Hubble Director's Perspective 03 Aug Draft 1

Steven Beckwith

Working on the Hubble program for the last year or two has been a schizophrenic experience. On the one hand, Hubble has dominated NASA's public image for inspirational science and technology. In 2002 alone, Hubble's discoveries accounted for one third of all the output from NASA, according to the widely used Davidson *Science News* metric, the metric Greg Davidson developed for NASA when he was working at NASA Headquarters. On the other hand, NASA has been planning Hubble's demise with a savings of the approximately 200M per year needed for servicing the telescope. Just as Hubble hit the top of its stride for scientific and public impact, all the talk was of how to end the mission in 2010. This talk redounded poorly on those of us connected with the mission. It was as if you had just won the New York marathon in record time, but your loved ones wanted to talk of nothing else except purchasing a mortuary plot for you at the local cemetery, asking all the while about how to distribute the proceeds of your estate.

We were therefore relieved when NASA decided to call up an advisory panel to help it with the complex decision about when to end Hubble, under what circumstances, and how to assess Hubble's place within NASA's overall science priorities. It assembled a "dream team," befitting of its best asset, led by John Bahcall and including scientists who already rank in the pantheon of 20th century physics and astronomy. It gave the committee wide latitude and asked for its advice. The committee issued its advice last week (three months ago by the time you read this article), which was to keep Hubble going as long as possible contingent on the unknown status of the shuttle program.

The process is an example of NASA at its best. NASA is one of our best federal agencies for management competence. That competence extends to its advisory processes, and it certainly did a remarkable job of coming to grips with the many complex issues surrounding the end of Hubble's mission. The timing and means of Hubble's end-of-mission are still not certain – among other uncertainties is the disposition of shuttle servicing to keep Hubble alive and well – but it clarifies the importance of Hubble to the scientific community, and it bolsters the morale of the team that makes Hubble the world's best known observatory. It puts off talk of the mortuary for now, and suggests that writing a will may be premature.

We should all be grateful to NASA for the care that it has handled the Hubble program. Its spectacular success owes to many people but especially to those in upper management who worked hard to get the best advice the world scientific community could muster. NASA is a can do agency that has conquered seemingly unsurmountable obstacles in the past. I am confident that if it wishes to maintain the superlative success of the Hubble Space Telescope, it can do so for a very long time. The Bahcall committee gives NASA a reason to take on this challenging task, and it gave heart to those of us who want to help.