

TDRS spacecraft pass system level reviews

22 February 2010

NASA's Tracking and Data Relay Satellite (TDRS) K-L program completed its Critical Design Review (CDR) and Production Readiness Review (PRR) in El Segundo, Calif. on Feb. 19.

The CDR and PRR bridge the design and manufacturing stages of the TDRS program. With the successful completion of this review, Boeing Space Intelligence Systems will proceed with assembly of the K and L satellites.

NASA's Tracking and Data Relay Satellite System (TDRSS) consists of eight in-orbit communication satellites stationed at geosynchronous altitude and the ground stations located at the White Sands Complex near Las Cruces, New Mexico, and at Guam. The system is capable of providing coverage to user [spacecraft](#) for up to 100 percent of each orbit.

When the K and L satellites join the TDRS on-orbit constellation, they will provide critical voice, video, mission payload data, and health and safety data relay services to Earth-orbiting spacecraft. "The K-L series of spacecraft are critical for ensuring the continued availability of high bandwidth communications necessary for the success of NASA missions, such as the [International Space Station](#), the [Hubble Space Telescope](#), and a host of launch vehicles," said TDRS Project Manager Jeff Gramling at NASA's Goddard Space Flight Center in Greenbelt, Md.

NASA project, program, headquarters officials, and independent review team members participated in reviews that evaluated the TDRS K-L spacecraft, ground, and mission design, including spacecraft assembly and systems integration, testing and safety requirements.

"Successfully completing these reviews is an important milestone," said Pete Vrotsos, Space Communication and Navigation (SCaN) Network Services Director at NASA Headquarters in Washington. "These new spacecraft will enable NASA to replenish aging TDRSS spacecraft and

maintain the outstanding level of communications services to NASA and the nation."

TDRS K and L are the 11th and 12th satellites, respectively, to be built for TDRSS, which was established in 1983 to replace NASA's worldwide network of ground tracking stations.

The TDRS Project Office at Goddard manages the TDRS K development and launch program. Goddard's Exploration and Space Communications Division manages the operation of the TDRS System (the Space Network). The SCaN Office within the Space Operations Mission Directorate at NASA Headquarters has programmatic responsibility for communications and navigation services required by NASA missions, provided by the Near Earth Network, the Deep Space Network and the geosynchronous Space Network.

Provided by NASA's Goddard Space Flight Center

APA citation: TDRS spacecraft pass system level reviews (2010, February 22) retrieved 22 February 2020 from <https://phys.org/news/2010-02-tdrs-spacecraft.html>

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