Instruments Containing Advanced Technology Sensors Head to Hubble Space Telescope

BOULDER, Colo. /PRNewswire/ — The historic mission to service NASA's Hubble Space Telescope this month will include installation of two instruments built by Ball Aerospace & Technologies Corp. Astronauts flying aboard Space Shuttle Atlantis expect to leave the Hubble at the apex of its scientific capabilities following their 11-day mission. Atlantis is scheduled to launch on Monday, May 11, at 2:01 EDT.

The Ball Aerospace-built Cosmic Origins Spectrograph (COS) and the Wide Field Camera 3 (WFC3) will be installed; and upgrades will be made to two critical Ball instruments: the Space Telescope Imaging Spectrograph (STIS), installed in 1997; and the Advanced Camera for Surveys (ACS), installed during the 2002 servicing mission. The celebrated mission will extend the operating life of the telescope and greatly enhance its scientific capability.

"Ball Aerospace is extremely proud to be part of NASA's historic return to the Hubble Space Telescope," said David L. Taylor, president and CEO of Ball Aerospace & Technologies Corp. "Hubble has provided us with the most amazing images in the universe and will expand those offerings following installation of the two new instruments provided by Ball Aerospace."

Ball has made significant contributions to the Hubble program for more than 30 years and became a key player after our engineers designed and built the Corrective Optics Space Telescope Axial Replacement that compensated for the original primary mirror flaw and enabled optimum performance of several science instruments," commented David L. Taylor,

The COS and WFC3 instruments contain advanced technology sensors, which far surpass what has been available on Hubble to-date, and improvement factors of 10X-70X are expected in certain key performance areas. COS will be 30 times more sensitive in the far-ultraviolet than earlier Hubble ultraviolet spectrographs, and will be able to observe distant quasars too faint for detection by previous spectrographs.

WFC3 will be sensitive to wavelengths from the near-ultraviolet to the near-infrared spectrum. This broad range expands our ability to make new discoveries and to understand existing data about the universe and galaxies. Using a 4,000 x 4,000 pixel charged couple device detector with a large field of view, WFC3 provides images with less "background noise" than previous instruments.

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