



## **U.S. MARINE CORPS FORCES, PACIFIC**

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**Media Release  
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### **OSPREY MISHAP INVESTIGATION COMPLETED**

**CAMP H.M. SMITH, Hawaii** –The Judge Advocate General Manual (JAGMAN) Investigation into the MV-22 Osprey mishap at Marine Corps Training Area Bellows on Sunday, May 17, 2015 has been completed and signed by the Commander U.S. Marine Corps Forces, Pacific. This tragic mishap led to the loss of two Marines, major aircraft damage, and injuries to most Marines aboard.

The investigation found the main contributing factors to this mishap were pilot performance and an improper site survey of LZ Gull. The pilots did not violate any regulations or flight standards; however, pilot decision-making failed to take into account the contributory events that led to the mishap. The first landing attempt indicated that the Reduced Visibility Level (RVL) of LZ Gull was much higher than anticipated. The investigation indicated that a proper risk assessment should have prompted the pilots to choose an alternate flight profile, path, or landing site that would have minimized or avoided the severe brownout conditions.

The investigation found that repeated, sustained flight time in brownout conditions (an in-flight visibility restriction due to dust or sand in the air) while attempting to land caused the left engine to stall, resulting in a loss of power that placed the aircraft in an unavoidable freefall to the ground. Specifically, Engine Percent Power (EPP) decreased on both engines each time the aircraft entered a low-altitude hover over Landing Zone Gull as dust and sand particles increased in the air due to rotor wash. The sand and dust ingestion caused a buildup of material on the turbine blades and vanes leading to a compressor stall in the left engine, which decreased lift and resulted in the hard landing.

Many of the recommendations from the investigation focus on aiding the pilot decision-making process, such as: displaying engine performance and stall margins on the Multi-Functional Display, more advanced brownout technology, advisories alerting pilots when engine power declines below 95%, and reconsideration of Naval Air Training and Operating Procedures Standardization (NATOPS) recommendations regarding flight times in brownout conditions. As a direct result of this mishap, a NATOPS Interim Change was published on 17 November, 2015, decreasing exposure time in Reduced Visibility Landing Profiles. The investigation has also recommended improving the engine air filtration systems for the MV-22. The investigation recommendations also include the potential for disciplinary and administrative actions.

The aircrew performed all emergency procedures in accordance with NATOPS and training when responding to the engine failure. Furthermore, the investigation concluded that the mishap did not occur due to any misconduct or negligence of duties or training on the part of the air crew.

The loss of life was tragic and felt deeply in the Marine Corps community; our thoughts go out to the families of all those affected by this incident.

Additionally, the Marine Corps expresses its deepest gratitude for the heroic, selfless actions of the Marines and sailor aboard the aircraft along with the quick lifesaving actions of the civilian and military first responders that prevented any further loss of life.