

## AMERICAN METEOROLOGICAL SOCIETY

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Keith L. Seitter, Executive Director

Richard E. Hallgren, Executive Director Emeritus Ronald D. McPherson, Executive Director Emeritus Kenneth C. Spengler, Executive Director Emeritus

28 May 2008

The Honorable Mark Udall The Honorable Bart Gordon U.S. House of Representatives Committee on Science and Technology 2320 Rayburn Building Washington, D.C. 20515

Dear Congressman Gordon and Congressman Udall,

On behalf of the American Meteorological Society (AMS), I am writing in reference to the **National Aeronautics and Space Administration Authorization Act of 2008, H.R. 6063.** The communities represented by the AMS have interests in Titles II and III, and after further study we may wish to offer comments on those. At present, however, we wish to offer our support to the language in Section 1101, Title XI, dealing with space weather.

As you know, space weather can have a direct impact on aviation operations. Effects include disruption in High Frequency (HF) communications, satellite navigation system errors, and radiation impacts to humans and avionics. These concerns not only apply to current operations, but become even more important at all latitudes when considered within the framework for the Next Generation Air Transportation System (NextGen) and the rapidly expanding fleet of military and commercial high altitude airships. Additionally, with the potential space tourism and intercontinental space flight markets, these risks are equally important to the commercial space transportation industry.

As air traffic over the poles increases, the aviation industry is becoming more aware of the impacts space weather can have on operations. United Airlines has reported that if polar routes are not available, the additional operating costs and penalties for an unscheduled stop or reroute can total hundreds of thousands of dollars. However, more research is needed to understand the impacts of space weather on aviation. The industry needs a better understanding from the scientific, engineering, and medical communities regarding the risks. Then they can use space weather information and services to reduce aviation costs and maintain safety.

The AMS Policy Program held a policy workshop in November 2006 in Washington, DC on Integrating Space Weather Observations and Forecasts into Aviation Operations. Participants represented the aviation community (dispatchers, operations managers, meteorologists, and international organizations); federal government (FAA, NOAA, NSF, NASA, DOD, JPDO); and the space weather community (researchers and vendors). This was part of a broader three year study funded by the National Science Foundation. The report from this workshop is available online at http://www.ametsoc.org/atmospolicy/spacewxworkshop.html.

This workshop led to a formal AMS Policy Statement on Space Weather, a copy of which is attached. The language in Section 1101 is very consistent with the recommendations in the AMS Statement, and with what the aviation and space weather communities discussed as essential to increasing the safety, reliability, and efficiency of the nation's aviation operations through more effective use of space weather forecasts and information. The AMS urges you to retain this language in H.R. 6063.

Sincerely,

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Keith Seitter Executive Director



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The Honorable Ralph M. Hall U.S. House of Representatives Ranking Member, Committee on Science and Technology 2405 Rayburn Building Washington, D.C. 20515

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