FAA William J. Hughes Technical Center

Air Traffic Control Beacon Interrogator-6 Program (ATCBI-6)



The Air Traffic Control Beacon Interrogator -6 (ATCBI-6) Program will upgrade the outdated 30-year old existing beacon radar systems with current technology equipment and meet current and future air traffic needs.

The ATCBI-6 program will be the third and last phase of the National Airspace System (NAS) field implementation of secondary surveillance radar system upgrades.

In August 1997, the Secondary Surveillance Product Team received full program approval from the FAA Joint Resource Council to procure 129 ATCBI-6 systems. These systems will be used to replace the aging ATCBI-4 and ATCBI-5 at en route radar sites (ARSR-4, ARSR-3, ARSR-2, ARSR-1, FPS, and Beacon only sites). The ATCBI-6 systems will be state-of-the-art monopulse secondary surveillance radars with Mode S discrete addressing capabilities. The surveillance capabilities and performance will complement the existing 147 Mode S systems currently fielded and will help provide a sound infrastructure to allow transition to the Free Flight environment envisioned for early next century. This approach will meet the nearterm needs while providing for a seamless transition to cooperative satellite-based surveillance. The photo shows the hardware cabinet configuration for the ATCBI-6 system. Surveillance capabilities include:

- 255 mile range
- Can interface to newer automation system with asterix data



- 1400 target capacity
- Enhanced surveillance

KEY ACCOMPLISHMENTS

 Contract awarded to the Raytheon Corporation, August 3, 1998

STATUS

Currently, the ATCBI-6 is undergoing preparation for DT&E. DT&E is expected to begin by early 1999.

PI ANS

- Complete DT&E testing by September 1999
- Begin OT&E testing by October 1999
- Keysite commissioning April 2000

To find out more about the Air Traffic Control Beacon Interrogator-6 Program, contact:

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