. Assuming a loss of tail rotor effectiveness, LT (b)(6),(b)(3) lowered the collective and again attempted to fly the aircraft into forward flight. Unsuccessful, he accepted a second water landing followed by a Maximum Gross Weight Take-off maneuver (transition to forward flight in low ground effect) and was able to transition the aircraft into forward flight. [Encl (27), (30), (34), (37)]

82. A group of hikers in the Emerald Lake area witnessed the water landings of Aircraft 413 and 416 and recorded a video that was later posted on the "You Tube" website. [Encl (27)]

83. The "You Tube" video appears to begin after 416 has already hit the water and is transitioning to forward flight. Aircraft 413 is seen spinning to the right for a full 360 degrees just as it is about to hit the water for the first time. As 413 came out of the water it disappeared behind a stand of trees. [Encl (27)]

84. After both aircraft recovered from the water and returned to forward flight, the Mishap Aircrews flew to South Lake Tahoe Airport and performed precautionary running landings and shut down their aircraft. [Encl (30), (31), (32), (33), (34), (35), (36), (37)]

85. Upon post flight inspection, Aircraft 413 had sustained damage to the Radar Radome. [Encl (30), (31), (32), (33), (38)]

86. Upon post flight inspection, Aircraft 416 had sustained damage to the Radar Radome. [Encl (30), (32), (33)]

87. Following the Post Flight Inspection of Aircraft 413 and 416, LT (b)(3),(b)(6) contacted the HSM-41 Squadron Duty Officer to report the mishap. [Encl (34)]

88. The two aircraft mishaps were combined into a single Class B mishap totaling \$505,751.20. Aircraft damage was broken down as follows: [Encl (26)]

a. The following damage was recorded for Aircraft 413 BUNO #166533:

1. MMR Radome	\$27,111.15
2. MMR Antenna	\$32,253.60
3. MMR Pedestal, Antenna	\$96,840.90

b. The following damage was recorded for Aircraft 416 BUNO #166520:

1. MMR Radome	\$180,741.00
2. MMR Antenna	\$32,253.60
3. MMR Pedestal, Antenna	\$96,840.90
4. Stabilator Assembly	\$39,710.00

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89. Post Flight Performance Calculations performed by the Investigating Officer, Enclosure (44), were completed utilizing the environmental data listed in Enclosure (26) near the mishap site, aircraft gross weights listed in Enclosures (21) and (22) and Engine Torque Factors (ETF) listed in Enclosures (23) and (24). An estimated fuel burn rate of 1,000 lbs per hour was used to approximate aircraft gross weights at the time of the mishap which occurred approximately 1 hour into the flight. The results that follow are close approximations:

- a. Aircraft 413 BUNO 166533
 1. Aircraft take-off Gross Weight: 20,950
 2. Estimated Gross Weight at the time of the mishap: 19,950
 3. Actual Dual Engine Torque Available (Maximum Continuous Power): 81%
 4. Actual Dual Engine TQ Available (Intermediate Power, 30 min limit): 95%
 5. Actual Dual Engine TQ Available (Contingency Power, 2.5 minute limit): 103%
 6. Single Engine TQ Available (weakest engine): 99.64%
 7. Indicated TQ Required to Hover Out of Ground Effect (HOGE): at take-off weight of 20,950 lbs- 120%, at 19,950 lbs (approx aircraft gross weight at the time of the mishap) - 108%
 8. Indicated Torque Required to Hover in Ground Effect (HIGE): at take-off weight of 20,950 lbs- 95%, at 19,950 lbs (approx aircraft gross weight at the time of the mishap) - 88%
 9. Maximum Gross Weight to Hover Out of Ground Effect zero winds dual engine: 18,700 lbs (ECS-On), 19,200 lbs (corrected for ECS-off)

- b. Aircraft 416 BUNO # 166520
 1. Aircraft take-off Gross Weight: 20,458
 2. Estimated Gross Weight at the time of the mishap: 19,500
 3. Actual Dual Engine Torque Available (Maximum Continuous Power): 83%
 4. Actual Dual Engine TQ Available (Intermediate Power, 30 min limit): 98%
 5. Actual Dual Engine TQ Available (Contingency Power, 2.5 minute limit): 106%
 6. Single Engine TQ Available (weakest engine): 106%
 7. Indicated TQ Required to Hover Out of Ground Effect (HOGE): at take-off weight of 20,458 lbs- 115%, at 19,500 lbs- (approx aircraft gross weight at the time of the mishap)- 104%
 8. Indicated Torque Required to Hover in Ground Effect (HIGE): at take-off weight of 20,458 lbs- 91%, at 19,500 lbs, (approx aircraft gross weight at the time of the mishap) - 85%
 9. Maximum Gross Weight to Hover Out of Ground Effect zero winds dual engine: 18,700 lbs (ECS-On), 19,200 lbs (corrected for ECS-off)

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Opinions

1. LT (b)(6), (b)(3) was the originator and driving force for HSM-41's participation in the CAL CAP airshow due to its location near family in Sacramento, CA. [FF (1), (40)]
2. LT (b)(6), (b)(3) submitted only a notional Airshow Cross country request flight plan with an incomplete crew list that was never updated with accurate crew assignments or route of flight information. [FF (1), (2), (3), (4), (10)]
3. The arrangements detailed in the Airshow cross-country request form for the storage of classified Aircraft PCMIA cards with the 168th AV Regiment at Mather Airfield were not followed. [FF (5), (40)]
4. LT (b)(6), (b)(3) had an opportunity to update the airshow cross country request route of flight and crew list form when it was discovered that CHSMWP had not received the request and he hand-carried a copy to LT (b)(6), (b)(3) CHSMWP (b)(3), (b)(6) on 08 SEP 10. [FF (6), (7), (8), (9), (10)]
5. During the 09 SEP 10 Flight Planning meeting held with all Mishap Pilots, it appears there was a well thought out plan to meet all OPNAV 3710 requirements for flight filing. Charts were studied and a flight plan was drafted. Route of flight weather information was requested and NOTAMS were reviewed for the intended route of flight to Mather Airfield. There was, however, not much consideration for the return flight to NAS North Island. [FF (19), (20), (21), (22)]
6. LT (b)(6), (b)(3) and LT (b)(6), (b)(3) made an assumption that because two aircraft were scheduled for the cross country that it was tacit approval for them to fly in formation as a section even though the flight schedule of 10 SEP 10 did not designate the flights as a formation, nor did it list a designated formation leader. No one from the mishap crew questioned this decision. This was a violation Ref (b) 4.1.2 which states "Authorization for a flight shall be documented by a published flight schedule or other similar directive signed by commanding officers or their delegated authority. As a minimum, the document shall contain the following elements: (b) Designation of the PIC, mission commander, and/or formation leader as appropriate". [FF (23), (24), (25), (26), (29)]
7. At the 0800 preflight briefing on 10 SEP 10, the mishap crews followed all governing guidance and instructions by performing a NATOPS brief, ORM worksheet, review of NOTAMS, the filing of a DD-175 flight plan, weather briefing (DD-175-1), completed weight and balance review and performance calculations for the route of flight to Mather Airfield. [FF (27), (28), (32), (33)]
8. There was an underlying desire expressed by multiple crewmembers to take pictures along the route of flight for the HSM-41 Facebook page and for the squadron PAO. It is my opinion that this was a distraction to the

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completion of the assigned mission and a contributing factor to the mishap. [FF (35), (36), (63)]

9. No significant events occurred during the course of the airshow that were a contributing factor to the mishap. [FF (39), (40), (41), (42), (43)]

10. On the morning of 13 SEP 10 a contributing factor to the mishap was that the mishap crews failed to properly brief the flight IAW NATOPS, complete an Operational Risk Management assessment, file a flight plan or review weather and NOTAMS via official sources for the return flight to NAS North Island. This responsibility was squarely on LT (b)(6), (b)(3) and LT (b)(6), (b)(3) as the Pilots in Command of Aircraft 413 and 416 and a clear violation of Refs (b) para 4.3.1, 4.5.1, and 4.6.1; and Ref (c) para 6.1 and 6.2 [FF (47), (48), (49), (50), (87)]

11. On the morning of 13 SEP 10, after a discussion with an unidentified USAF LtCol and even though no overt pressure was applied, LT (b)(6), (b)(3) felt he was delaying the USAF U2 aircraft crew and ground support personnel from departing Mather Airfield. [FF (52)]

12. I have no reason to believe that the consumption of alcohol, fatigue or lack of crew rest were factors in this mishap. [FF (44), (45)]

13. LT (b)(6), (b)(3) and LT (b)(6), (b)(3) used poor judgment when they instructed their crews and passengers not to wear their Air-Save Survival Vest/Flotation devices. This was punctuated by the fact that a portion of the intended route of flight was to be over water. [FF (53)]

14. There were no significant discrepancies or performance issues with Aircraft 413 or 416 that contributed to the mishap. [FF (54), (55), (87)]

15. Upon reaching Lake Tahoe and tuning up to South Lake Tahoe Airport Aviation Weather Observation System (AWOS) frequency, the mishap crews failed to recognize the significance of operating at a reported Density Altitude of between 7,900 to 8,000 feet and its limiting effects on engine performance. [FF (59), (60)]

16. Given the fact that the Mishap Crews flew in the vicinity of and over Lake Tahoe, a known resort area, at altitudes between 50 to 100 feet AGL with no valid mission or training requirement to do so, it is my opinion that the Mishap crews violated the requirement of flying overland no lower than 1000 ft AGL (populated area) / 500 ft AGL (unpopulated area) and the intent of the minimum Day VFR over water altitude of 50 ft AGL flight restriction in Ref (e) Section O-9. Additionally, it is my opinion that the Mishap Crews violated Section 5.5.1 of Ref (b) which states "Flights of naval aircraft shall be conducted so that a minimum of annoyance is experienced by persons on the ground. It is not enough for the pilot to be satisfied that no person is actually endangered. Definite and particular effort shall be taken to fly in such a manner that individuals do not believe they or their property are endangered." [FF (61), (62)]

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17. LT (b)(6),(b)(3) and LT (b)(6),(b)(3) upon reaching Emerald Bay in Lake Tahoe, changed the mission by coordinating both aircraft to fly into a hover for the purposes of taking a picture, a maneuver that was not discussed prior to flight. The Mishap crews violated Ref (e) by not completing the "In-Flight Mission Change Checklist", which has provisions for reviewing environmental considerations, aircraft configuration and aircraft weight and balance for the new mission. [FF (63), (64), (67)]

18. Upon the aircraft entering Emerald Bay the Mishap Crews identified the winds coming from the direction of the mouth of the bay which is oriented approximately 035 degrees magnetic. Prevailing winds in the area as reported in the Mishap Data Report were 210 at 9 knots with gusts up to 17 knots. The Mishap crews flew Southwest with a turn towards the East to a hover facing in an easterly direction. As such, this would have put the aircraft hovering with a right quartering tailwind. MH-60R NATOPS Flight Manual Fig 23-1 HOGE Chart notes "Hovering in crosswind conditions may require up to 4% additional torque". It is difficult to ascertain where the winds on the bay were coming from however; a possible explanation taken from the MH-60R NATOPS manual Section 9.3 Mountain Winds, Turbulence and Topography, para 9.9.3.1 Prevailing Winds states "When the boundary layer is formed by light prevailing winds, strong, steady gradient winds may often bend the boundary layer winds as much as 180 degrees". Therefore, it is not unreasonable to assume that the aircraft were hovering for some amount of time with the benefit of a "gradient wind" from the direction the Mishap crews identified which would explain that while there were zero to little power margins, both aircraft hovered for a short time period prior to settling into the water. [FF (64), (65), (66), (67), (68)]

19. It is also possible that the winds were blocked by the ridge line of the bay and could have caused a loss of wind effect as both aircraft descended down to hover altitude. [FF (64), (65), (66), (67), (68)]

20. The casual factor of the mishap was the decision of the Aircraft Commanders to fly their aircraft into an Out of Ground Effect hover in a high Density Altitude environment without having completed engine performance calculations to judge whether the maneuver could be completed within adequate safety margins. If completed, the Mishap crews would have identified that neither Aircraft 413 nor 416 had adequate engine power margins or low enough Aircraft Gross Weight to perform an Out of Ground Effect Hover (HOGE). [FF (47), (69), (70), (71), (72), (73), (74), (75), (76), (77), (78), (79), (80), (81), (89)]

21. An additional contributing factor to the mishap was the complacency and lack of flight discipline displayed by LT (b)(6),(b)(3) LT (b)(6),(b)(3) AWR1 (b)(6),(b)(3) and AWR2 (b)(6),(b)(3) all of whom were FRS instructors, in preparing for the 13 SEP 10 flight. They applied a near sea level local San Diego flying area routine to a flight event that was anything but that. All crewmembers at the time seemed unaware to the potential dangers of the

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unnecessary maneuvers they attempted in a high Density Altitude environment. And as such, both Mishap Aircraft Commanders seemed surprised that their aircraft settled into the water. They also seemed to apply a different set of adherence to standards once they were outside of the local San Diego flying area. [FF (47), (49), (50), (53), (89)]

22. The reported engine instrument readings of high torque, high TGT, "Low Rotor RPM" Warning Light and Low NR (rotor RPM) along with pilot descriptions of aircraft attitude and examination of the video footage all seem to support the conclusion that both aircraft experienced a situation where Power Required exceeded the Power Available. Aircraft 413 also experienced a loss of Tail Rotor Authority as was demonstrated in the video by the 360 degree right hand spin as it hit the water the first time. It is my opinion that this was a result of the Pilot's attempts to pull more power once the aircraft began to descend towards the water exacerbating the situation. [FF (71), (72), (73), (74), (77), (78), (79), (80), (81), (83), (89)]

1. The MH-60R NATOPS Flight Manual describes both conditions as follows:

a. Page 11-9, Power Required Exceeds Power Available- "At high density altitudes, high gross weights, or when operating with reduced power, power required may exceed power available. It may not be possible to maintain level flight due to lack of power, which will cause settling to occur. The attendant loss of altitude is of minor consequence except in certain situations where sufficient altitude is not available to achieve the airspeed necessary to maintain level flight. Careful preflight analysis of engine performance and hover charts in Chapters 22 through 27 will aid in avoiding extreme situations."

b. Page 11-4, Loss of Tail Rotor Authority- "Loss of tail rotor authority is an issue of power. This is usually seen in high gross weight and/or high density altitude conditions. In these conditions, left pedal response may be sluggish. In extreme cases, main rotor speed will droop. As Nr droops, torque increases while power available to the main rotor and tail rotor decreases rapidly. Eventually, the tail rotor can no longer produce enough thrust to react against the high torque and the helicopter will spin to the right."

Recommendations

1. The Aircraft Commanders LT (b)(6), (b)(3) USN and LT (b)(6), (b)(3) USN both made multiple violations of OPNAV 3710, the MH-60R NATOPS Flight Manual and CHSMWP SOP. Their complacency, lack of flight discipline, and succession of poor judgments nearly led to the loss of two aircraft and ten U.S. Navy sailors for no benefit and did result in the damage of two aircraft. In the end, it required extraordinary efforts as Naval Aviators to recover their respective aircraft from the water and return them to a safe landing. They were chosen to become FRS Instructors because of their

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records of performance in the fleet. I believe that at the time of the mishap, they had forgotten their higher duty and trust placed in them to train the next generation of Naval Aviators. In my mind, the greatest scrutiny that can be applied to a Naval Aviator is that of a Field Naval Aviator Evaluation Board (FNAEB). While it is administrative in nature, a FNAEB is appropriate for aviators who have demonstrated faulty judgment in a flight situation. Therefore, it is my recommendation that a FNAEB be convened for LT (b)(6), (b)(3) , USN and LT (b)(6), (b)(3) USN.

LT (b)(6), (b)(3) USN as a qualified Helicopter Aircraft Commander who was riding in the back of Aircraft 413 during the mishap, could have spoken up several times during the events of 10-13 SEP. If he had, it could have possibly brought a different perspective to the two Aircraft Commanders and broken the chain of events. LT (b)(6), (b)(3) who was a student under instruction, and whose actions did not directly contribute to the mishap, failed to consider the principles of Crew Resource Management (CRM) in not questioning the decisions of the Aircraft Commanders. The mere fact that he was not in the cockpit during the mishap should not absolve him of some responsibility.

3. (b)(5)

(b)(5)

4. During interviews with the three CAT I Fleet Replacement Pilots, it was clear that they were truly unaware of most of the infractions from 10-13 SEP and that they trusted to the experience of their Instructor Pilots for what they were unsure of. It never occurred to them to question their actions or decisions.

(b)(5)

(b)(5)

5. (b)(5)

(b)(5)

(b)(6), (b)(3)

CDR USN