National Aeronautics and
Space Administration
Office of the Administrator
Washington, DC 20546-0001

March 27, 2014

Vice Admiral Joseph W. Dyer, USN (Ret.)
Chair
Aerospace Safety Advisory Panel
National Aeronautics and Space Administration
Washington, DC 20546

Dear Admiral Dyer:

Enclosed is NASA's response to a recommendation from the 2014 First Quarterly Meeting of the Aerospace Safety Advisory Panel (ASAP). Please do not hesitate to contact me if the ASAP would like further background on the information provided in the enclosure.

I look forward to receiving continued advice from the ASAP that results from your important fact-finding and quarterly meetings.

Sincerely,

Charles F. Bolden, Jr.
Administrator

Enclosure:
2014-01-02 – Knowledge Capture and Lessons Learned

Aerospace Safety Advisory Panel Recommendation
Tracking Number 2014-01-02
Knowledge Capture and Lessons Learned

Finding:
Knowledge management and transfer within NASA has some aspects of "story-telling around the campfire" instead of modern, digitally-accessible and retrievable information. Lessons learned, accidental discoveries, and collateral benefits from all of NASA's human space flight activity is immeasurable.

Recommendation:
The ASAP strongly recommends a continuous and formal effort in knowledge capture and lessons learned. Modern tools exist to facilitate this and NASA should avail itself of them. Rigor in this area is particularly critical as the experience in specific skills dissipates over time and as engineering talent is stretched across programs.

Rationale:
When one looks at what has been lost or difficult to regain from Apollo, one can see the importance of capturing the wisdom of those who have gone before.

NASA Response:
NASA concurs with the recommendation to pursue a formal effort to prioritize critical knowledge that emerges from events such as mishaps, accidents, and technical investigations. This strategy will facilitate augmenting, integrating, and improving on current knowledge services efforts occurring across the Agency as briefed by the NASA Chief Knowledge Officer (CKO) to the ASAP on 27 February 2014 at NASA Headquarters. These efforts will focus on the twin overall goals of knowledge visibility and accessibility to include improving knowledge search capabilities based on the latest digital knowledge tools, processes, and procedures. For prioritizing critical knowledge, NASA will review current policies and procedural requirement documents (i.e., NPR 8621.1 - NASA Procedural Requirements for Mishap and Close Call Reporting, Investigating, and Recordkeeping) to identify opportunities to improve codifying standards based on mishap report lessons as well as incorporating identified critical knowledge into existing or new standards and other documents for distribution to the program and engineering community. NASA will develop and implement an administrative mechanism to serve as a NASA Headquarters knowledge referee consisting of appropriate Agency Technical Workforce representatives that will play a formal role in identifying critical knowledge that should receive the highest levels of Agency visibility and accessibility. Recommendations for improving NASA managerial focus on knowledge services will be created for incorporation into Agency leadership development programs, knowledge-related competencies and capabilities, and established as criteria for Agency leadership evaluation and selection. These efforts will be accompanied by the development and publication of a digital Agency Knowledge Management Handbook supported by accompanying knowledge content development products and services that will describe best and emerging practices of effective knowledge capture, sharing, and discovery as well as formalizing standardization of Agency and Center knowledge practices. NASA welcomes the opportunity to discuss with the ASAP ways that it can continue to improve its ability to function as a learning organization that optimizes its knowledge resources.