

**National Science Foundation**  
4201 Wilson Boulevard  
Arlington, Virginia 22230

Guy Consolmagno, SJ  
Chair, Division of Planetary Sciences of the American Astronomical Society

Dear Dr. Consolmagno,

Thank you for your letter of 13 November on the report of the Senior Review committee. We agree that reaching recommendations such as those made by the committee is a difficult task and assure you that the committee approached them with honesty and a full and respectful consideration of the impact they would have on the scientific community.

It is also understandable and appropriate that those whose work will be affected by the recommendations express their views on the implementation of these recommendations. It is for that purpose that we at NSF have invited input from the community and will be holding a series of town meetings around the country in the coming months. In this spirit, we value your statement on behalf of the Division of Planetary Sciences.

However, we would like to take this opportunity to address several of the points made in your letter, to clarify the process and role of the Senior Review committee in formulating the recommendations they have made to us.

Your letter suggests that the report and its recommendations are flawed because the Senior Review committee did not have representation from the planetary sciences community. In fact, the committee members were not chosen to represent specific disciplines or communities, but were instead selected for their broad view of science and the astronomical community. There was never any intent to populate the committee with experts in every area or technique of astronomical science, but instead to seek individuals with extensive backgrounds and a range of perspectives of the science, the global community, and the context in which science policy decisions are made.

We note also that the committee relied not only on their own knowledge and experience, but the input they received from the observatories, the NSF, and the community through email, town meetings, and personal interactions with their colleagues. Unlike study groups that review aspects of programs and produce specialized reports, this committee was able to review, in depth, the entire portfolio of NSF/AST investment, and as a result, their perspective on the relative priorities and future scientific use of AST-supported facilities and programs was much broader and more complete.

Your letter expresses the view that the committee overlooked the “unique abilities of Arecibo in studying solar system bodies, especially near earth asteroids, by radar,” because the report does not refer specifically to the research done in this area. We note that the committee considered a vast amount of information in their evaluation, including extensive documentation provided by the observatories themselves. The committee also reviewed the hundreds of emails and letters

submitted to the NSF email account. The committee necessarily could not reference every piece of information it received, reviewed, and factored into its discussions. The fact that the report may not have referred directly to the 'unique abilities of Arecibo in studying solar system bodies... by radar' does not mean that the committee was unaware of this aspect of the Arecibo scientific program. It had, in fact, been extensively discussed in NAIC's initial submission to the committee, which served as the basis for the committee's consideration of the facility's current and future scientific program. In the end, the committee arrived at a scientific prioritization that informed its recommendations, yet realized that even the telescopes recommended for possible closure could be 'unique and productive' for many years.

There is an unfortunate, and incorrect, statement in your letter that "the NSF funding cut to \$8M/yr allows operation of the S-band planetary radar system only until 30 September 2007." In fact, the Senior Review report says nothing about whether AST funding at the recommended level does or does not allow for the operation of the S-band planetary radar system. The reduced funding was judged by the committee, and by AST, to be sufficient to provide basic operational support for Arecibo astronomy programs, under the assumption that survey work would take up a larger fraction of observing time. However, we would like to make it clear that NSF does not determine the programmatic balance among NAIC operations. NAIC management establishes the relative scientific priority of the Arecibo programs, and could very well decide, should they find it warranted, to continue the S-band radar operations within the funding envelope provided them by NSF funding. We encourage you to direct your concerns about the implied termination of the planetary radar program to NAIC's management at Cornell University.

While we welcome input as we consider the recommendations and develop an implementation plan, we must emphasize that the recommendations in the committee's report are final and will not be revisited or revised. The Senior Review Committee was a subcommittee of the MPS Advisory Committee, and with the receipt and acceptance of its report, the committee's work is over and it has been dismissed. We will consider their report in conjunction with other community recommendations and advice, and look forward to a continued dialog with the community as we plan for the future of ground-based astronomy within AST.

Sincerely,

Wayne Van Citters  
Director  
Division of Astronomical Sciences