

Directors' Perspective: Good Times

Watching from the comfort of mission control in Houston, it is easy to be seduced by the ease with which the astronauts emerge from their orbiting cocoon and go to work on the Hubble Space Telescope. It is only the background images of the Earth below and the blackness of space above that remind us only a few centimeters of cloth and rubber separate them from immediate death. Floating in space with only their safety tethers binding them to the spacecraft, they go about their business without obvious anxiety. Yet to emerge from the airlock and get that first glimpse of the heavens must be a transforming experience, one that you and I will never experience here on Earth.

I was asked recently in an interview if I would go into space like the astronauts. "In a heartbeat," I replied, yet it was an ill-considered reply. Spaceflight is a risky business, and the experience is short-lived. To witness a shuttle launch from a few miles away, where the blast lights up the sky and the noise overpowers every other sound, is to understand the danger should any one of a few million components choose that moment to fail. Yes, I would go, but there would be second thoughts along the way. The astronauts who do go risk their lives on our behalf.

There is enormous public interest in our ability to improve Hubble through servicing. Following an embarrassing start and a successful repair with the first servicing mission, the public sees Hubble as the comeback kid. And they know that we do more than fix it; we improve it. So when the first images were released from ACS, the New York Times put all four images on its front page, papers from Honolulu to London carried stories about the new capabilities, and the news networks took extra time to laud the success of the mission. Joe Rothenberg, recently the head of manned spaceflight at NASA, told me that Hubble had more than twice the name recognition of the space station in his impromptu surveys. People know what we do, they follow our success with pride, and they pay attention to astronomy partly because of the Hubble story as a serial saga of humankind's success in exploring the heavens.

We have come to take for granted this ability to improve our space telescope with astronaut servicing. That ability will disappear in two years with the final mission to upgrade Hubble is carried out in the spring of 2004. After that, Hubble will make scientific observations until a major component fails. It may make it until 2010, at which time NASA plans to bring it back to Earth. The era of on-orbit servicing will come to an end and close a chapter in space exploration, just as the last Apollo mission closed the door on human exploration of the Moon. We will look back on these missions with faint nostalgia for a bygone era when the presence of humans was thought vital to getting the job done and to maintaining public support for the space program itself. We may well regret the loss of capability the astronauts have given us and the public interest it has maintained.

We are fortunate to have such a remarkable instrument as the Hubble Space Telescope at our disposal for a few more years. It requires many people to build the equipment, train the astronauts, launch the shuttle into orbit, and carry out the operations after the telescope is reawakened to cosmic light. We at the Institute extend our thanks to NASA, to the contractors, to the astronauts, and to our partners at Goddard Space Flight Center for making it all possible. I want to give my personal thanks to the people at the Institute who make it all go smoothly. We are in the midst of a high point in the history of astronomy, and we should all enjoy our good fortune before it recedes into the past.

These are the good times.

Steven Beckwith
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