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## **Mitsubishi Electric to Supply PLS Components for Orbital Sciences Corporation for NASA International Space Station Re-supply Programs**

**Tokyo, October 22, 2009** – Mitsubishi Electric Corporation (TOKYO: 6503), announced today it has agreed with Orbital Sciences Corporation (Orbital) to supply Proximity Link System (PLS) components that will guide Orbital's Cygnus Spacecraft to the International Space Station (ISS) on nine re-supply missions for the National Aeronautics and Space Administration (NASA). The PLS components were originally developed for the H-II Transfer Vehicle (HTV) program by Mitsubishi Electric under contract with the Japan Aerospace Exploration Agency (JAXA). Mitsubishi Electric will deliver the PLS components to Orbital between 2010 and 2014 in a deal valued at approximately 66 million U.S. dollars (6 billion yen), making it one of the largest contracts tying a Japanese company to NASA's space exploration program.

### **Background**

The Cygnus Spacecraft is under development by Orbital under a Commercial Orbital Transportation Services (COTS) Space Act Agreement with NASA. A demonstration flight is scheduled to launch in 2011 for a commercial cargo delivery system to ISS, following the retirement of the Space Shuttle in 2010. The eight subsequent missions will transport cargo to the ISS between 2011 and 2015 under Orbital's Commercial Resupply Services (CRS) Contract with NASA. Mitsubishi Electric's PLS components to be integrated into the Cygnus Spacecraft utilize the same technologies originally developed for the H-II Transfer Vehicle (HTV) program for the Japan Aerospace Exploration Agency (JAXA), whose maiden flight launched on September 11, 2009 and successfully docked with the ISS on September 18, 2009.

“Mitsubishi Electric's longstanding experience in the development of ISS-related programs in partnership with JAXA, such as the Japanese HTV and Experimental Kibo Module, has rewarded the company with an excellent reputation globally for its space technologies,” said Hiroyuki Inahata, General Manager of Space Systems Division. “We are delighted that Mitsubishi Electric's involvement in these NASA's space programs marks the first ever achievement as a Japanese space system supplier.”

The PLS components, composed of transponders, duplexers and data handling processors, are essential for rendezvous control between re-supply spacecraft and the ISS. When the re-supply spacecraft approaches the ISS, the on-board PLS initiates a signaling exchange with the PROX (Proximity Communication System), which is built into the ISS as a part of the Japanese Kibo Experimental Module, and guides the spacecraft in rendezvous and berthing with the ISS. Once the re-supply spacecraft is in close proximity to the ISS, it is grappled by the Space Station robotic arm and maneuvered to its final berthed position at the Nadir port of Harmony.

The development and manufacture of the PLS components will be carried out at Mitsubishi Electric's factory in Kamakura, Japan, with a well established and robust quality management system to assure that the products fully meet Orbital's design requirements.

Since the establishment of the National Space Development Agency of Japan (NASDA)<sup>1</sup> in 1969, Mitsubishi Electric has been a leading manufacturer contributing to Japanese space research and development, participating as the main contractor for nearly half of NASDA's domestic satellite development projects. The company has also been involved in more than 330 domestic and overseas satellite projects.

<sup>1</sup> Integrated with the Institute of Space and Astronautical Science (ISAS) and National Aerospace Laboratory of Japan (NAL) on October 1, 2003 to form the Japan Aerospace Exploration Agency (JAXA).

### **About Mitsubishi Electric**

With over 85 years of experience in providing reliable, high-quality products to both corporate clients and general consumers all over the world, Mitsubishi Electric Corporation (TOKYO: 6503) is a recognized world leader in the manufacture, marketing and sales of electrical and electronic equipment used in information processing and communications, space development and satellite communications, consumer electronics, industrial technology, energy, transportation and building equipment. The company recorded consolidated group sales of 3,665.1 billion yen (US\$ 37.4 billion\*) in the fiscal year ended March 31, 2009. For more information visit <http://global.mitsubishielectric.com>

\*At an exchange rate of 98 yen to the US dollar, the rate given by the Tokyo Foreign Exchange Market on March 31, 2009.

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