OPENING STATEMENT
The Honorable Steven M. Palazzo (R-MS), Chairman
Subcommittee on Space and Aeronautics
Exploring Mars and Beyond: What's Next for U.S. Planetary Science?
2318 Rayburn House Office Building

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Today's hearing has been called to examine the future course of NASA's Planetary Sciences program, looking particularly at NASA's plans to carry out recommendations put forward in the Decadal Survey released earlier this spring by the National Academy of Sciences.

Before getting started, however, I'd like to thank our witnesses for agreeing to testify today. I realize a lot of work and effort goes into preparing for your appearance, and I want you to know that your wisdom and experience will be of immense value to this Committee and Congress in the months and years ahead as we strive to maintain a vital national space program.

In March of this year the National Academy of Sciences published *Visions and Voyages for Planetary Science in the Decade 2013 – 2022*. This report reflects a broad consensus of the Planetary Science community, first by identifying key questions to guide NASA in the decade ahead as it endeavors to develop the next series of missions, and then by providing NASA the tools needed to maintain a balanced and vital program that looks broadly across our solar system. It is the product of an immense effort that sought a wide range of input, including papers, meetings, and reviews by a committee chaired by Dr. Steven Squyres.

Unfortunately, budget forecasts provided by NASA to the Academy proved to be optimistic. To its credit the survey committee had the foresight to anticipate budget shortfalls and included in their recommendations steps that the agency should follow to align programs with resources, all the while maintaining balance across a set of missions.

For fairly obvious reasons, exploration of Mars has become the largest component of NASA's Planetary Science program, as well as one of its most visible. Through development of critical technologies, NASA has orbited the planet with powerful satellites, put rovers on its surface, and in less than two weeks time is preparing to launch yet another rover that will be bigger and more capable still.

The conundrum now facing NASA is selecting a mission that is the next logical step in our exploration of Mars, and how to pay for it. The decadal survey selected as its top priority mission a Mars sample-caching rover that would, in effect, be the first of a three-phase mission to return Mars soil samples to Earth. This will be a very expensive undertaking, and one obvious option would be to engage with the European Space Agency on a collaborative mission, thus reducing costs to the US.

In November 2009, NASA Administrator Bolden and ESA Director General Dordain signed a joint Statement of Intent that spelled out a series of steps for the exploration of Mars that both agencies, working collaboratively, hoped to pursue. Quoting from the statement:

> "NASA and ESA agree to consider the establishment of a new joint initiative to define and implement their scientific, programmatic, and technological goals for the exploration of Mars. Initially focusing on 2016 and 2018, this initiative would span several launch opportunities with landers and orbiters conducting astrobiological, geological, geophysical, climatological, and other high-priority investigations and aiming at returning samples from Mars in the mid-2020s."

So the question is, are we ready to make that commitment? Will NASA be a reliable partner, able to sustain obligations that span years, Administrations, and unpredictable budgets?

If not resolved quickly, I am deeply worried that NASA will be viewed by our international partners as an unreliable, schizophrenic agency. On the one hand NASA is actively seeking international partners to collaborate on future missions; on the other, the Administration appears to be interfering with the agency's efforts to reach out and engage foreign governments in future flagship missions. If these internal conflicts aren't soon resolved, NASA could be left alone to fly its own missions with budgets that will result in fewer flight opportunities. Meanwhile other international space agencies will collaborate, and in time, they may well be able to fly space missions that were once the domain of NASA.

Adding further uncertainties are NASA's struggles with the James Webb Space Telescope. To its credit, NASA identified offsets across the Science Mission Directorate – including Planetary Science – but did it in a way that did not undermine its ability to proceed with a de-scoped Mars sample-caching rover. Unfortunately, the White House has not yet approved the plan for release, preventing NASA from living up to its commitments to ESA, and frustrating our European partners. Adding further insult, the White House won't even reveal what offsets will be taken out Planetary Science's FY12 budget, suggesting that they'll wait until next February with the FY13 budget request rollout to identify offsets in the FY12 operating plan. I can't begin to make sense of the rationale for such a delay.

Before closing, I also want to stress the importance of maintaining balance in the Planetary Science portfolio, both in terms of mission size and destination. NASA must ensure that flagship missions don't overwhelm the Planetary Science budget, as well as preserve a regular cadence of small to medium size missions.

I realize my statement has covered a lot of territory, but in today's environment, discussing future Planetary Sciences missions necessarily involves agency budgets, international partners, the planetary science community, the James Webb Space Telescope.

I want to point out that the Office of Management and Budget was invited to testify at this hearing, but chose not to appear. I am not surprised, but I find it regrettable. OMB has enormous influence over NASA, as their decisions in many ways define the agency's future roles and missions. It would have been helpful to gain their perspective in these discussions.