

111TH CONGRESS  
1ST SESSION

# H. RES. 698

Expressing the sense of the House of Representatives that the fatal crash of an MV-22 aircraft on April 8, 2000, in Marana, Arizona, was not a result of aircrew human factors or pilot error.

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## IN THE HOUSE OF REPRESENTATIVES

JULY 30, 2009

Mr. JONES submitted the following resolution; which was referred to the  
Committee on Armed Services

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## RESOLUTION

Expressing the sense of the House of Representatives that the fatal crash of an MV-22 aircraft on April 8, 2000, in Marana, Arizona, was not a result of aircrew human factors or pilot error.

Whereas an MV-22 aircraft crashed on April 8, 2000, in Marana, Arizona, killing the pilot, Lieutenant Colonel John A. Brow, the co-pilot, Major Brooks S. Gruber, and 17 other Marines aboard the aircraft;

Whereas Lieutenant Colonel Brow and Major Gruber possessed excellent and unassailable records throughout their careers in the United States Marine Corps and gave their lives for the United States and the Marine Corps in the crash on April 8, 2000;

Whereas after the accident Lieutenant Colonel Brow's commanding officer described him as a "highly regarded pilot, both in the C-130 and MV-22, and his expertise and recommendations lent a great deal to the MV-22 program.";

Whereas after the accident Major Gruber's commanding officer described him as a "very highly regarded pilot, both in the CH-53E and MV-22, whose work with special operations gave unique insight to the MV-22 program.";

Whereas numerous reviews and investigations following the accident document that the pilots of the aircraft involved in the accident were not provided with the necessary and critical knowledge of the potential for sudden loss of controlled flight in the MV-22 following Vortex Ring State (VRS) onset or the training to recognize, avoid, or recover from the extreme dangers of VRS in the MV-22;

Whereas after the accident Naval Air Systems Command called for a thorough investigative flight test program to find the MV-22's boundaries of VRS, characterize its handling qualities, and establish the basis for a new flight limitation, new pilot procedures, and a cockpit warning system, if warranted;

Whereas, as a result of testing following the fatal accident, a visual and aural cockpit warning system was developed to alert the aircrew when the aircraft exceeded the Naval Air Training and Operating Procedures Standardization (NATOPS) flight manual's rate-of-descent limit;

Whereas, on July 27, 2000, the Marine Corps announced in a press release that a combination of "human factors" caused the April 8, 2000, crash, stating that "deviations from the scheduled flight plan, an unexpected tailwind

and the pilot's extremely rapid rate of descent into the landing zone created conditions that led to the accident.”;

Whereas the press release also stated the “although the report stops short of specifying pilot error as a cause, it notes that the pilot of the ill-fated aircraft significantly exceeded the rate of descent established by regulations for safe flight.”;

Whereas the press release issued by the Marine Corps also quoted Commandant General James L. Jones as saying that “the tragedy is that these were all good Marines joined in a challenging mission. Unfortunately, the pilots’ drive to accomplish that mission appears to have been the fatal factor.”;

Whereas the language of the press release is damaging and inaccurate because, at the time of the crash, adequate testing of the MV-22 in the High Rate of Descent (HROD) and the VRS regimes had not been conducted, the MV-22 did not have a VRS warning system, and the pilots did not have adequate knowledge of the potential for sudden loss of controlled flight in the MV-22 following VRS onset or the training to recognize, avoid, or recover from the extreme dangers of VRS in the MV-22;

Whereas according to the investigation conducted pursuant to the Judge Advocate General Manual (JAGMAN investigation), on April 8, 2000, Lieutenant Colonel Brow and Major Gruber were participating in an Operational Evaluation (OPEVAL) to determine the operational effectiveness and suitability of the MV-22 and to continue tactics development to support the promulgation of an Operational Tactics Guide;

Whereas an OPEVAL is to be conducted under realistic scenarios in day, night, and adverse weather;

Whereas the OPEVAL of April 8, 2000, called for a long-range night Non-combatant Evacuation Operation exercise involving the insertion of a security and processing unit;

Whereas, according to the Comptroller General, the Operational Test and Evaluation Force's MV-22 report on the OPEVAL indicated that the MV-22 "Naval Air Training and Operating Procedures Standardization (NATOPS) manual lacked adequate content, accuracy, and clarity at the time of the accident. Additionally, because of incomplete developmental testing in the High Rate of Descent (HROD) regime, there was insufficient explanatory or emphatic text to warn pilots of hazards of operating in this area. The flight simulator did not replicate this loss of controlled flight regime.";

Whereas the preliminary NATOPS manual and MV-22 ground school syllabus provided insufficient guidance or warning as to high rate of descent airspeed conditions and the potential consequences of a rapid rate of descent;

Whereas the officer conducting the JAGMAN investigation stated that "The fact that this aircraft not only found itself in a Vortex Ring State condition with no apparent warning to the aircrew, but also departed controlled flight is particularly concerning.";

Whereas, based on this evidence, it is clear that the pilots of the aircraft involved in the accident on April 8, 2000, did not have the knowledge, warning systems, or training needed to avoid or recover from VRS onset at the time of the accident;

Whereas, on December 15, 2000, after a second crash of a MV-22 aircraft that year, then-Secretary of Defense Bill Cohen determined that the accident history of the MV-22 aircraft and other testing issues required an independent, high-level review of the program and therefore established a Blue Ribbon Panel to review the safety of the MV-22 aircraft and to recommend corrective actions;

Whereas the Blue Ribbon Panel was briefed by the Comptroller General and the contents of this brief were incorporated into a subsequent Comptroller General report which cited concerns about the adequacy of development tests conducted prior to the MV-22 aircraft entering the operational test and evaluation phase, in particular that such developmental testing was deleted, deferred, or simulated in order to meet cost and scheduled goals;

Whereas the original plan to test the flying qualities of the flight control system of the MV-22, including various rates of descent, speeds, and weights, would have provided considerable knowledge of the MV-22 flight qualities especially in areas related to the sudden loss of controlled flight following VRS onset;

Whereas, to meet cost and schedule targets, the actual testing of the MV-22 conducted was less than a third of the testing originally planned;

Whereas the MV-22 pilots involved in the accident did not understand the optimum use of nacelle tilt to recover from VRS onset;

Whereas additional HROD and VRS developmental testing could have prevented the tragic accident on April 8, 2000, in Marana, Arizona, by providing the pilots the

knowledge and training to either avoid or recover from VRS;

Whereas the Comptroller General report also revealed that the Director, Operational Test & Evaluation of the Department of Defense stated that “while the possible existence of VRS in the V-22 was known when flight limits for OPEVAL were established, the unusual attitude following entry into VRS was not expected” and “thus, the first indication the pilot may receive that he has encountered this difficulty is when the aircraft initiated an uncommanded, uncontrollable roll.”; and

Whereas Lieutenant Colonel Brow and Major Gruber and their families are dishonored by the assertion that the aircrew was in any way responsible for this fatal accident: Now, therefore, be it

1       *Resolved*, That it is the sense of the House of Rep-  
2       resentatives that—

3               (1) the fatal crash of an MV-22 on April 8,  
4       2000, in Marana, Arizona, was not a result of air-  
5       crew human factors or pilot error that can be attrib-  
6       uted to the late Lieutenant Colonel John A. Brow or  
7       the late Major Brooks S. Gruber who performed  
8       their duties as United States Marine Corps aviators  
9       competently and professionally;

10              (2) the fatal factor in the crash of an MV-22  
11       on April 8, 2000, was the aircraft’s lack of a Vortex  
12       Ring State (VRS) warning system and the failure to  
13       provide the pilots with the necessary and critical

1 knowledge and training regarding the extreme dan-  
2 gers of VRS onset in the MV-22;

3 (3) because of inadequate High Rate of Descent  
4 (HROD) and VRS developmental testing, the pilots  
5 of the MV-22 involved in the accident on April 8,  
6 2000, were not trained or able to recognize, avoid,  
7 or recover from VRS onset in the MV-22; and

8 (4) had adequate HROD and VRS develop-  
9 mental testing been conducted prior to the Oper-  
10 ational Evaluation of April 8, 2000, and had a VRS  
11 warning system been installed in the aircraft, Lieu-  
12 tenant Colonel Brow and Major Gruber would have  
13 been better able to avoid or recover from VRS.

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