NASA
PROGRAM MANAGEMENT COUNCIL
Meeting Summary, Decisions and Actions

VITAL MEETING DATA

Date: 17 May 2017
Time: 12:30 p.m. – 2:30 p.m. (EST)
Location: NASA Headquarters (HQ), 8Q40 & ViTS
Agenda: See attached.
Attendance: See attached.

Opening Comments

Robert Lightfoot, National Aeronautics and Space Administration (NASA) Associate Administrator (AA), made the following brief opening comments:

- Today we will be talking about Enterprise Risk Management (ERM) and the work done to document our baseline risk profile and increase awareness across the centers.
- The second topic will be a discussion about how we handle Planetary Protection and the direction going forward.

First Item of Business: NASA Enterprise Risk Management Decision

The ERM work presented, which has been taking place since March 2016, started with interviews with the A-suite based on guidance from the Office of Management and Budget (OMB). Following the interviews, the team went to most of the centers for ERM Roadshows. The roadshows were intended to educate and provide a general awareness of the agency ERM Program, introduce the NASA Unified Comprehensive Operational Risk Network (UNICORN), socialize the draft Agency Risk Profile for further input and buy in, and provoke thought among agency leadership. The target audience consisted of all Officials In Charge (OICs) or their representatives and other team members, such as risk managers for the organization, center Chief Financial Officer (CFO) representatives, and Office of Safety and Mission Assurance (OSMA) representatives. When the team first started, they were looking for ERM gaps by observing which areas were compliant and which weren't based on the OMB request. Their conclusion is that although a lot of ERM work is being done within NASA, there is little consensus on how to do it.

NASA UNICORN

The NASA UNICORN was described and includes ERM activities across the Executive Council (EC), Senior Management Council (SMC), Program Management Council (PMC), and Mission Support Council (MSC). The core of the UNICORN, which was "comprehensive operational risk," was found to exist, but unification and network of these risk management efforts across the enterprise was lacking. The UNICORN illustration includes a fulcrum, which represents the balancing act that must occur when taking into account political and reputational risk, programmatic risk, financial risk, strategic risk, and operational risk. ERM sources include management councils, internal controls reviews/reports, Agency Risk Management Working Group (ARMWG), Baseline Performance Review (BPR), technical authorities, Strategic Objective Annual Reviews (SOAR), ERM Roadshows, and audits.

Draft Risk Profile

The draft Agency Risk Profile, based on the initial A-suite interviews conducted and validated through center interviews was presented. The profile notes that agency leadership is focused are on key risks. Risk themes include cyber security capabilities, aging infrastructure, micrometeoroids and orbital debris (MMOD), workforce strategies, procurement lead time, safety culture, commercial partners/change of business model, international partnerships, limited launch vehicle (LV) access, protection of proprietary and sensitive information, flexible workforce, and future space communication/architecture.

The question was raised regarding the criteria for an Enterprise-level risk being identified. Lightfoot commented that these high-level risks were identified by the fact that they continually come up in management meetings. They are based on cross-cutting enterprise risks and represent the baseline for an enterprise risk profile, impacting broadly across the agency and not just program(s).

OICs are enthusiastic that actions are being taken to formalize and integrate top risks across the agency, producing an enterprise risk list to help inform budget and resource priorities for the agency. The themes presented within the notional risk profile were generally viewed as comprehensive and on point. The existence of OIC-driven risk discussions within their organizations was verified.

The goal was achieved of informing OICs of ERM, introducing the NASA UNICORN, and socializing the notional risk profile within the agency through the roadshows and other interactions. The design and operation of the NASA UNICORN was validated by asking OICs to describe their UNICORN/risk management process and how they feed into the broader NASA UNICORN. OICs that do not currently have a risk management framework in place are open to implementing a risk management process. It was determined that an existing forum such as the BPR should be used to conduct formal agency-level ERM discussions.

Future work includes developing a more robust technique for conducting and integrating ERM activities, conducting a deeper dive into the risk profile and potential or on-going mitigation strategies, and continuing to strengthen the ERM Program as it matures.

Lightfoot commented that the goal for the day was to approve this first risk profile. The next step will be to develop the triggers and determine what to pay attention to in order to track these risks. The agency risk profile will be updated with annual briefings brought to the APMC, and quarterly status briefings during the applicable (mission support) BPR. The initial set of risks will be an attachment to the decision memo.

One informal action was assigned to the ERM team to apply appropriate risk descriptions, determine the best tracking process, understand when the environment changes and how risks are affected, determine how to watch and mitigate risks, and identify an appropriate point of contact. These risks will be presented quarterly at the BPR. At that point, the team will explain what it means to have this list and what the next steps will be, including how the risks will be tracked and documented.

The Decision Memo Summary: The NASA Agency Risk Profile is devised from Enterprise Risk Management activities facilitated through the NASA Unified Comprehensive Operational Risk Network (UNICORN). These activities comport with effective and efficient implementation of OMB Circular No. A-123, "*Management's Responsibility for Enterprise Risk Management (ERM) and*

Internal Control". The Agency Risk Profile is a compilation of those Agency Level cross-cutting risks identified by the UNICORN.

The Decision: Adopt the NASA Agency Risk Profile as final, as briefed to the APMC.

Second Item of Business: Planetary Protection Authority Transition Decision

The Office of the Chief Engineer (OCE), Office of the Chief Technologist (OCT), and the Office of the Chief Scientist (OCS) reviewed the NASA Advisory Council (NAC) structure and flagged the Planetary Protection Officer (PPO) position and Subcommittee as being unaligned with other functions, committees, and subcommittees in the NAC, and recommended a deeper look into the area. Even though it is located in the Science Mission Directorate (SMD), Planetary Protection is an agency-wide function and the responsibility of the NASA Administrator. Since 2010, the role has been delegated to the Associate Administrator, SMD, because all missions to planets were SMD-related.

A team made up of SMD, OCS, OCE, OSMA, Planetary Protection subject matter experts (SME), and Office of the Chief Health and Medical Officer (OCHMO) reviewed NASA Policy Directive (NPD) 8020.7, current state of the agency (robotic and human exploration missions), Planetary Protection function, technical authorities, and the pros and cons of each office as they pertain to planetary protection.

The team recommends that the planetary protection function should fall under one of the technical authorities and the function should be transferred to OSMA. Forward activities include advertising for a senior level PPO at HQ/OSMA, establishing a Planetary Protection Research program, and establishing a permanent Planetary Protection directive and standard.

Lightfoot commented that it sounds as though the Planetary Protection status quo is working well for spacecraft and the proposal is primarily logistical, moving it from SMD to OSMA. He noted that a weakness in Planetary Protection activities for future missions was also identified, especially out of the Human Exploration and Operations Mission Directorate (HEOMD), which may require new activities to support Planetary Protection. Lightfoot strongly cautioned the team against using the word "program" to describe the work, as it is not an actual program.

The team stated that the proposed PPO does not have to be located at Ames; that is just where it resides currently. The PPO selected should be the best choice for the Office of Planetary Protection (OPP) regardless of location.

OCHMO mentioned issues regarding bacteria that could be brought from planets to earth, as well as introducing bacteria to other planets during missions. These topics are critical to the benefits that Planetary Protection would provide.

Lightfoot asked about NASA's responsibility for SpaceX's Red Dragon missions (as an example). Members replied that Red Dragon agreed it would comply with the set requirements as if it were a NASA mission. Lightfoot stated that the worry is more related to the accountability and responsibility versus the authority. If this new position is now advising, what if there are disagreements? Chris Scolese recommended looking at the Nuclear Launch authority process as a similar model, which follows a multiple-agency approval process that might be a good source of insights for managing commercial launch, Planetary Protection considerations. The position would

be in a consulting role. It was also stated there will be a commercial section in the updated NASA Procedural Requirement (NPR).

The Decision Memo Summary: It is recommended the Planetary Protection Officer (PPO) function including all roles and responsibilities be transitioned from the Science Mission Directorate (SMD) to the Office of the Safety and Mission Assurance (OSMA). Further, it is recommended the responsibilities of the PPO be divided into policy and research such that focus on development of tools and techniques with regard to the avoidance of organic-constituent and biological contamination can be maximized. This transition strengthens the Planetary Protection role and gives it greater visibility across the Agency and the stakeholders. A white paper and proposed organizational structure is attached to the memo.

An update to NPD 8020.7G: **NASA Policy Directive (NPD): Biological Contamination for Outbound and Inbound Planetary Spacecraft** (Revalidated 05/17/13 w/change 1) is appropriate.

The Decision: Implement the Planetary Protection Authority Transition as briefed to the APMC.

Transition the NASA Planetary Protection Officer function from the Science Mission Directorate (SMD) to the Office of the Safety and Mission Assurance (OSMA). Create a new Planetary Protection Research manager position for the FY2019 budget submission supporting OSMA to focus on tools and techniques for the avoidance of organic-constituent and biological contamination in NASA's current and future human and robotic exploration missions. Establish a funding mechanism for planetary protection positions and activities necessary to support and oversee NASA's current and future missions to be paid for by the Mission Directorates. Document the transfer of responsibility via a NASA Interim Directive to replace NPD 8020.7.

Members were polled and supported this transition.

Lightfoot commented that this approach provides a good structure going forward and sets up the conversations that will be held about human exploration. He encouraged HEO to think about when it will be paid for and stated that this approach provides a mechanism for that type of research. He would like to have a decision point to evaluate pulling the budget for this out of SMD so it can be included in the 2019 budget for OSMA.

One new informal action was taken on this topic: Evaluate the trade space of transferring the budget from SMD to OSMA as part of the 2019 budget submission. Provide a recommendation and rationale.

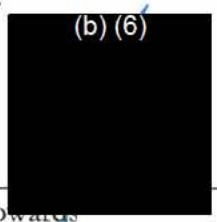
Actions:

See informal actions within the topic sections.

Closing

Meeting was adjourned.

Prepared by:



Stephanie Sowards 5/17/2017

APMC Executive

Agenda

Agency Program Management Council
May 17, 2017 12:30pm – 2:30pm ET
NASA Headquarters, Room 8Q40 & ViTS

12:30	Roll Call and General Admin	PMC Exec/Stephanie Sowards
12:33	Opening Remarks	AA/Robert Lightfoot
12:35	**NASA Enterprise Risk Management Decision**	OCFO/Frank Petersen
	ERM Overview	
	ERM Roadshow Schedule	
	NASA UNICORN	
	Draft Risk Profile	
	Notable Takeaways	
	Results	
	Agency Integration	
	Questions	
1:30	**Planetary Protection Authority Transition Decision**	
	Opening and Background	SMD/Thomas Zurbuchen
	History, Process and Proposed Change	OCS/Gale Allen
	S&MA Schedule	OSMA/Terry Wilcutt
	Discussion	SMD/Thomas Zurbuchen
	Acting Administrator Comments	AA/Robert Lightfoot
2:25	Review Actions	PMC Exec/Stephanie Sowards
2:27	Closing remarks and summary	AA/Robert Lightfoot
2:30	Adjourn	

PROGRAM MANAGEMENT COUNCIL
NASA Headquarters - 8Q40/VITS
17-May-2017
Other Invitees and Presenters

Position	Name	Signature
Administrator	Robert Lightfoot, Acting	(b) (6) [redacted]
Deputy Administrator	Lesa Roe, Acting	
Chief of Staff	Vacant	
Associate Administrator, Strategy and Plans	Tom Cremins	
- Assistant Administrator, Human Capital	Lauren Leo	
- Assistant Administrator, Procurement	Bill McNally	
- Assistant Administrator, Strategic Infrastructure	Rick Marrs (for)	
	Cristina Guidi	
Director, NASA Management Office	Joe Costanza (for)	
Labor Management Liaison	Sharon Burks	
Associate Administrator, Communications	Jen Rae Wang	
Associate Administrator, OLIA	Rebecca Lee, Acting	
Associate Administrator, Small Business	Glenn Delgado	
Labor Management Liaison	Tifarah E. Thomas	
Director, OACS	Dennis Boccippio	
OACS Council Executives	Sarah Murray	
OACS Senior Analyst	Cecelia Smith	
OACS Analyst	Tim Warner	
OACS Analyst	Amir Deylami	
Presidential Appointments Team	Brandon Eden	
Presidential Appointments Team	Rodney Liesveld	
Presidential Appointments Team	Jeff Waksman	
OCS	(b) (6) [redacted]	
A-suite		
NASA WHL		
OSHA		

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MEMBERS

Position	Name	(b) (6)
General Counsel	Sumara Thompson-King	
ARC Center Director	Tom Edwards (for)	Attending via ViTS ARC-N200-R203
AFRC Center Director	David McBride	
AFRC Deputy Center Director	Patrick Stoliker	Attending Remotely
GRC Center Director	Janet Kavandi	Attending via ViTS GRC 3-7
GSFC Center Director	Chris Scolese	Attending via VITS from GSFC
JPL Center Director	Larry James (for)	Attending via telecom/WebEx
JSC Center Director	Ellen Ochoa	Attending via ViTS at JSC's CR945
KSC Center Director	Janet Petro (for)	Attending via telecom/WebEx
LaRC Center Director	David Bowles	Attending via ViTS
MSFC Center Director	Paul McConnaughey (for)	Attending via VITS Bldg 4200, Rm. 915
SSC Center Director	Randy Galloway (for)	Attending via ViTS
Associate Administrator, Mission Support	Krista Paquin	
Associate Administrator, STMD	Jim Reuter (for)	
Associate Administrator, SMD	Thomas Zurbuchen	
Associate Administrator, HEOMD	Greg Williams (for)	
Associate Administrator, ARMD	Robert Pearce (for)	
Chief Technologist	Vickie Crisp (for)	
Chief Scientist	Gale Allen, Acting	
Chief Engineer	Ralph Roe	
Deputy Chief Engineer	Dawn Schaible	
Chief Information Officer	Renee Wynn	
Chief Financial Officer	Lisa Ziehmann (for)	
Chief Safety & Mission Assurance	Terry Wilcutt	
Deputy Chief Safety & Mission Assurance	Hal Bell	
Chief Health & Medical Officer	James (J.D.) Polk	
Deputy Associate Administrator	Lesa Roe	
Associate Administrator	Robert Lightfoot, Jr	
APMC Executive	Stephanie Sowards	

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Other Invitees and Presenters

Position	Name	Signature
HQ OCFO	Charlene Williams	At (b) (6)
HQ OCFO	Cherisse Aquil	
Assistance to JSC Center Director	Darryl Gaines	At
OSMA	Deirdre Healey	At
OCFO	Frank Petersen	
OSMA	Frank Groen	
OSMA	Gerry Schumann	At
JSC	Larry Shaw	
BPR	Lee Edwards	At
JSC	Sharon Thomas	At
~~OSA~~ OCHMO	Vincent Michaud	
A-suite.		
	James ortiz	
Rich Mairs	OSI	
	(b) (6)	
OCE		
HQ OCFO	Kelly Barnes	
OACS Valador Support	~~Anna Huntemann~~ Donna Connell	attended
OACS Valador Support	Ben Franzini	Attending Remotely
OACS Valador Support	Fatima Senghore	(b) (6)
OACS Valador Support	Thanh Dinh	