Lockheed Martin Team Supporting Hubble Space Telescope Servicing Mission

A team led by Lockheed Martin is providing support to the NASA Goddard Space Flight Center in the planning, training and implementation of Servicing Mission 4 (SM-4) to the Hubble Space Telescope (HST), scheduled for launch on May 11.

"We have found that working on the Hubble Space Telescope is more than just a job -- it is a passion. And we are enormously excited to be going back again to Hubble one final time and providing it a new lease on life," said Dennis Connolly, Lockheed Martin program manager of HST Flight Systems and Servicing. "We assembled much of the same team that performed so impressively on previous Hubble servicing missions and we're confident that this operation will go just as well. We're very proud to work with our colleagues at NASA Goddard Space Flight Center (GSFC) to maintain this magnificent observatory and extend its spectacular mission of discovery."

The SM-4 mission will involve five spacewalks by the astronaut crew of the Space Shuttle Atlantis. Maintenance tasks will include replacement of all of Hubble's batteries and gyros, installation of a refurbished Fine Guidance Sensor, and the mounting of insulation blankets on the outside of the telescope.

Two new instruments - the Cosmic Origins Spectrograph and the Wide Field Camera 3 - will be installed, significantly expanding Hubble's astronomical observing capability. Astronauts will attempt to repair two existing instruments - the Space Telescope Imaging Spectrograph and the Advanced Camera for Surveys. The Science Instrument Command and Data Handling unit will be replaced. Finally, a soft-capture mechanism will be attached to the aft bulkhead of HST to facilitate de-orbit and safe re-entry into the Earth's atmosphere when the telescope reaches the end of its scientific usefulness.

The Lockheed Martin team includes individuals from Lockheed Martin Space Systems, Lockheed Martin Information Systems & Global Services, Computer Sciences Corporation, Eagle Pitchard Industries, Goodrich Corporation, Honeywell, Jackson and Tull, L-3 Communications, Orbital Sciences Corporation, and Raytheon Corporation. The team is responsible for:

-- Spacecraft Systems Engineering and Design Integration
-- Payload Integration and Test at GSFC and Kennedy Space Center
-- Astronaut Training Support
-- Replacement Satellite Hardware Design and Development
-- Space Shuttle Support Equipment Design and Development
-- Spacecraft Mission Operations and Control
-- Ground Software
-- Spacecraft Flight Software
-- Servicing Mission Planning and Timeline Development.

The Hubble telescope, designed and built at Lockheed Martin Space Systems in Sunnyvale, Calif., was launched in 1990 and has revolutionized astronomy with its thousands of discoveries, while opening up the universe to the public through its beautiful and inspiring pictures. During its 19 years in orbit, HST has taken more than 880,000 exposures of 29,000 celestial objects - such as galaxies, dying stars, and giant gas clouds, the birthplace of stars - that have generated over 7660 scientific publications reporting Hubble results.

The NASA Goddard Space Flight Center in Greenbelt, Md. manages the HST program for the Science Mission Directorate, NASA Headquarters. Since the 1990 launch, under contract to NASA, Lockheed Martin Space Systems and Lockheed Martin Technical Operations personnel in Sunnyvale, Calif. and at GSFC have helped manage the day-to-day spacecraft operations of the telescope, and provided extensive preparation and training for the telescope servicing missions. The Space Telescope Science Institute in Baltimore, Md. selects observing programs from numerous proposals and analyzes, archives and disseminates incoming astronomical data.

Lockheed Martin Space Systems Company, a major operating unit of Lockheed Martin Corporation, designs and develops, tests, manufactures and operates a full spectrum of advanced-technology systems for national security and military, civil government and commercial customers. Chief products include human space flight systems; a full range of remote sensing, navigation, meteorological and communications satellites and instruments; space observatories and interplanetary spacecraft; laser radar; ballistic missiles; missile defense systems; and nanotechnology research and development.

Headquartered in Bethesda, Md., Lockheed Martin is a global security company that employs about 146,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The corporation reported 2008 sales of $42.7 billion.

Media Contact: Buddy Nelson, (510) 797-0349; e-mail, buddynelson@mac.com,
pager: 1-888-916-1797

To download the HST Servicing Mission 4 Media Reference Guide,

and to access additional information on the mission, please visit our website:

www.lockheedmartin.com/hubble

First Call Analyst:
FCMN Contact:

SOURCE: Lockheed Martin

Web Site: http://www.lockheedmartin.com/

---

https://news.lockheedmartin.com/2009-05-04-Lockheed-Martin-Team-Supporting-Hubble-Space-Telescope-Servicing-Mission