Raytheon Company d/b/a Raytheon Systems Company Request for Special Temporary Authority

## **Exhibit**

By this application, Raytheon Company requests Special Temporary Authority, beginning November 22, 1999, to operate experimental equipment on 36-37 GHz. The technical specifics of the experimentation are described in the application.

The equipment will be used as part of an experimental program to characterize the detection and tracking capabilities of a modern technology radar. The radar will be installed in a test aircraft and operated at various locations in the continental United States. Initially, operation will be within a 120-km (75-mile) radius of Dallas, Texas; Yuma, Arizona; and White Sands Missile Range, New Mexico.

The radar was developed by Raytheon as part of a proprietary program. The radar is designed for evaluation of a newly developed transmitter as it applies to radar systems. The primary objective is to demonstrate the radar's capability to detect and track aircraft targets of various types and geometrics.

The modulating signal will be 0.5 to 4.0 usec and 50 to 500 kHz.