



DAVID A. PREWITT  
VICE PRESIDENT - SAFETY

George B. Finelli  
NASA Langley Research Center  
Mail Stop 229  
Hampton, VA 23681-2199

Dear Mr. Finelli,

About nine years ago, we at Alaska Airlines were approached by the NASA / Battelle team to help contribute to the testing and refinement of the APMS program and its suite of tools including the Morning Report analysis tool. Having seen the capabilities available from current COTS programs and recognizing their limitations, we were more than happy to become an APMS Partner Airline.

Put briefly, the inventions resident in the APMS suite of tools and particularly the Morning Report tool, the underlying technology which was developed by Battelle's Pacific Northwest National Laboratories (PNNL), are very powerful. We are now in the midst of evaluating this new technology in actual airline operations. We are using the analysis results from the APMS program in addition to the basic analysis capability that comes from SAGEM, the company whose FOQA GDRAS suite of tools that we currently use.

We find the APMS Morning Report tool is pioneering new ways to help airline safety programs to better understand what is actually happening in daily operations. The analysis results from this new technology have assisted us in our efforts to improve the overall management of flight safety risk. The Morning Report tool does, indeed, find the "unexpected" and assists us in adjusting our current COTS FOQA programs to look for important events that we may otherwise never have found until an accident occurred.

It should also be noted that the availability of the Morning Report tool was a prime-motivating factor in the FOQA Aviation Rule Making Committee (FOQA ARC), a body constituted by FAA representing the airline industry, in asking NASA to establish a national distributed database of FOQA flight data. It is expected that the Morning Report tool will be used to conduct analysis on this national database. Our airline sits on the FOQA ARC and will continue to support this worthwhile effort.

We are also happy that the APMS program calculates and derives both kinetic and potential energy parameters of aircraft during approach and landing. These are key concepts based in the core physics of flying that must be controlled by the pilot in an effective way. Using the Energy Index displays provided by these new APMS tools, which are not available in COTS programs, we are now able to easily detect and analyze flights that are involved in High Energy and Unstable Approaches which have been identified by the CAST as a primary causal factor in aviation accidents. The same Battelle PNNL development team also constructed the underlying algorithms used in this new technology.

Additionally, new technology developed by the APMS Aviation Data Integration System (ADIS) tool is a major step forward in flight analysis because heretofore, obtaining the actual weather and day/night operations for a flight under analysis was too labor intensive to perform except on only a few selected flights. We now use this tool on a routine basis.

Finally, we offer our sincere thanks to NASA and to the Aviation Safety & Security Program for its support in development of these important new technologies. We also offer our thanks and appreciation to the NASA/Battelle team for the work done on the APMS Morning Report and other new innovations that they have brought to the aviation community. We also stand ready as a member of the US aviation industry to continue supporting NASA in its aviation safety work.

Sincerely,



Dave Prewitt  
Vice President Safety & Security  
Alaska Airlines, Inc.

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