

**Statement  
of**

**Michael D. Griffin  
Administrator  
National Aeronautics and Space Administration  
Before the  
Committee on Science and Technology  
U.S. House of Representatives**

Mr. Chairman and Members of the Committee, thank you for this opportunity to appear before you today to discuss the National Aviation Operations Monitoring Service (NAOMS) project, and the issue concerning the release of data obtained by various researchers pursuant to that project. When I was made aware last week that NAOMS pilot survey data had been withheld under a Freedom of Information Act request initiated by the Associated Press, I asked Dr. Lisa Porter, Associate Administrator for Aeronautics Research, to investigate the matter. I hope to provide you with information that will address the questions and concerns that have been raised by you and others during the past several days.

**What is NAOMS?**

There has been some confusion regarding what NAOMS actually is. The NAOMS project began in 1998 with an overarching goal of developing methods to facilitate a data-driven approach to aviation system safety analysis. Accomplishing this goal requires the generation of data that are statistically meaningful and representative of the system. The NAOMS project team decided to develop a survey methodology to acquire such data. The survey methodology development took roughly two years to complete. The actual data collection using the methodology began in April 2001 and ended in December 2004. During that time, the project team surveyed approximately 24,000 commercial airline pilots and approximately 5,000 general aviation pilots.

In early 2005, it was determined that the amount of data collected was sufficient to evaluate whether the NAOMS survey methodology indeed produced statistically meaningful and representative data. NASA's Aviation Safety and Security Program leadership thus directed the NAOMS project to complete the assessment of its survey methodology and transfer it to industry-government decision-makers (Commercial Aviation Safety Team [CAST] and Air Line Pilots Association [ALPA]), and provided FY2005 funding to do so. It is worth noting that the 2004 Review of NASA's Aerospace Technology Enterprise by the National Academies concluded that there was not a compelling argument for continued independent data collection in the NAOMS project. In FY2006, the Aviation Safety Program of the Aeronautics Research Mission Directorate (ARMD) provided additional funding to complete the transition and to document the results. The transition of the survey methodology has been successfully completed,

but the documentation has taken longer to complete than anticipated. The documentation will be completed by the end of this year.

### **Why was funding for NAOMS cut?**

It has been widely reported that NAOMS funding was cut or prematurely shut down. That is not the case. When the project originated in 1998, it was intended to continue until 2004, as indicated in project briefings that were provided to various Government and industry audiences when the project began. (These briefings have been provided to the Committee for the record. Later briefings indicated an extension to 2005.) As I previously mentioned, funding was extended through 2006 to allow for transition of the methodology and final documentation. The total amount we spent on this effort was \$11.3M.

That said, the overarching goal of trying to develop methodologies that enable data-driven system safety analyses is one that NASA continues to embrace in its current Aviation Safety Program, in close partnership with the FAA, industry, and academia. In order to continually and significantly reduce the accident rate to meet the expected growth of the Next Generation Air Transportation System (NextGen), it is imperative to develop a robust safety information system that discovers safety precursors before accidents occur. Accomplishing this requires the ability to combine and analyze vast amounts of data from many varied sources to detect and act on new safety threats.

NASA and the FAA are combining their unique skills and resources under clearly defined roles and responsibilities to address this challenge. NASA is focused on the development of advanced analysis algorithms that can be implemented in a comprehensive system that the FAA can utilize to effectively analyze a wide variety of safety data. In order to ensure that the technology is effectively transitioned between organizations, a program plan has been developed and is being executed. The initial response to this approach from the stakeholder community has been very positive. The FAA Research Engineering and Development Advisory Committee (REDAC) Safety Subcommittee recently reported out to the REDAC in October 2007 that it “believes significant progress has been made over the past year” in defining the program and its execution. The Subcommittee credited the leadership of both the FAA and NASA for “driving a well integrated plan that will form the basis for proactive risk identification and assessment in the future”.

### **What do the data show?**

There has been much speculation in the press regarding what the data will reveal about the safety of our national airspace system. Several briefings were given to other government and industry organizations by members of the NAOMS project team, and some of those presentations included some analyses that were based upon extrapolation methods to estimate absolute numbers of events occurring within a given time period. For many of these events, the numbers were significantly higher than reported by other means, such as the Aviation Safety Reporting System (ASRS). However, there was no attempt made to validate the extrapolation methodology. Indeed, given the results for some examples such as engine failure events, there may be reason to question the validity of the methodology.

While some analysis of the data was presented to NASA and other government personnel, unfortunately, none of the research conducted in the NAOMS project, including the survey methodology, has been peer-reviewed to date. Accordingly, any product of the NAOMS project, including the survey methodology, the data, and any analysis of that data, should not be viewed or considered at this stage as having been validated.

### **Did NASA destroy any data?**

There has been considerable attention in the press to the supposed destruction of NAOMS data. Battelle Memorial Institute, the prime contractor, maintains master copies of all NAOMS survey results on compact discs and other backup media in its Mountain View, Calif., facility. NASA's Ames Research Facility at Moffett Field, Calif., also maintains copies of this data.

NASA had directed Battelle to recover, or ensure secure destruction of, any copies of the NAOMS data that might be held at locations outside of Mountain View. This includes copies held by present or past Battelle NAOMS subcontractors. The purpose of this request was to ensure compliance with NASA data security requirements as part of the contract close-out process, because the contract is scheduled to end in October 2007. This request in no way jeopardized the security of the master copies, which remain secure at Battelle and the Ames Research Facility.

To ensure that no destruction of data, including data held by sub-contractors, occurred after concerns about data destruction were raised by this Committee, NASA notified the NAOMS project management team and Battelle to retain all records related to the NAOMS project. Battelle provided the same direction to its subcontractors.

### **Dissemination of research results**

One of the most important NASA principles is to ensure the dissemination of research results to the widest practical and appropriate extent. This principle has received particular focus during the restructuring of ARMD. The emphasis on open dissemination is clearly stated in ARMD's fully and openly competed NASA Research Announcements as well as in the Space Act Agreements that it establishes with commercial organizations for collaborative research. Furthermore, all of ARMD's project plans include documentation and publication of results as deliverables. We firmly believe in the importance of the peer-review process, which is essential for ensuring technical excellence.

### **Why did NASA reject the FOIA request?**

Under federal law, NASA is required to protect confidential commercial information that is voluntarily provided to the agency and would not customarily be released to the public. In preparing the response to the Associated Press' Freedom of Information Act appeal, the characterization of the requested data by Ames researchers raised concerns that the data likely contained confidential commercial information. This characterization was the basis for withholding the data under Exemption 4.

Considerable attention has been focused on one sentence in the final determination letter suggesting the data was being withheld because it could “affect the public confidence in, and the commercial welfare of, the air carriers and general aviation companies.” I have already made clear that I do not agree with the way it was written. I regret any impression that NASA was in any way trying to put commercial interests ahead of public safety. That was not and never will be the case.

### **NASA plans**

I have directed that all NAOMS data that does not contain confidential commercial information, or information that could compromise the anonymity of individual pilots, be released as soon as possible. The release of this data will be accompanied with the proviso that neither the methodology nor the results have received the level of peer review required of a NASA research project. Therefore, the survey methodology and the data should not be considered to have been verified.

NASA will receive a final report from Battelle by December 31, 2007 that will include a comprehensive description of the methodology, including approach, field trials, etc. NASA will make this report available to any interested party.

We intend to continue to emphasize the importance of peer-review of all research results, whether conducted by NASA researchers or contractors funded by NASA. Peer-review is critical to the achievement of technical excellence.

### **Concluding remarks**

Let me conclude by thanking you again for this opportunity to appear before you to discuss NAOMS and to answer your questions.