

**STA REQUEST
AND DESCRIPTION OF OPERATIONS**

1. **Introduction**

By the instant application (“STA Request”), SET Corporation (“SET”) requests that the Commission grant special temporary authority (“STA”) to permit SET to operate the facilities (the “Facilities”) specified in the instant STA Request. STA is requested for a period of six (6) months from the date of grant of this STA Request.

2. **Purpose and Scope of Operation**

SET, founded by scientists from the Defense Advanced Research Projects Agency (“DARPA”), offers engineering services to U.S. Government customers with advanced research and development missions. SET’s Advanced Technology team develops intelligent information technologies that add value through integration and automation, and specializes in multi-sensor products designed to counter the growing number of deadly security threats faced by homeland security and defense customers. The testing for which authority is sought in the instant STA Request is a critical part of the manufacture and delivery of such systems to the Armed Forces in support of Homeland Security as well as war efforts, and ultimately to state and local law enforcement and security personnel.

The specific purpose of the system for which authority is requested is described at Exhibit 3, which is subject to SET’s “Confidentiality Request” attached to the STA Request at Exhibit 1.

To ensure sufficient flexibility in the implementation of the subject experiments - the instant STA Request seeks Commission authority to operate the specified antennas on a temporary fixed basis within a radius of operation around the centerpoints identified in the application:

Antenna #1: 20 km radius around the centerpoint geographic coordinates of:
38-53-15 N.Lat.; 077-10-51 W.Long. [NAD 83]

Antenna #2: 1.0 km radius around the centerpoint geographic coordinates of:
38-47-30 N.Lat.; 077-24-6 W.Long. [NAD 83]

Antenna #3: 1.0 km radius around the centerpoint geographic coordinates of:
38-41-30 N.Lat.; 077-33-4 W.Long. [NAD 83]

Antenna #4: 3 km radius around the centerpoint geographic coordinates of:
38-32-56 N.Lat.; 077-12-56 W.Long. [NAD 83]

It is noted that pursuant to File No. 0197-EX-ST-2006, the Commission granted SET Special Temporary Authority (the “Original STA”) to operate the same system at three different locations. Because under the Commission’s procedures that initial STA cannot be modified, this STA Request seeks a second STA grant for the same system to be authorized at the above-referenced 4 additional locations. Because no other aspects of the system are changed, it is hoped that the Commission’s prior processing of the Original STA helps streamline the processing of this STA Request.

3. Why STA is in the Public Interest

STA is being requested in order to obtain processing as expeditiously as possible so that the commencement of operation of the proposed facilities can occur as soon as possible. The capabilities of the proposed system, described at Exhibit 3, will offer numerous homeland-security related safety and counter measures for our armed forces in the field, as well as ultimately to state and local law enforcement and security personnel. SET’s customers require development of this technology on a schedule which does not permit SET to delay the commencement of these tests. Commission grant of STA in this case will permit SET to commence operations under a timeframe that will permit it to timely verify performance in accordance with the near term requirements of the above-referenced contracts. For the foregoing reasons, approval of this STA Request is in the public interest, convenience and necessity.

4. Directional Antennas

The Antenna Registrations to the instant STA Request ask:
“Is a directional antenna (other than radar) used?”

In response to this Item, SET has responded “No” because the instant experiment involves the use of radar emissions. However for the purpose of full disclosure, the following information is provided:

- Width of beam in degrees at the half-power point: 0.5-4.0 “pencil” beam
- Orientation in horizontal plane: The antenna may be oriented so as to point its main lobe in any direction within a horizontal plane.
- Orientation in vertical plane: The antenna is oriented such that its main lobe will be parallel to the ground +/-2 degrees.

5. Prevention of Interference

SET hereby advises the Commission that John Reed and John Gorman will personally monitor the experiments for which authority is requested, and will act as “stop buzzers” if any issues regarding interference arise during testing. His wireless numbers for this purpose will be: John Reed (703-994-8778); John Gorman (703-587-1898).