

NASA AEROSPACE SAFETY ADVISORY PANEL
National Aeronautics and Space Administration
Washington, DC 20546
VADM Joseph W. Dyer USN, (Ret.), Chair

November 13, 2012

Mr. Charles F. Bolden, Jr.
Administrator
National Aeronautics and Space Administration
Washington, DC 20546

Dear Mr. Bolden:

The Aerospace Safety Advisory Panel (ASAP) has reviewed the eighteen open NASA responses to their recommendations. Of these eighteen recommendations, the ASAP has determined that six recommendations can be closed. They are: 2010-01-03, 2010-01-04a, 2010-01-07, 2012-01-01, 2012-01-03, and 2012-01-05. Enclosure 1 provides a summary of the twelve remaining open recommendations.

As a result of the discussion on closing these items, a briefing to the ASAP is requested to fully understand the broader picture of the Probabilistic Risk Assessment (PRA) process.

Sincerely,

A handwritten signature in black ink, appearing to read "J. W. Dyer", written in a cursive style.

VADM Joseph W. Dyer, USN (Ret.)
Chair

Enclosure

ASAP Open Recommendations

<u>Rec. No.</u>	<u>Title</u>	<u>ASAP Status</u>	<u>ASAP Evaluation of To-Date Responses</u>
<p>2011-01-01 2010-04-03 2006-03-04</p>	<p>NASA Alcohol Use and Testing Policy: 2011 - NASA should implement a post-mishap blood alcohol and drug testing program for all personnel in sensitive positions that are involved in Class A and B mishaps. That includes NASA contractors, civil servants, political appointees, and all affected visitors. This investigative tool will support key organizational learnings and is in line with many legal requirements in various jurisdictions in which NASA operates. It should be noted that this is NOT a recommendation for a random test program. It is a test for cause after a serious mishap has occurred. 2010 - The lead Headquarters organization responsible for developing the alcohol policy is requested to provide a formal briefing on the status of the policy (including a schedule showing a targeted completion and implementation date) at the ASAP's first quarterly meeting in 2011. 2006 -Random Drug and Alcohol Testing - Recent mishap investigation revelations indicate that there does not seem to be an Agency-wide requirement for random drug and alcohol testing among contractors. ASAP recommends that expanding both random pre-incident and targeted post-incident testing would be well advised for contractors as well as NASA civil servants.</p>	<p>NASA has elected to not implement. Will be closed upon receipt of closure letter.</p>	
<p>2011-01-02</p>	<p>Safety and Mission Assurance Role Descriptions: NASA should begin to draft a role description as well as some key job requirements, such as educational background and experience., for the personnel who have to specify, manage, and assure the S&MA activities under the new program direction. NASA needs to articulate the skills needed as soon as possible.</p>	<p>Open, pending receipt of a briefing addressing the findings of the OSMA's Research and Technology Strategy Team Study.</p>	

ASAP Open Recommendations

<u>Rec. No.</u>	<u>Title</u>	<u>ASAP Status</u>	<u>ASAP Evaluation of To-Date Responses</u>
2011-01-03b	IRIS Support: The ASAP would like to understand how the IRIS supports causal analysis and include the causations in the periodic reports together with their associated mitigation actions and schedules for completion to management. Steps should be taken to have the system do the analysis and reporting automatically.	Open pending modifications being implemented for automated reporting	
2011-04-01	Chief Knowledge Officer Positions: To ensure the identification and capture of critical NASA implicit and explicit knowledge, the ASAP recommends NASA establish a single focal point (a Chief Knowledge Officer) within the Agency to develop the policy and requirements necessary to integrate knowledge capture across programs, projects, and Centers. Additionally, the ASAP recommends that NASA consider establishing Chief Knowledge Officer positions at all NASA Centers and in all Mission Directorates to ensure standardization of programs and lessons-learned as we move forward.	Open with monitoring for receipt of revised NPR 7120.6	
2012-01-02	ISS Deorbit Capability: (1) To assess the urgency of this issue, NASA should develop an estimate of the risk to ground personnel in the event of uncontrolled ISS reentry. (2) NASA should then develop a timeline for development of a controlled reentry capability that can safely deorbit the ISS in the event of foreseeable anomalies.	Open waiting visibility and the final plan.	
2012-03-01	Software Assurance and CMMI Requirements: All NASA internal safety-critical software development groups should achieve CMMI Level 3 (or an equivalent as established by external validation agent) by the end of FY 14.	Open pending briefing on topic.	

ASAP Open Recommendations

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2012-03-02	Software Assurance Metrics: NASA should provide metrics and trends that demonstrate whether the software assurance provisions are working and provide return on investment	Open pending receipt of metrics and analyses of data.	
2012-03-03	Software Independent Verification and Validation (IV&V) Requirements: NASA should establish a standard identifying the level of criticality that requires software IV&V, i.e., at what risk level must IV&V be required and therefore either be resourced, or if that is not possible, a formal waiver process be in place for an accountable individual to accept the associated risk and document it.	Open pending understanding. Is there an standard and is NASA meeting it?	
2012-03-05	Five Year Roadmap for Continuous Improvement of the Agency's Mishap Investigation Process: Link status reports of the five year mishap investigations process plan with progress reports on the NASA drug and alcohol policy development. Also, continue to report on the training of the MIT and the investigation Board Chairs in greater detail to include the method, consistency, and quality of training for MIT members and Board Chairs.	Open	
2012-04-01	Alignment of NASA OSMA and OCE Budgets with Line Authority: NASA should review and determine the appropriateness of having OSMA and OCE in a non-safety aligned budget line item and office.		