2/21/12 PSS Budget Telecon

Committee Members Present: Jim Green (HQ), Jonathan Rall (HQ), Sarah Noble (HQ), Jim Bell (acting Chair), Julie Castillo, David Des Marais, John Grant, Sanjay Limaye, Bill McKinnon, Louise Prockter, Chip Shearer, Mark Sykes, Mini Wadhwa

Goal of the meeting:

The purpose of this telecon is to provide an opportunity for Jim Green to address questions from the PSS resulting from the 2013 budget release. In addition, the AG chairs were invited to present their thoughts on the implications of the FY13 and out year budgets on their respective communities.

Dr. Rall: Calling to order, 2 pm. Welcome. Rules: 1) When you're not speaking, please mute mic. Don't put phone on hold – there may be music. 3) PSS members ask questions before general public. 4) Identify yourself before you ask your questions.

1st presentation: Jim Green.

The next PSS meeting has not been scheduled, but is expected to occur in April.

Jim Green

Jim presented to the committee the same slides that he has presented over the last couple of weeks to the House and Senate Authorization and Appropriation committees. The slides can be found here: www.lpi.usra.edu/pss/feb2012/Green.pdf

The President's budget requires PSD to end work on the Mars 2016 Trace Gas Orbiter and the 2018 ExoMars rover and to rethink our approach to Mars exploration by looking for ways to integrate and partner with Human Exploration (HEOMD) and the Office of the Chief Technologist (OCT). The termination process for the 2016 mission will begin after the last instrument goes through PDR. In addition, the rate of Discovery flights will be reduced, with the Discovery 13 AO release moving to FY15, and the Lunar Quest program will be phased out with the remaining activities absorbed into R&A and Discovery.

On the positive side, the NEO (Near Earth Object) program will be expanded and LADEE and MAVEN are on track to launch in 2013. Every effort has been made to ensure that despite the reductions in the overall budget, the R&A program will continue nearly intact with a budget for selection and awards that maintains a healthy community.

Beginning in FY13, there is a new line item called "Joint Robotics Program for Exploration", this \$10M/yr from PSD will be matched by\$ 20M/yr from HEOMD for joint activities between the divisions, including research (e.g. NLSI), joint studies, and instrumentation (for example, HEO might build an instrument with their funds and we would use ours to integrate that instrument onto a science mission).

Questions for Jim:

Louise Prockter noted that after Mars 2016 and 2018 are removed; there is still a large amount of money in that line. Jim replied that that is a placeholder, a planning wedge, for a future mission, one

that has yet to be formulated but which will evolve from our new integrated approach to Mars exploration. He encouraged those interested to attend next week's MEPAG meeting, where that conversation will start.

Louise, and later Bob Pappalardo and Julie Castillo, pressed Jim that this potential new Mars mission doesn't seem to follow the intent of the decadal. Jim tried to clarify that the 2018 mission has been cancelled, we are not doing Mars sample return this decade, that in fact, this budget does not provide any funds for *any* flagship mission this decade. Bob, who is leading the Europa mission study team, noted that there is now a Europa mission concept that is also sub-flagship in their cost estimates. Jim said that they can't be considered until those studies are complete (expected this spring - all three final reports should be handed over to HQ by May).

Jim Bell, doing some quick math, noted that if the cost of all the missions facing Senior Review are added up and compared to the amount proposed for extended missions, there is about a 25% shortfall. Jim Green suggested that that was possible, but that math assumes that everything reviews well. Doug McCuistion added that there is also carryover and other fine-tuning that can vary those budgets. Louise noted that the numbers for MESSENGER, which has already passed its Senior Review, don't match what the team is expecting. Mark Sykes pointed out that when missions get squeezed for money, it is often the science that bears the brunt of the cuts, since operation costs can only be reduced so much. Doug agreed that yes, that can be a problem and we need to be very careful of that balance. It was also noted that Mars R&A was also taking a hit, which would compound the problem.

Jim Green noted that there are two Op plan changes on the Hill right now, one has been approved, the other we are still waiting for, that include some increases for R&A funds. Someone asked if the content of those Op plans could be made public. No one knew the answer to that, but HQ took the action to look into it.

Jim was also asked, hypothetically, what would happen if there is a full year continuing resolution next year. In that case, Science would remain at FY12 dollars, ~\$5B, for <u>SMD</u> to <u>distribute</u> (unless Congress add specific language on how they want it distributed).

Jim Bell asked for an update on the Plutonium situation. Jim Green noted that again funding was not provided in the DOE budget, it is clear that the administration is not supporting the joint funding approach, so we continue to fund the whole activity. The total price tag will probably be in the neighborhood of \$70-90M, the study will refine those numbers. We should know by the end of the FY what the going-forward position is. Mark noted that there is no placeholder for that level of funding in the out years. Jim recognizes that more money will be needed.

Chip Shearer asked about future SALMON opportunities. Jim noted that those are important and he hopes to collaborate and build our relationship with ESA, perhaps with opportunities on ESA's JUICE or Marco Polo missions. Chip asked specifically about opportunities with Google Lunar X-Prize teams. Jim would be amenable to that once those opportunities become realistic.

Reports from the AGs:

LEAG (Chip Shearer)

Jim noted that "LASER is doing a fabulous job" and he doesn't expect to see any significant change to it as it transitions from Lunar Quest to R&A. Jim also noted that the CAN for the follow-on to the NLSI is in review right now, and once it is approved he will "announce it in the next minute".

MEPAG (Dave Des Marais)

The Mars community obviously took the biggest hit in this budget and Dave noted that it appears that we are "not yet in an age that we can do international collaborations at this scale." He worries that by backing out of these missions we will damage our relationship with ESA such that they won't dare to collaborate with us the next time around. He also noted that even if Congress were to alter the President's budget, it would already be too late for the 2016 mission.

OPAG (Bill McKinnon)

The Europa studies are moving along well, the first two have been independently reviewed, and the third (lander) will be soon. The results of all three will be presented at the OPAG meeting at the end of March in St. Louis, and presented to HQ in May.

SBAG (Mark Sykes)

The small bodies community is concerned about the cadence of the Discovery and New Frontiers missions.

VEXAG (Sanjay Limaye)

Sanjay feels that Venus has become something of the Rodney Dangerfield of the Solar System. He notes that there are currently no Venus missions on the books and this makes it difficult to keep Venus research alive, attract new talent, and engage the international community in Venus exploration. He is concerned that the community may be in danger of becoming extinct in the US. Delays in competed missions will only exacerbate this trend.

CAPTEM (Mini Wadhwa)

Mini expressed concern over the large (17%) and unexpected cut in the curation budget in FY13. Jim is concerned about this too, it needs to be fixed and he is committed to doing so.

Update on new PSS Chair and other new members:

We are in the process of appointing a new chair, but this needs to go all the way up to the Administrator's office and that is expected to take another month or two. We hope and expect the new chair to be in place in time for the April meeting.

Four other members (Jim Slavin, Greg Herzog, Jeff Johnson, and Tom Cravens) whose memberships were extended last year have now rotated off, we thank them for their excellent service.

There are also several members whose terms are expiring at the end of February, though Jim Bell's term will be extended to allow for some overlap with the incoming chair. Likewise, Mini and Sanjay will also be extended to overlap with the new CAPTEM and VEXAG chairs.

We have gotten permission to re-open the self-nomination process to build a pool from which to choose new members, and we hope to have completed the selection process and have new members in place by the summer meeting.

Jim Bell adjourned the meeting