## Explanation

Please explain in the area below why an STA is necessary:

ARTEMIS, Inc. is testing an X-band synthetic aperture radar (SAR) system from a high-altitude balloon for the Department of Defense. Frequency allocation for the radar system is needed in two new locations: East of Albuquerque, New Mexico, and along the coast of southern California.

## Purpose of Operation

Please explain the purpose of operation: The Department of Defense has contracted ARTEMIS, Inc. to provide demonstrations of their synthetic aperture radar system operating on a high altitude balloon. The purpose of these tests is to demonstrate functionality of the system and collect system performance data.