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## MEMORANDUM

From: *Sally Bruce-O'Hara*  
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VCG

To: Distribution

Subj: FINAL ACTION ON THE ADMINISTRATIVE INVESTIGATION INTO THE  
CRASH OF CG-6017 THAT OCCURRED ON 7 JULY 2010

### 1. Overview:

CG 6017, an MH-60T helicopter, was scheduled to be transferred to Coast Guard Air Station Sitka, Alaska, from Coast Guard Aviation Logistics Center (ALC) following a six month overhaul period. The aircraft transfer order specified that an ALC aircrew would ferry the helicopter from Elizabeth City, North Carolina, to Coast Guard Air Station Astoria, Oregon, and that an Air Station Sitka aircrew would complete the transfer by ferrying the helicopter from Astoria to Sitka, Alaska. On 06 July 2010, the ALC aircrew successfully arrived at Air Station Astoria. On 05 July 2010, the Air Station Sitka aircrew arrived at Astoria with another H-60 helicopter that was to be ferried east by the ALC aircrew.

On the morning of 07 July 2010, CG 6017 departed Air Station Astoria en route Air Station Sitka to complete the delivery process. The weather was clear with unlimited visibility and light winds. At 0941 (all times in this memorandum are Pacific Daylight Time), approximately 54 minutes into the flight, CG 6017 struck a span of power transmission lines near La Push, Washington, at an approximate altitude of 114 feet while travelling at 115 knots indicated air speed (KIAS). Immediately following impact the helicopter became uncontrollable, broke apart in flight, and came to rest in approximately 10 feet of water near the Quillayute River Inlet. Three of the four crewmembers were killed. The copilot survived. The helicopter was destroyed.

This Final Action Memorandum sets forth the material facts, as determined by the Administrative Investigation, which led to this incident, states my conclusions, and orders actions to further mitigate risks in an effort to prevent similar incidents and tragic loss of life.

### 2. Findings of Fact and Opinion:

The following narrative provides the key findings that inform my conclusions and actions:

The CG 6017 aircrew consisted of LT Sean Krueger as the pilot in command (PIC), LT Lance Leone as the copilot (CP), AMT1 Adam Hoke as the flight mechanic (FM), and AMT2 Brett Banks as a basic air crewman (BA), all from Air Station Sitka. Pursuant to the U.S. Coast Guard Flight Manual, Series MH-60T Helicopter, dated October 7, 2009, the PIC is responsible for the safe and orderly conduct of the flight and the CP's duties include acting as safety pilot, monitoring helicopter instruments, operating communication and navigation equipment, and navigating.

The filed flight plan specified a planned altitude of 1,000 feet.

Federal Aviation Regulation (FAR) 91.119 authorizes, in areas that are not congested, an altitude of 500 feet, except over open water or sparsely populated areas, where an aircraft may not be operated closer than 500 feet from any person, vessel, vehicle, or structure. There is an exception in FAR 91.119 for helicopters which authorizes operation at an altitude below 500 feet, wherever a helicopter is located, if the operation is conducted without hazard to persons or property on the surface.

The Olympic Coast National Marine Sanctuary encompasses 2,408 square nautical miles of water and includes three National Wildlife Refuges: Flattery Rocks, Quillayute Needles, and Copalis. Flight less than 2,000 feet above the Olympic Coast National Marine Sanctuary and within one nautical mile of the National Wildlife Refuges is prohibited by 15 C.F.R. § 922.152. The Coast Guard Air Operations Manual, COMDTINST M3710.1F, dated October 22, 2007, incorporates that restriction for sensitive environmental habitat areas except for emergency operations. The Sanctuary altitude restriction is reflected in the Seattle Visual Flight Rules (VFR) Sectional Chart. The power transmission lines that CG 6017 struck are depicted on the Seattle VFR Sectional Chart and the electronic version of the chart loaded in the CG 6017's navigation system. Prior to departing Astoria, LT Krueger acknowledged reviewing a variety of required data, including airspace restrictions, local directives, and operational risk management considerations to include, among other things, planning (the flight route, altitudes), the scheduled event (purpose of the flight/mission), any discrepancies or maintenance issues with the helicopter, radio communication requirements, and the operational environment considerations (night or day, weather, visibility).

A guideline in Coast Guard Air Station Sitka Air Operations Manual, CGASINST 3710.1N, dated May 27, 2008, advises ferry crews to research and adhere to airspace restrictions, while CGASINST 3710.1N also requires compliance with FAR 91.119.

On 07 July 2010, CG 6017 departed Astoria at approximately 0848 with a planned fuel stop in Port Hardy, British Columbia. Shortly after takeoff, the helicopter descended to an altitude below 200 feet and accelerated to approximately 125 KIAS. For sixty-two percent of the flight, the helicopter navigated the coastline at an altitude below 200 feet and for sixty-seven percent of the flight above 125 KIAS. In order to minimize airframe stress, the Coast Guard H-60 Flight Manual limits airspeed to 125 KIAS unless operational necessity dictates the need for greater

airspeed. On three occasions prior to entering Copalis National Wildlife Refuge (which CG 6017 transited between 0918 and 0929), and again shortly after entering the Quillayute Needles National Wildlife Refuge, the pilots received an auditory altitude warning in their headsets of "altitude, altitude" from the Central Aural Warning System (CAWS), which actuates when the helicopter is at an altitude below 200 feet. LT Krueger verbalized twice before entering the Copalis Refuge that he was descending below 200 feet. At no point did any other member of the aircrew comment on the helicopter's altitude.

At 0932, CG 6017 entered the Quillayute Needles National Wildlife Refuge and flew from the south-southeast towards the Quillayute River jetties where Coast Guard Motor Lifeboat (MLB) 47288 was underway outbound. At approximately 0941, in a period of 42 seconds, the helicopter descended from an altitude of 220 feet to 114 feet, decelerated to 115 KIAS, initiated a right banking turn, and passed over MLB 47288. Within a few seconds, CG 6017 struck a span of power transmission lines between James Island, WA, and La Push, WA, at an altitude of 114 feet and 115 KIAS.

Impact with the power transmission lines caused the helicopter's locator light and pilot's cockpit access step to shear off the airframe. The right main landing gear became entangled in the power transmission lines, which initiated a catastrophic chain of events. The helicopter shed all four main rotor blades and the fuselage broke into 5 main pieces. The main pieces of the airframe came to rest in shallow water approximately 150 yards northeast of James Island.

The crew of CG 47288 witnessed the mishap, notified Station Quillayute River, and immediately initiated search and rescue operations. Additionally, an H-65 from Air Station Port Angeles, CG 6550, and an H-60 from Air Station Astoria, CG 6001, were launched to assist. Coast Guard Response Boat-Small (RBS) 25546 got underway from Station Quillayute River to aid in search and rescue efforts. Two skiffs crewed by "Good Samaritans" who witnessed the crash, departed the Quillayute Harbor Marina to assist. At 1004 a Coast Guard skiff, SKF 171444, got underway.

Despite multiple attempts to approach the wreckage site, CG 47288 was unsuccessful due to the shallow water depth. At approximately 0947, 6 minutes after initial impact, the CP, LT Leone, egressed the airframe and fired a flare. He was recovered at approximately 0948 by one of the Good Samaritan skiffs and transported to the marina dock. At 1003 the second Good Samaritan skiff recovered AMT1 Hoke in an unresponsive state and transported him first to the marina dock and then to the Coast Guard boathouse dock. Emergency Medical Service (EMS) response personnel performed CPR on AMT1 Hoke. Both LT Leone and AMT1 Hoke were then transported by EMS response personnel to the Forks Community Hospital. At 1025, CG 6550 arrived on scene and began to search for survivors. At 1030, the crew of the second Good Samaritan skiff returned to the crash site and reported that two persons remained in the submerged fuselage. At 1031, CG 6001 arrived on scene. At 1058, AMT2 Banks was freed from the fuselage by a Coast Guard member, brought aboard the second Good Samaritan skiff, and subsequently transferred to RBS 25546. The crew of RBS 25546 determined that AMT2 Banks was unconscious with no breathing or pulse, and immediately began performing CPR

while transporting him to the marina dock. At the marina dock, AMT2 Banks was transferred to EMS personnel and transported by ambulance to Forks Community Hospital with CPR still in progress. At 1115, LT Leone was transported via air ambulance to Seattle for further medical care. At 1137, AMT1 Hoke was pronounced dead at Forks Community Hospital. Approximately 30 minutes later, AMT2 Banks also was pronounced dead. At 1209, CG SKF 171444 returned to the crash site with National Park Service (NPS) divers. At 1313, the divers recovered LT Krueger from the submerged wreckage. CPR was initiated while he was transported via a tribal Fish and Wildlife skiff to the marina dock. LT Krueger was then taken by ambulance to Forks Community Hospital while CPR continued. At 1357, LT Krueger was pronounced dead.

Assets remained on scene to aid in the recovery of wreckage debris. Upon request of the Coast Guard, a Naval Undersea Warfare Division (NUWD) salvage team arrived at 1515 to prepare for recovery of the helicopter under the direction of a designated Coast Guard Salvage Officer. Although recovery efforts were hampered by weather, the operation was completed on 12 July.

### **3. Findings and Directed Action:**

#### **A. I find that the deaths of LT Sean Krueger, AMT1 Adam Hoke and AMT2 Brett Banks, and the injuries to LT Lance Leone occurred in the line of duty.**

I base these findings upon the following facts:

1. The members of the aircrew were all properly qualified in their crew positions and were fit for full flight duties at the time of the mishap.
2. There is not evidence that is clear and convincing, which is a high standard, that any member of the aircrew's actions intentionally caused this mishap, or that there was a willful neglect on the part of the aircrew demonstrating a reckless disregard for the foreseeable and likely consequences of their conduct.

#### **B. I find that the cause of this mishap was CG 6017 striking the power transmission lines that spanned the area between James Island, WA, and La Push, WA.**

I base this finding on the following facts:

1. The helicopter was fully mission capable and had no maintenance discrepancies that contributed to the mishap.
2. Upon initial contact with the power transmission lines, the right main landing gear became entangled.
3. The power transmission lines acted as an anchor point as the airframe continued along its flight path. This caused an asymmetrical loading moment on the main rotor head resulting in excessive flapping of a main rotor blade, causing it to strike the hoist boom and break apart. This subsequently resulted in the cascading disintegration of the remaining 3 main rotor blades and the in-flight breakup of the helicopter fuselage.

4. In less than 3 seconds following contact with the power transmission lines, CG 6017 became completely uncontrollable. There was no way for the pilots to recover from the strike.
- C. I find that a contributing factor to this mishap was the failure of the PIC and the CP to carry out their responsibilities to comply with established altitude restrictions and policy regarding low-level flight, and to maintain situational awareness. Their operation of the helicopter at high speed and low altitude created a situation in which there was little margin for error and even a momentary lack of attention increased the potential for a mishap.**

I base this finding on the following facts:

1. The flight plan listed a flight level of 1,000 feet. This was not followed by the pilots who navigated the coastline at an altitude below 200 feet for sixty-two percent of the flight.
2. At the time of the mishap, CG 6017 was operating in the Quillayute Needles National Wildlife Refuge where aircraft must maintain a minimum altitude of 2,000 feet. In disregard of both the flight plan and the required Refuge altitude, the PIC flew for nearly 10 minutes at or near an altitude of 200 feet, before descending to 114 feet moments before impact.
3. Although low-level flight is not a prohibited maneuver, the Coast Guard H-60 Flight Manual requires that low-level flights be scheduled, planned, and briefed to the aircrew. The H-60 Flight Manual defines low-level flight as flight "...at a preselected altitude below 500 feet along a prescribed route, usually in straight line segments at constant airspeed." Due to the increased proximity to obstacles inherent in low-level flight, the H-60 Flight Manual requires that detailed individual tasking of duties be pre-briefed among the aircrew. Additionally, this pre-brief must specifically set vertical and horizontal obstacle clearance requirements stated in feet. During low-level flight, the H-60 Flight Manual makes the PIC responsible for avoiding obstacles, directs that the PIC's attention be constantly outside the helicopter, and identifies the CP as responsible for monitoring flight and engine instruments and navigation. Finally, during low-level flight, the H-60 Flight Manual requires that two aircrew members be assigned as lookouts, one on the starboard and the other on the port side of the helicopter. These lookouts are responsible for obstruction clearance. The PIC and CP failed to comply with these requirements.
4. The Coast Guard H-60 Flight Manual limits airspeed to 125 KIAS unless operational necessity dictates the need for greater airspeed. This airspeed restriction is designed to minimize airframe stress. The PIC flew CG 6017 at speeds in excess of 125 KIAS for sixty-seven percent of the flight, despite having no operational need to exceed the helicopter's normal operational limit.
5. The CP was the safety pilot and responsible for navigation, but he did not note or report CG 6017's failure to maintain proper altitude required in the Sanctuary, the presence of

power lines (a charted obstruction) in the area, or question flying at a speed above 125 KIAS while at low altitude. Although the CP may not have been able to anticipate the PIC's final descent and turn, his failure to challenge the PIC earlier concerning altitude and speed increased the potential for mishap.

**Action:** LT Krueger and LT Leone failed to carry out their responsibilities as the PIC and CP, and this failure contributed to this mishap. Tragically, LT Krueger did not survive. The following actions address LT Leone.

1. I am aware that an entry was made in LT Leone's official flight logbook in the Accident and Flight Rule Violation Record that denotes him being involved in an accident on 7 July 2010.
2. The Commander, Coast Guard Personnel Service Center (CG PSC), previously convened an Aviator Evaluation Board (AEB) which considered LT Leone's suitability for further duty as a Coast Guard Aviator. I direct CG PSC to review this Final Action and any other evidence not reviewed by the AEB that has been collected by investigations involving the circumstances of this mishap, other than the mishap investigation convened pursuant to COMDTINST M5100.47 (series). In light of this additional information and the prior AEB proceeding, CG PSC shall decide whether to convene an AEB to reconsider LT Leone's suitability.
3. LT Leone's accountability has been independently considered by the operational commander pursuant to the Uniform Code of Military Justice. I direct the Commander, 17<sup>th</sup> Coast Guard District consider whether any additional administrative action is appropriate in light of this final action.

**D. I find that a lack of adequate aeronautical hazard markings on the power transmission lines may have contributed to this mishap.**

I base this finding on the following facts:

1. The power transmission lines were appropriately depicted on the Seattle VFR Sectional Chart and the electronic version of the chart loaded in the CG 6017 navigation system. Additionally, because the power transmission lines were less than 200 feet above ground level, there was no FAA marking requirement for the power transmission lines. FAA guidelines describe the recommended method of marking power transmission lines. The warning balls attached to the power transmission lines were not in accordance with these guidelines at the time of the mishap and consequently did not provide adequate warning to aircraft. Specifically, the warning balls were only 18 inches in diameter vice the FAA's standard of 36 inches.

2. The FAA guidelines state that when the color of a warning ball is faded so as to degrade the ball's visibility, the warning ball should be replaced. The warning balls attached to the power transmission lines were faded and required replacement.
3. Additionally, when wires are grouped together, the FAA guidelines state that the warning balls should be placed on the highest wire. Where there is more than one wire at the highest point, the guidelines state that the warning balls may be installed alternately along each wire and spaced 200 feet apart. The last documentation showing the location of the warning balls is a photograph taken in 2008. This photograph shows four of the five 1,900 foot power transmission lines outfitted with warning balls. The warning balls on two of the power transmission lines were positioned within 200 feet of the power pole and located over land. The remaining two warning balls were located at the base of the power transmission lines, where the lines attached to the power pole. This left between 1,700 and 1,900 feet of power transmission lines unmarked.
4. As CG 6017 approached the mouth of the Quillayute River, and in a period of 42 seconds, the PIC descended from an altitude of 220 feet to 114 feet, and decelerated from 131 to 115 KIAS. During this time, and just 5 seconds prior to striking the power transmission lines, the PIC entered a right banking turn which maneuvered CG 6017 east of James Island and directly over MLB 47288. Given the speed of the helicopter and its maneuvering directly over MLB 47288, it is speculative whether the PIC or CP would have noticed the presence of additional, larger, and brighter warning balls, or would have been able to avoid them.

**Action:** Subsequent to this mishap these power transmission lines, maintained by the Coast Guard, were removed and replaced with a generator. I direct CG-4 to audit other power transmission lines and towers maintained by the Coast Guard to ensure they are properly marked.

**E. I find that a breakdown in Crew Resource Management (CRM) contributed to this mishap.**

I base this finding on the following facts:

1. Coast Guard aircrew are trained and expected to practice CRM per Chapter 8 of the Coast Guard Air Operations Manual and standardization training. The principles and tenets of CRM are communication skills, flight discipline and leadership, risk management, and situational awareness.
2. Several times during the flight, both pilots could hear auditory altitude warnings when the helicopter descended to an altitude below 200 feet, and the PIC twice verbalized that he was descending below 200 feet which could be heard by the entire aircrew. However, this was not acknowledged or challenged by the CP or by any other crewmember.

Questioning or challenging unsafe conditions is consistent with the training and practice of sound CRM.

3. Verbalizing changes in such things as aircraft configuration, altitude, and airspeed enables all members of the aircrew to maintain situational awareness, a fundamental principle and tenet of CRM. There was no discussion at any time during the flight by the aircrew regarding the helicopter's low altitude.
4. There was no discussion in the helicopter between the PIC and CP about the aircraft's altitude despite the fact that the filed flight plan specified a planned altitude of 1,000 feet.
5. The aircraft is not configured to allow the aircrew to hear the low altitude warnings that the pilots receive in the cockpit.
6. There was little interaction between the pilots and enlisted aircrew during the flight. In the cockpit, the PIC and CP were engaged in training on the helicopter's navigation systems while, in the cabin, the BA had requested and received permission to move about to conduct training with the FM on the High Frequency radio system. This led to an overall lack of communication and situational awareness between the pilots and enlisted aircrew.
7. The breakdown in CRM exacerbated the effect of the CP's failure to fully carry out his responsibilities.

**Action:** As a result of this finding I direct:

1. CG-1131 to conduct a review of the initial and recurrent CRM training requirements for pilots and enlisted aircrew to address the necessity of practicing CRM throughout all phases of flight.
2. CG-41 and CG-711 develop the capability in the H-60 to allow aircrew to hear warning tones that are available to the pilots.
3. CG-711 to amend Coast Guard policy to explicitly state that it is the responsibility of all aircrew members to assist the CP with carrying out the duties of the safety pilot.
4. FORCECOM to require CRM during all safety training evolutions, including as part of the safety brief for aircrew during the check-in process at a new aviation unit.

**F. I find some helicopter pilots at Air Station Sitka may have become habituated to low-level flight when conditions did not require it and this may have contributed to this mishap.**

I base this finding on the following facts:



1. By the nature of their design, helicopters are capable of safe flight at significantly lower altitudes than fixed wing aircraft.
2. The Air Station Sitka area of responsibility often experiences poor weather that compels low altitude operations. There is evidence that pilots were encouraged to fly the Sitka area of responsibility at low level and slower air speed to increase their familiarity in advance of bad weather conditions, and that flight at an altitude as low as 300 feet through passes was typical. This may have habituated pilots to fly at lower altitudes when actual conditions did not require low-level flight.
3. This flight was conducted in clear conditions with unlimited visibility outside the Alaska area of operations. Flight below an altitude of 200 feet in these conditions violated Coast Guard policy because it was not scheduled, planned, nor briefed to the aircrew, which is not consistent with requirements specified in the H-60 Flight Manual; doing so was imprudent and created an unnecessary hazard.
4. The apparent practice of some Air Station Sitka pilots to fly at low altitude when conditions did not warrant may have created a permissive climate that made low-level flight acceptable to CG 6017's PIC and CP.

**Action:** As a result of this finding I direct:

1. CG-711, Area, and District commanders to emphasize compliance with existing regulations and guidance applicable to altitude and use of airspace, and Air Station commanders ensure compliance. For helicopters, CG-711 to review existing policy and, as necessary, provide guidance, consistent with FAR 91.119(d), that includes that flight below 500 foot altitude be based on good judgment, operational necessity or other mission-support requirements, and Operational Risk Management (ORM). I direct that FORCECOM make this an item for Standardization Team review.
2. CG-711 to amend the Coast Guard Air Operations Manual, COMDTINST M3710.1(series), to require that Operational Hazard Awareness Training be provided to transient aircrews prior to their transiting through another air station's area of responsibility.

**G. The apparent decision of the PIC to divert CG 6017 from its flight path to overfly a Coast Guard surface asset at a low altitude contributed to this mishap.**

I base this finding on the following facts:

1. CG 6017 flew towards MLB 47288, descended to an altitude of 114 feet, and passed over MLB 47288, placing the aircraft in a position where the nearby transmission lines became an unobserved hazard.

2. The Coast Guard Air Operations Manual provides that no vessels shall be “zoomed” except in an emergency or during a SAR operation when the attention or assistance of the vessel is desired. “Zoomed” is not further defined. The practice of diverting from flight paths to overfly Coast Guard surface assets when there is no operational necessity is not limited to this unit. Conducting over flights of this nature may in some circumstances introduce unnecessary risk to the safety of flight and violate FAR 91.119.

**Action:** As a result of this finding I direct CG-711 to reassess and analyze the adequacy of existing policy addressing over flights of CG surface assets.

**H. I find that a Wire Strike Prevention System (WSPS) could potentially have mitigated this mishap.**

I base this finding on the following facts:

1. Many DOD aircraft have successfully adapted the WSPS to mitigate wire strike mishaps.
2. WSPS may have been capable of shearing the power transmission lines, potentially avoiding an entanglement with CG 6017’s main landing gear.

**Action:** As a result of this finding I direct CG-41 and CG-711 to review available data and studies to determine the feasibility of equipping Coast Guard helicopters with WSPS.

**I. I find that a contributing factor to this mishap was a complacent cockpit environment, characterized by minor procedural errors and lapses that were followed by significant errors in judgment that, in combination, increased the possibility of mishap.**

I base this finding on the following facts:

1. The flight plan was not signed by the PIC as required by the Coast Guard Air Operations Manual, COMDTINST M3710.1 (series), and did not list the number of people aboard as required by FAR 91.153.
2. Although the PIC validated that ORM had been conducted, no ORM score sheet was located or referenced on the Pre-mission Planning and Servicing Record.
3. The pilots used non-standard terminology throughout the pre-start, engine start and rotor engagement checklists.
4. The PIC and CP of CG 6017 failed to execute checklists as required by the Coast Guard H-60 Flight Manual. Specifically, the PIC and CP did not execute the hover checklist or the level off checklist.

5. The PIC and CP of CG 6017 flew in close proximity to multiple uncontrolled airfields during the mishap flight without making radio calls. Although not required by FAA or Coast Guard regulations, radio communication in the vicinity of uncontrolled airfields to self-announce the aircraft's position is a generally accepted safety practice throughout the aviation community and is continually emphasized during annual proficiency course and standardization visits.
6. Casual, non-operational chatter between the PIC and CP while operating at a low altitude and high speed contributed to the overall lack of situational awareness exhibited by the aircrew.

**Action:** Leaders will review and continue to implement the Aviation Safety Assessment Action Plan (discussed below).

#### **4. Additional Directed Actions**

Although not related to causal or contributing factors, the administrative investigation identified additional areas to improve the Coast Guard's ability to investigate future mishaps. As a result, I direct:

1. CG-41 to require a copy of the aircraft transfer documents remain with the transferring unit, in addition to the copy kept onboard the transferring aircraft. Current practice allowed the only paper copies of the transfer documents to be onboard the CG 6017, and these documents were destroyed in the mishap crash.
2. CG-711 to require log book entries relating to aircraft qualification indicate both the aircraft and model type for each entry when a pilot attains a qualification applicable to only one specific aircraft model. A review of the Aviator's Flight Log Books for the PIC and CP of CG 6017 showed that model designations were regularly omitted from log entries, making it difficult to determine, based solely on the Aviator's Flight Log Books, on which of the H-60 models the qualification pertained.
3. CG-41 to initiate an engineering change to the MH-60T Voice and Flight Data Recorder (VFDR) Lo-Band 1 channel to reconfigure it to record Flight Mechanic, Basic Aircrew, and Aviation Survival Technician audio at all times. The current configuration of Lo-band 1 records all radios and navigation aids without squelch, making the recording indiscernible.

#### **5. Summary**

All Coast Guard operations have the potential to be high risk. Coast Guardsmen have a fundamental responsibility to mitigate risk to the maximum extent by operating in accordance with established policy and safety procedures. Although the crew of CG 6017 was comprised of

skilled and professional Coast Guardsmen, failure to follow established Coast Guard aviation policy and procedures, and an apparent complacency in the planning and conduct of this flight, were significant factors in this tragic accident and must serve as a lesson for others.

Two years ago, the Coast Guard chartered the Aviation Safety Assessment Action Plan (ASAAP) to conduct a “nose-to-tail” review of the aviation environment. This in-depth assessment identified a trend toward a loss of focus on the basics of aviation professionalism and a tendency toward complacency in medium to low risk operations such as in this case. As a result of the ASAAP, the Deputy Commandant for Operations has directed a number of key measures. Pilots must file an FAA/DOD instrument flight rules (IFR) or visual flight rules (VFR) flight plan for any transit, training, or logistics missions flown outside a unit’s designated area of responsibility. Prior to departure, the PIC will file a detailed route or flight plan and provide an ORM briefing to the unit’s Operations Officer or higher Command Authority. Additionally, the ASAAP required comprehensive assessment of the Training and Standardization Program, to include a requirement that the annual unit-level CRM refresher training be jointly attended by both pilots and enlisted aircrew to enhance total aircrew involvement and assertiveness in mission planning, execution, and post-flight evaluation.

Since this mishap, Coast Guard senior leaders have visited every aviation unit and senior operational commanders to personally discuss ASAAP findings and address the issues of complacency, the need to follow established aviation policy, and the importance of professional mission execution and adherence to accepted safety procedures. The Coast Guard will continue to work aggressively to identify opportunities to reduce mishaps, enhance flight safety, and improve operational effectiveness.

I commend the extraordinary efforts of all Coast Guard units, the National Park Service, the Quillayute Nation Fish and Wildlife Service, Department of Defense assets and the community of La Push for their assistance during this tragic incident.

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