The purpose of this meeting was for NSF-AST to brief the AAAC on the recommendations of the Portfolio Review.

James Ulvestad gave the briefing in three parts. He discussed some of the reasons for conducting the Portfolio Review (PR), one being that future budgets would not be sufficient to meet the aspirations and desires of the astronomical community for new instrumentation and programs; the other being that the National Academy of Sciences in their astronomy and astrophysics decadal survey report (*New Worlds, New Horizons* = NWH) stated that if the budget was truly flat and there was no possibility of implementing any of the recommendations of the survey then a second review of the AST portfolio should be done. The NAS survey assumed a budget for AST that would rise 4% in purchasing power through the decade. Such reviews should also be carried out periodically for responsible stewardship of the AST portfolio.

One committee member asked Ulvestad, How do you define purchasing power? Ulvestad replied that the PR Committee settled on approximately 2.5% annual inflation after 2012. One could argue about the basis of that number but the charge to the committee was to give AST notional budgets not details. An additional question about guidance for decommissioning costs prompted an answer from Ulvestad. The PR Committee was told to stay away from that issue but AST did tell them that if they were recommending closure one had to anticipate that it took at least a couple of years of operations money. That's one reason why the committee adopted 2017 as a fiducial date.

One member asked about input from the national observatories, noting that the NRAO response document from 9/23 suggested they had new information not available to committee. Did they not provide this? Ulvestad answered that the facilities were asked in November 2011, with a
deadline in January 2012, for updated long-range plans and their vision of the future. These
documents were not made public. The facilities had 2 months to prepare their input. An AAAC
committee member asked whether there was sufficient expertise on the PR committee. Ulvestad
replied that there was an effort to have sufficient expertise, including users of all of AST
facilities. It was a difficult assessment to say how much was "enough". AST specifically advised
committee members that they were not on the committee to represent a constituency, but to
represent the community as a whole.

Ulvestad reviewed the recommendations of the PR Committee. At either assumed budget level,
the current facility portion of the portfolio remained the same. At the lower level, the facilities/
grants/mid-scale programs are all at ~75% of FY10-12 level (i.e., maintain present balance). At
the higher level, funds are restored to the grants and midscale programs, investing in more new
NWNH-recommended facilities later. The dedicated programs such as the University Radio
Observatories and optical instrumentation are merged into a midscale innovations program. For
the Facilities, the PR Committee recommended that AST fund:

- Priority 1: ALMA, ATST, VLA, LSST (operations start in 2020), CTIO, Gemini-S, Dunn
  Solar Telescope (until ~2017)
- Priority 2 (Keep now, possibly revisit later): Arecibo, SOAR, Solar synoptic, Gemini-N
- Priority 3 (Divest expeditiously): McMath-Pierce Solar Telescope, federal (NOAO)
  telescopes on Kitt Peak, Green Bank Telescope (NRAO), Very Long Baseline Array
  (NRAO)

A question was asked about across the board cuts. Ulvestad indicated that the PR Committee did
not recommend across the board cuts. The recommended portfolio was not a contraction of all
telescopes; it was divesting some facilities and keeping others at or near a healthy state. For
the grants it was not a close-your-doors scenario. Success rates for types of midscale programs that
previously had a guaranteed funding line (e.g., University Radio Observatories) would go down.
A follow-up question was “Is divestment of optical and radio facilities in the northern hemisphere
philosophically and demographically palatable?” Ulvestad replied that it was true that primary
targets for divestment are in the north but the PR Committee’s view was that science emphasis
will shift to the south because of ALMA and LSST; hence optical telescopes that are best placed
to follow up or complement ALMA and LSST were judged to be of higher science benefit. An
additional question, “Does this hand back to the private observatories something that has been a
community enterprise for the last several decades?” Ulvestad replied that the PR Committee
indicated in the report that they hoped nights would be returned to the community through
midscale competition.

Ulvestad discussed AST’s response to the report recommendations. NSF’s response document
was issued on August 31. NSF must decide on the nature of divestments near the end of CY 2013
in order to realize significant savings by FY 2017. No decisions have been made by NSF and
discussions within NSF will lead to the President’s FY14 budget request, which will then be
subject to action by Congress. Divesting a telescope does not necessarily imply closing a site, but
the principle of divestment in a responsible manner will be emphasized in the process. These
decisions have an impact on the management competitions that will be taking place over the next
two years. AST agreed with the Committee assessment that failure to act on their
recommendations would reduce the grants program four-fold in Scenario B and the resulting
grants success rate would be in 3%-4% range. This success rate would essentially end NSF
research funding of the U.S. astronomy community and the PR Committee found this risk
unacceptable.
An AAAC member asked whether AST is considering the impact on the user communities. Ulvestad replied that AST is looking in Chapter 6 and Chapter 10 for the committee's views on the health of the profession. Some rough demographic figures are that there are roughly 1,000 users of each of the national facilities. In FY12 AST received 750 grant proposals with 110 or so of them funded. A committee member noted that there is concern about mapping of users of today onto facilities, and users of tomorrow onto capabilities. Ulvestad observed that new surveys are new ways of doing astronomy that involve lots of astronomers using data sets rather than writing observing proposals. This shift has happened in particle physics, and happens when facilities become so expensive that you need new ways of using them. Another question asked was “How big is the "window of realization"? Ulvestad replied that the longer one takes the more you get into the status quo scenario which has its own dangers. NSF cannot waste 6 months.

In other business, the AAAC Chair indicated that the committee needed to start planning the agenda for the November meeting. It was suggested that it would be good to have a list of dangling alliances; e.g., the slating of the Mayall telescope for BigBOSS, as possible agenda items. Ulvestad noted that what NSF can say about such items would be limited by the budget embargo but he was willing to discuss the issues.

**MEETING ADJOURNED AT 4:00 PM EDT, 11 MAY 2012**