

## **IMAX Camera Returns to Space to Chronicle Hubble Space Telescope**

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Astronaut William M. "Bill" Shepherd uses an IMAX camera aboard the International Space Station in February 2001. Credit: NASA

IMAX Corporation and Warner Bros. Pictures announced Monday that, in cooperation with NASA, the IMAX 3D camera is scheduled to return to space in 2008 aboard the space shuttle during STS-125 for production of a new film. Set for release in early 2010, IMAX will chronicle the life story of the Hubble Space Telescope.

"We are thrilled that people from around the world will experience this vital servicing mission from a front row seat," said Shana Dale, NASA deputy administrator, Headquarters, Washington. "Audiences will be mesmerized as they are transported to the distant galaxies of the universe."



IMAX's long-standing partnership with NASA has enabled millions of people to travel into space through a series of award-winning films. The IMAX 3D camera made its first voyage into space in 2001 for the production of "Space Station 3D." The Hubble IMAX 3D film will mark Warner Bros. Pictures' first venture into space.

Veteran astronaut Scott D. Altman will command the final space shuttle mission to Hubble when the orbiter lifts off in late 2008. Navy Reserve Capt. Gregory C. Johnson will serve as pilot. Mission specialists are veteran spacewalkers John M. Grunsfeld, Michael J. Massimino, and first-time space fliers Andrew J. Feustel, Michael T. Good and K. Megan McArthur.

The Hubble servicing mission is an 11-day flight. Following launch, the shuttle will rendezvous with the telescope on the third day of the flight. Using the shuttle's mechanical arm, the telescope will be placed on a work platform in the cargo bay. Five separate spacewalks will be needed to accomplish all of the mission objectives.

"A decade ago we made a film that briefly touched on the subject of Hubble, but back then its first images were just coming in," said IMAX producer and director Toni Myers. "Today, we have Hubble's entire phenomenal legacy of data to explore. With IMAX 3D, we can transport people to galaxies that are literally 13 billion light years away. Real star travel is here at last."

"Our original IMAX 3D releases have already put audiences in the driver's seat of a NASCAR racecar and taken them swimming with some of the most exotic undersea creatures on earth, and now we look forward to transporting them to the far reaches of the universe," said Dan Fellman, domestic distribution president, Warner Bros. Pictures. "Warner Bros. and IMAX have collaborated on 20 films over the last four years, and we are excited to share our next endeavor - the IMAX



3D space film - with our audience."

Among work scheduled during the mission is the installation of two new instruments, the Cosmic Origins Spectrograph (COS) and Wide Field Camera 3 (WFC3).

The COS is the most sensitive ultraviolet spectrograph ever flown on Hubble. The instrument will probe the cosmic web, the large-scale structure of the universe whose form is determined by the gravity of dark matter and is traced by the spatial distribution of galaxies and intergalactic gas. WFC3 is a new camera sensitive across a wide range of wavelengths (colors), including infrared, visible, and ultraviolet light. It will have a broad capability to study the planets in our solar system, the early and distant galaxies beyond Hubble's current reach, and nearby galaxies with stories to tell about their star formation histories.

Other planned work includes installing a refurbished Fine Guidance Sensor that replaces one degrading unit of the three already aboard. The sensors control the telescope's pointing system. An attempt also will be made to repair the Space Telescope Imaging Spectrograph. Installed in 1997, it stopped working in 2004. The instrument is used for high resolution studies in visible and ultraviolet light of both nearby star systems and distant galaxies, providing information about the motions and chemical makeup of stars, planetary atmospheres and other galaxies.

Astronauts will attempt to repair the Advanced Camera for Surveys, which stopped working in January 2007. The instrument consists of three imagers that are equipped with a variety of filters and dispersers that detect light from the ultraviolet to the near infrared. It was installed during the March 2002 servicing mission (SM3B).

Source: NASA



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