NASA ADVISORY COUNCIL

Planetary Science Subcommittee

October 1, 2013

MEETING MINUTES*

Janet Luhmann, Chair

Jonathan Rall, Executive Secretary

^{*}Due to the shutdown of the Federal government, this meeting did not follow the agenda that was published in the Federal Register.

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> Prepared by Elizabeth Sheley Zantech IT

Tuesday, October 1, 2013

Call to Order

This meeting of the Planetary Science Subcommittee (PSS) of the NASA Advisory Committee (NAC) was called to order in the anteroom of the lobby at NASA Headquarters. Dr. Jonathan Rall, Executive Secretary of PSS, explained that the meeting would not be able to take place as planned due to the shutdown of the Federal government. However, they were required by law to convene the meeting as advertised. Dr. Rall then canceled the meeting, due to lack of appropriations for NASA.

Orderly Shutdown

A few updates were provided regarding what was likely to occur due to the shutdown.

GPRAMA

Dr. Rall said that since the meeting could not take place as planned, it was imperative that PSS take the first opportunity to meet via teleconference in order to conduct the Government Performance and Results Act (GPRA) Modernization Act (GPRAMA) review. PSS conducts this review annually.

Dr. Janet Luhmann, PSS Chair, asked Dr. Rall to clarify what the PSS members were to do with the document he sent them regarding GPRAMA. He explained that Subcommittee members should add to the report where they believed there was something missing, make corrections and deletions as appropriate. For the GPRAMA review, PSS must summarize the Planetary Science Division (PSD) science accomplishments from the previous 12 or so months, in order to have the PSS evaluate how well the Division met its annual performance goals. The document he sent included some highlights, but it was not all-inclusive. PSS was asked to expand on it, revise it, and rebalance it as needed.

Dr. Luhmann asked if she was allowed to work on this off-line with PSS members. The answer was yes, members could edit the draft document in advance of the next meeting where the document would be discussed in open session, however, PSS members who are civil servants could not participate if their agency or department was subject to the government shutdown. Dr. Luhmann took this as an action item.

Dr. Rall reminded PSS that the due date for the GPRAMA review was the middle of October. There is a very hard deadline on this, and a prolonged shutdown could create problems. Dr. T. Jens Feeley of NASA's Science Mission Directorate (SMD) explained that PSS cannot meet in other than an open session to deliberate, vote, or otherwise participate in a decision-making process. The Federal Advisory Committee Act (FACA) requires such activities to be done in open session, and an open session cannot occur during the government shutdown because the Subcommittee cannot meet in the absence of its civil servant Designated Federal Officer (DFO), Dr. Rall. However, PSS members can do work to prepare the draft document so that it is ready to review and revise as soon as they have a meeting. For example, they can draft recommendations or findings. But NASA will need the Subcommittee to convene officially in order to deliberate on the package and give the grades.

It was decided that Ms. Doris Daou, a contractor for NASA, would send out a poll to determine which dates in November would be best for a teleconference dealing with GPRAMA. Dr. Luhmann explained that she would not be available in November, and therefore PSS needed a Vice Chair for the teleconference. Dr. Julie Castillo volunteered, and will serve in that capacity as needed.

Dr. Rall asked that the teleconference be kept brief, with the sole purpose of grading for GPRAMA.

Impact of the Shutdown on PSD

Dr. James Green, Division Director of PSD, provided a quick review of what would happen to PSD projects during, or as a result of, the shutdown.

The shutdown and its effects may put a damper on a few things PSD had planned in terms of informing the community, such as participation in scientific meetings.

A couple of important actions that PSD managed to get done before the shutdown are going to continue, such as the release of the 2020 Announcement of Opportunity (AO) for instrumentation. In addition, there was a selection for the SSERVI CAN, and the selection notifications went out to the winners on September 30. Dr. Green was not sure whether the unsuccessful candidates had been notified, and he did not know if the information was posted. Under normal circumstances, it would be publicly available. These were the big milestones that PSD wanted to make sure got done before October 1.

Another thing that the Division is watching very carefully is the Mars Atmosphere and Volatile EvolutioN (MAVEN) mission, which has a very limited launch window in November-December 2013. If it does not launch then, the next such window will not occur for another 26 months. One of the instruments had a problem that was recently fixed, and although the repaired instrument was ready for transit, it had not yet shipped from Goddard Space Flight Center (GSFC). No one on that team had been designated "essential" and therefore they were all furloughed, with no ability to ship the instrument. While there are 9 days of funded schedule reserve, the launch date could be affected after those days are gone. Although one of the mission scientists had told a PSS member that there were 21 days of reserve, Dr. Green said that the instrument still had to be at Kennedy Space Center (KSC) by October 8.

The Lunar Atmosphere and Dust Environment Explorer (LADEE) was launched and was on its way out to apogee. It will do a burn on October 8 or 9, then it will head towards the moon. Everything on the mission looks great so far.

NASA is in the process of turning the Wide-field Infrared Survey Explorer (WISE) mission back on to restart the NEO-WISE program of searching for near-Earth objects, but that may be caught in the shutdown. This would affect the level of its operation, which is a problem due to the mission's limited life. The shutdown time eats into that.

Otherwise, currently operating missions will continue. Curiosity Rover is performing particularly well.

The six extended missions are funded through 2014, accounting for about \$110 million. PSS will need to discuss the guidelines for extended missions. The next 2-year set in the Senior Review will be competing for about the same amount of money, but Curiosity will also be in the mix at that point. Curiosity runs about \$63 million per year. So the next Senior Review will be very difficult, as there is a limited amount of funding for extended missions, and that amount has not grown. This puts pressure on the missions. Dr. Green briefly explained how the extended mission budget is determined.

The Mars budget has relatively little money between now and Fiscal Year (FY) 2016, at which point the budget opens again. For FY14, the President's budget has about \$10 million for Mars 2020. PSD can make selections and get contracts in place by next summer to have them ready for the next fiscal year.

The MESSENGER mission will end in March 2014. The Dawn mission is still in its prime mission. The Balloon Rapid Response for ISON (BRRISON) mission left Earth and went into the atmosphere on September 28, then landed in Texas after making some initial observations. There was an anomaly, however, and the planned observations did not all occur. The analysis team is working on this.

The observations of Comet ISON on its closest approach to Mars will occur as intended, as this involves operational missions taking observations that were already planned. Recent data indicate that it is a much smaller comet than originally thought.

R&A Program

Dr. Rall had on the agenda that he would present a report on the proposed strategy to consolidate some of the program elements, but that was not going to occur. He suggested adding that to the telecon. The program was still on track to do the Research Opportunity in Space and Earth Sciences (ROSES) call for 2014. Under the consolidation scheme, everyone will still find a program under which to propose, and there would be a map between the old and new structures. This has been in the works for several years and should not come as a surprise. The overall funding level will not change. The infrastructure that is in the R&A budget will be moved out so that the research funding picture is clearer. Dr. Rall gave other examples as well.

Data accessibility, especially regarding the Planetary Data System (PDS) will be on the agenda for the next meeting, as there are issues with user interfaces and usability in some areas.

Dr. Green said that another thing affected by the shutdown is the Plutonium-238 (Pu-238) Department of Energy (DOE) infrastructure report, which has been completed and submitted to NASA. This was to be the first public discussion of that report. PSS will need to discuss it, and eventually prepare a summary that will be provided to Congress.

The Asteroid Redirect Mission (ARM) submissions had been under review at the Johnson Space Center (JSC), but that review was truncated by the shutdown and is therefore incomplete. There had been 200 to 300 inputs, and plans were to review about 80 of them. The review will resume once government operations restart. The results will feed into the architecture for the next year. The President's FY14 budget has ARM as an initiative.

Dr. Luhmann asked, given that the shutdown is of unknown duration, how damage control might occur. Dr. Green explained that everything is affected by this. It is possible that the shutdown will lead to delays of actions that had been planned for early FY14, for example. The delays could spill over long past that, however. At this point, it is an unknown.

Dr. Rall said that he was relying on Ms. Daou to handle some of his Executive Secretary tasks in his absence, as she is a contractor and therefore not subject to the same restrictions as furloughed Federal employees. She would be communicating with PSS members regarding the upcoming teleconference and the rescheduled meeting. Another contractor, Dr. Christina Richey, will be at the DPS meeting and has some ability to answer questions that would normally be addressed by Dr. Rall and Dr. Green, whose presence at the meeting is uncertain due to the shutdown. Dr. Rall had transferred to her information about the R&A reorganization.

Dr. Luhmann pointed out that concerned members of the community were likely to start contacting PSS members for information. Dr. Rall reiterated that, by law, Federal employees on furlough are prohibited from work-related communications. Information will be limited to what he can pass along to Ms. Daou and Dr. Richey.

Dr. Green and Dr. Rall noted that they were trying to get approval for as many civil servants as possible to attend the American Geophysical Union (AGU) meeting in December. That was still undetermined and had not yet been approved.

Public Comment

Dr. Gregg Vane of NASA's Jet Propulsion Lab (JPL) said that he had a quick update on the Pu-238 topic. DOE recently sent a letter attempting to clarify exactly how much of the substance is currently available to NASA; it appears to be a greater amount than previously reported. Dr. Green explained that DOE manages Pu-238 for the country, including all of the Federal agencies, and has released an additional, sizable amount to NASA. However, it is older and must be mixed with the new Pu-238 in order to be useful. Taking into account the reductions for PSD missions, the Division will still have a significant amount of Pu-238 into the next decade, putting the missions in great shape.

Planning for Rescheduled Meeting

Dr. Luhmann noted that the Analysis Groups (AGs) were on the agenda. Dr. Rall explained that those reports would have to wait until the next meeting. Dr. Feeley said that charts can be emailed to the members, but PSS cannot deliberate outside of a FACA meeting. He cautioned that they would also lack context for any information that they did receive. However, as part of an orderly shutdown, it was possible to send out the presentations as read aheads in advance of the rescheduled meeting where those charts would be discussed open session. Ms. Daou agreed to handle this task.

Dr. Feeley noted that the documents sent to the members are not public, as they have not yet been presented in an open forum. He added that if the upcoming teleconference were to include substantive discussion of anything beyond GPRAMA, the meeting notice should state that in the Orderly shutdown Federal Register. It was agreed that the teleconference would be planned for 4 hours.

<u>Adjourn</u>

Dr. Luhmann thanked the attendees. The meeting was adjourned at 9:15 a.m.

Appendix A Attendees

Subcommittee members

Janet Luhmann, University of California, Berkeley, Chair, Planetary Science Subcommittee Jonathan Rall, NASA, Executive Secretary
Julie Castillo-Rogez, Jet Propulsion Laboratory
Nancy Chanover, New Mexico State University
Christopher H. House, Penn State University
Paul Steffes, Georgia Institute of Technology

NASA attendees

James Green, NASA Headquarters, *Director, Planetary Science Division* T. Jens Feeley, NASA Headquarters

Non-NASA attendees

Doris Daou, NASA SSERVI Elizabeth Sheley, Zantech Gregg Vane, JPL Ana Wilson, Zantech

Appendix B Membership Roster

Janet Luhmann, Chair

Space Sciences Laboratory University of California, Berkeley

Jonathan A. R. Rall, Executive Secretary Planetary Science Division Science Mission Directorate NASA

Julie Castillo-Rogez Jet Propulsion Laboratory

Nancy Chanover New Mexico State University

David S. Draper Astromaterials Research and Exploration Science Directorate NASA Johnson Space Center

Christopher H. House Penn State University

Louise Prockter Department of Space Physics Johns Hopkins University Applied Physics Laboratory

Anna-Louise Reysenbach Department of Biology Portland State University

Paul Steffes School of Electrical and Computer Engineering Georgia Institute of Technology

Jessica Sunshine Department of Astronomy University of Maryland

Donald Yeomans Jet Propulsion Laboratory

Appendix C

Presentations

none

Appendix D

Agenda*

Planetary Science Subcommittee Meeting October 1-2, 2013

Tuesday, October 1, 8:30 a.m. - 4:30 p.m. (9H40)

9:00	Welcome, Agenda, Announcements Introductions PSD Status Update Proofs	Luhmann, Green, Rall All Green
10:30 11:00	Break Planetary Facilities Status and Plans for Future Q&A Mission Lunch	Rall All
1:00 1:45	GPRA-MA Plutonium 238 DOE Zero Baseline Review Report Break	Kearns/Rall Adams
3:00 3:30 4:30	Q&A Missions General Discussions Adjourn	All All
Wednesday, October 2, 8:30 a.m 3:30 p.m. (9H40)		
8:30	Agenda Updates & Announcements	
8:45	R&A	Rall
9:15	NAI Report	Voytek
9:45	SSERVI Report	Pendleton
10:15	Break	
10:30	OPAG Report	Hansen
11:00	VEXAG Report	Glaze
11:30	Lunch	
1:00	MEPAG Report	Pratt
1:30	SBAG Report	Chabot
2:00	LEAG Report	Plescia
2:30	Break	
2:45	CAPTEM Report	McSween
3:15	Discussions & Next Meeting Planning	All

^{*}As planned.