Honeywell Supports Modernization

Honeywell

Remote Tracking Station Block Change (RBC) System

Challenge

Modernizing and maintaining the U.S. national security space infrastructure.

Solution

Programs like the Air Force Satellite Control Network (AFSCN) remote tracking station modernization effort being conducted by the Honeywell team on the Satellite Control Network Contract (SCNC).

Leadership

Honeywell is leading the team for the Air Force Satellite Control Network's successful turnover of the Remote Tracking Station Block Change (RBC) system at Vandenburg Tracking Station. The Air Force program is replacing 17 legacy ground stations and developing two transportable stations.

When compared to legacy ground stations within the Air Force Space Command Network, the RBC system is a significant technology leap that enables the Air Force to readily address future user requirements and to move effectively into remote operations capability while reducing operational costs.

Proven Mission Success

The RBC system's design is the most capable antenna system built to date. Developed as the third generation of similar systems delivered previously to National Aeronautics and Space Administration (NASA), and National Oceanic and Atmospheric Administration (NOAA), the system design protects Air Force investments at the same time it transforms performance.

Reduce Costs and Enable Upgrades

With a legacy interface design that enables it to support current capabilities provided by the Automated Remote Tracking Station (ARTS) system today, and a scalable system architecture that is "antenna independent," the RBC system can be interfaced to various technical options with minimal engineering effort. The result is significant savings in operations and sustainment costs.

Honeywell's core electronics architecture protects the Air Force investment in RBC systems through a continuous evolution design that also supports phased array technology.

The system design reduces budgetary pressures by lowering costs and helping to do more with less. Cost reductions are supported by the designs centralization of system administration duties and reduced manpower requirements at the sites. Information assurance auditing can provide network security Improvements

Transform Performance

The RBC system design supports performance improvements today and accommodates emerging long term capability needs. The design allows for:

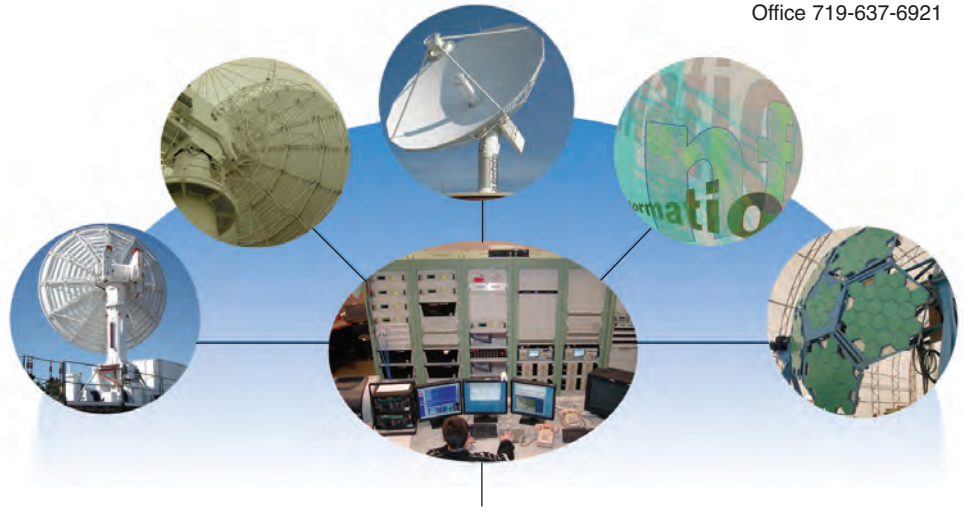
- Implementation of future capabilities i.e., Spectrum Efficient Waveform (SEW) and Unified S-Band (USB)
- A Transmission Control Protocol/Internet Protocol (TCP/IP) interface design for Telemetry, Tracking & Commanding (TT&C)
- Deployment of a Service Oriented Architecture (SOA) within the AFSCN
- Satellite Operations and Control support allowing user to reach a "Lights-Out" operations posture
- Significant redundancy for additional flexibility in scheduling maintenance activities
- Collection and correlation of signal data from the tracking stations to allow real-time correlation of data targeted at identifying events, threats, cyber attacks and other activities that could disrupt or degrade service
- A state-of-the-art Fault Detection/Fault Isolation/ Fault Correction. As part of pre-pass, the RBC will automatically interrogate the signal path to ensure that required components are available. If any of the required components are not available, redundant components are automatically selected for use
- Condition-Based Maintenance (CBM) capabilities for real-time maintenance decision support and assets being continuously maintained in an operational state

Process to Date

Currently, the program has deployed Remote Block Change (RBC) systems to five locations; Vandenburg Tracking Station, Colorado Tracking Station, Eastern Vehicle Checkout Facility, Telemetry and Command Station, and Diego Garcia Tracking Station. Also underway is the development of the first RBC transportable system planned for deployment in 2012. The asset will allow the Government to have more versatility in its operations.

Find Out More

To learn more about the RBC system and HTSI, contact the SCNC RBC Program Manager
Debra.Pomerleau@afscn.com
Office 719-637-6921



Satellite Operations & Control/Network Operations & Control

For more information:

Aerospace Defense & Space
Honeywell Technology Solutions Inc.
7000 Columbia Gateway Drive
Columbia, MD 21046
Tel: 410-964-7000
www.honeywell.com/HTSI

Honeywell

N61-0897-000-000
HTSI-February 2009