

National Aeronautics and Space Administration
Washington, D.C.

NASA ADVISORY COUNCIL

PLANETARY SCIENCE SUBCOMMITTEE

March 1, 2011
NASA Headquarters
Washington, D.C.

Teleconference
Meeting Minutes

Ronald Greeley, Chairman

Jonathan Rall, Executive Secretary

March 1, 2011
Scheduled 1-3 PM

Introduction

Dr. Ronald Greeley, Chair of the Planetary Science Subcommittee (PSS), presided over the teleconference, which had been specifically scheduled to discuss the President's FY12 budget, as well as outyears. The discussion was also noted to be an interim exercise, as a more thorough budgetary examination would have to take place after the release of the Planetary Science Decadal Survey on 7 March 2011. Dr. Greeley expressed his appreciation of members' review of a recent report, and requested that they send names of outside reviewers if possible. Several PSS members reported planning to be at the Lunar and Planetary Science Conference (LPSC) meeting the following week.

Dr. Greeley, by way of preface, noted that while the FY12 budget looks adequate, the subsequent years are steadily declining in funding for planetary science, allowing no major new starts, for instance, for a Flagship-class mission. This is a major issue for the planetary community. Dr. Fran Bagenal commented that any Flagship mission for the next decade would have to get going soon; another relevant issue would be the timing of and potential funding conflict with the James Webb Space Telescope (JWST).

Dr. James Green, Director of the Planetary Science Division (PSD), provided responses to previously posed questions from the PSS. He noted that effectively, there is a billion dollar differential compared to the FY11 budget request. Responding to a question from Sarah Noble regarding a \$10M increase in the Education and Management budget line in 2013, Dr. Green explained that this additional \$10M is viewed as a Management budget line but not an actual increase in Education; it is aimed at supporting a better robotic research initiative in concert with the Exploration Systems Mission Directorate (ESMD), which will include flying instruments and risk reduction activities- \$10M represents the Planetary share of this activity.

Responding to a question on the impact of the large number of operating missions, possible extensions and their impact on the budget, Dr. Green expected to continue to use the Senior Review process to make these decisions. Extended Mission budget lines are in the existing program lines (Mars, New Frontiers, etc.), however the structure of the mission lines or

extended mission planning may change depending on the outcome of the Decadal Survey.

Concerning the re-start of Pu-238 production, Dr. Green reported that the funding will be shared with the Department of Energy (DOE) as part of a near-term enabling technology line. Projects that require nuclear material will pay for their own needs (i.e. the funding will come out of individual mission lines). For example, if a Discovery mission uses nuclear material, the Discovery mission budget line would pay for it.

The budgetary rearrangement of Civil Servant (CS) labor expenses has changed slightly from September timeframe discussions; the current plan is to execute in FY12 a rollup of CS labor expenses. An initial estimate has been made, and this amount has been removed from individual lines. This does not represent a significant amount of funding for PSD, except in the Research and Analysis (R&A) program. A larger amount has been bookkept out of R&A for that reason.

Responding to a question from Dr. John Grant, concerning any chance of procuring additional resources for PSD, Dr. Green countered any hopes for such an occurrence; PSD may have to rearrange individual programs and will have to make appropriate decisions when the Decadal Survey is released, but it must be understood that there is no additional money beyond the President's submitted budget.

Is New Frontiers (NF) expected to continue after NF3? Dr. Green reported that the FY12 budget has money for NF3 and startup money for NF4; however this may also change after the Decadal Survey release.

Responding to a question from Dr. Mark Sykes on how potential reductions may impact the R&A program, Dr. Green noted that current CS funding that had been removed at beginning of the year is now coming back into R&A program, which will operate as usual in 2011- the only action in R&A is to be conservative in the selection rate to anticipate future reductions. All R&A elements have been given a target budget, but have been told to hold back 10% in anticipation of a Congressional action. PSD is also sending out more "selectable letters" and employing active grants management. Dr. Green recommended consulting individual Program Officers about individual grants. He personally apologized to all those who participated in latest Near Earth Object (NEO) ROSES call, attributing it to his premature decision to

aggressively fund the plan. Having approved WISE to go to FY11 in anticipation of funding and an aggressive spending plan, as well as having set aside \$2M (in response to Congressional action) to fund the Arecibo facility to help support NEO surveillance, PSD had nearly overspent the original \$5.8M, which was to have been increased to \$20M had the FY10 budget been enacted. However, given the eventual circumstances surrounding the budget, this was too optimistic too early in the year, resulting in the inability to fund the NEO selections. Henceforth in the R&A program, once a budget is passed, PSD will carry out complete funding of the remaining proposals appropriately. As for the reprogramming of CS salaries; this is being done in a way that is budget-neutral, and this will be made clear in individual calls vs. civil servant salaries.

Dr. Greeley opened the floor for comment. Dr. Sanjay Limaye thanked Dr. Green for the clarifications. Dr. Sykes returned to the issue of extended missions (EMs), the outyears, and missions for which Senior Reviews have not yet taken place. Dr. Green assumed that the Decadal Survey would provide future guidance about the value of Senior Reviews and EMs, which would then be put in context with the rest of the program; PSD will wait for that guidance. There is funding in the budget for current EMs (such as the recent comet encounters). There is no potential “padding” for any mission that has not undergone a Senior Review. If there are gaps, PSD will go back to PSS for evaluation. Dr. Green agreed that coordinating Senior Reviews over time could be a good approach.

Asked to clarify the withholding of 10% of R&A funds, Dr. Green felt the best way to answer was that each R&A line has an associated budget, which must take into account all previous and future awards- that amount has not changed between 2010 and 2011, and most of the (rescinded) increase was going to be put toward the NEO program. The plan was to make it a zero-sum activity, and that R&A would always have a known Budget. PSD will have to do complete analysis once a completed budget is in place.

Dr. Julie Castillo-Rogez commented that there seemed to be little prospect of an Outer Planets Flagship mission for NASA alone, and asked Dr. Green whether he had received any feedback from ESA on future planning for a joint mission. Dr. Green reported that NASA had already had a telecom with its ESA partners on the budget factors and is continuing to communicate with them; there also will be a bilateral meeting with ESA at the end of

March. Based on the potential for Decadal Survey prioritization, Dr. Green did not assume that Outer Planets would be totally off the plate. NASA has said publicly that its plan is to provide a mission of opportunity (MoO) on the ESA Ganymede Observer pending Decadal Survey concurrence. ESA is under a competition, and he doubted they would change objectives at this point (such as to a Europa mission).

Dr. Fran Bagenal, speaking for the Outer Planets Analysis Group (OPAG) and OP community, expressed hope that NASA or ESA could still go to Europa in a top science priority mission. She appreciated Dr. Green's efforts and hoped PSS could help him address future discussions in that vein. Dr. Green resonated with Dr. Bagenal's comments and pledged to try to execute as much of the Decadal Survey as possible. Asked about a general PSD philosophy (take longer to do the same amount, do less, or rebalance the program), Dr. Green replied that he hoped the Decadal Survey would give sufficient and clear guidance in decision-making to allow PSD to do as much as possible in the next decade.

Dr. Greeley, anticipating the release of the Decadal Survey, recommended that PSS start posing questions and to plan for another teleconference on 16 March (2-3pm) to discuss how to help PSD with the implementation of the results. Dr. Green planned to be at the LPSC meeting until Friday. He added that on Monday night at 5:30 pm (Central Time), there would be a presentation of the 2013-2023 plan, followed by brief remarks by Dr. Green. The Decadal Survey will be accessible at the time of the announcement. Dr. Green's remarks will be followed by a Q&A session for Dr. Steve Squyres *et al.* NASA Night (Wednesday) will provide more details on the budget and will also talk about how PSD will respond to the Decadal Survey for execution. Livestream will be available for both events. Dr. Limaye invited Dr. Green to attend the VExAG Town Hall meeting on Thursday of that week.

Dr. Greeley adjourned the meeting at approximately 2:11p.

Attendees

Jim Adams	HQ
Fran Bagenal	University of CO
Julie Castillo	JPL
Dom Conte	Orbital Sciences
John Cooper	NASA GSFC
D. Desmarais	NASA ARC

Monty DiBiasi	Southwest Research Institute
Jens Feeley	NASA HQ
Ron Greeley	AZ University
Jim Green	NASA HQ
Will Grundy	Lowell Observatory
Greg Herzog	Rutgers University
Jeff Johnson	APL
Richard Kerr	Science Magazine
Gregory Lee	Self interest
S. Limaye	Univ. of Wisconsin
M. Listner	Space Law&Policy
J. McCarthy	Orbital Sciences
Bill McKinnon	Washington Univ.
Sarah Noble	NASA GSFC
Louise Prockter	APL
Jonathan Rall	NASA HQ
Jaime Reyes	Lockheed Martin
A.L Reysenbach	Portland State Univ.
Charles Shearer	University of NM
James Slavin	NASA GSFC
Marcia Smith	SpacePolicyonline.com
Paul Steffes	Georgia Inst. of Tech.
Jessica Sunshine	University of MD
Amy Svitak	Space News
Mark Sykes	PSI
George Tahu	NASA HQ
Gregg Vane	NASA JPL
Anne Verbiscer	University of Virginia
Richard Vondrak	NASA GSFC
J. Zimmermann	Zantech IT