Letter to the Boston Globe

NASA: Not Out Of Focus

Your editorial concerning the Hubble Space Telescope ("Out of Focus at NASA," February 11, 2004) accurately notes Hubble's tremendous contributions to scientific research and discovery. Hubble will continue to provide compelling views of the far reaches of space till at least 2008, three years beyond its designed lifetime.

Recently, I made a difficult but necessary decision to cancel the last servicing mission to extend the Hubble's useful lifetime. Given the increased and complicated safety requirements handed to us by the Columbia Accident Investigation Board and after careful analysis of the risk, I determined it would not be the responsible course of action to expose the lives of seven Shuttle astronauts on a mission that does not go to a safe haven like the International Space Station.

While many scientists are disappointed about this decision, they also know NASA is committed to opening new windows on the Universe. We are doing this through the work of the Chandra X-Ray Observatory and the infrared Spitzer Space Telescope, and will do this with our next generation of space telescopes.

Sean O'Keefe
Administrator
National Aeronautics and Space Administration
The Hubble Space Telescope consumes about 2 percent of NASA’s budget but produces about one-third of its scientific discoveries. In spite of this, NASA announced last month that it would send no more shuttle flights to service the telescope, dooming it by 2008 or sooner. Recently, Maryland’s Senator Barbara Mikulski persuaded NASA to consider a second opinion by Admiral Harold W. Gehman Jr., who led the investigation of the Columbia disaster a year ago.

Hubble deserves this at least. Looking deep into space and bygone time from outside the earth’s atmosphere since its launching in 1990, it has been indispensable in teaching astronomers about the universe’s “dark energy” and the evolution of the first galaxies.

The plan is to have it succeeded by the larger James Webb Space Telescope in 2011 or so. But Hubble does things that Webb won’t be able to, and if the Hubble goes out of service soon and the Webb timetable turns out to be optimistic, there could be several years without a space telescope. Repairing it with another shuttle trip could prevent that and allow Hubble to yield even more revelations about the birth and death of stars.

NASA’s administrator, Sean O’Keefe, said safety concerns made him decide against further shuttle flights to the telescope. The crew of a shuttle that suffers damage during its takeoff or flight, like Columbia, could not seek refuge at the Hubble as it could at the space station, which will be the destination of future shuttle voyages. There is an answer to that, however. When the Hubble service shuttle took off, another shuttle and crew could be made ready to fly to Hubble and rescue the original crew if there were a mishap. Also, the Gehman board recommended that NASA devise ways for a shuttle crew to inspect and repair tiles independently of the space station.

Cost was undoubtedly also a factor in O’Keefe’s decision to stop Hubble flights. But not servicing it would mean sacrificing $200 million in new instruments that have been prepared for it. Also, as space specialist Michael Benson noted in a recent New York Times article, NASA will at some point have to pay for a robotic rocket that would attach itself to Hubble and bring it down to earth safely in an ocean. Part of a shuttle service flight could include the installation at much lower cost of controlled reentry rockets.

O’Keefe made his decision about the Hubble just after President Bush unveiled his proposal for a manned flight to Mars that would use a man-made station on the moon as a launching pad to the planet. But that plan has received such a tepid response from the public and Congress that Bush did not even mention it in his State of the Union address and includes only modest funding for it in his new budget.

The Mars expedition, whatever form it takes, will be a long time coming. In the meantime, it would be folly for NASA to forfeit the Hubble, one its most successful and scientifically rewarding ventures.