

PUBLIC INTEREST STATEMENT

1. Introduction

By the instant application (“Application”), Science Applications International Corporation (SAIC) requests that the Commission grant special temporary authority (“STA”) to SAIC to operate the facilities (the “Facilities”) specified in the Application.

2. Purpose and Scope of Operation

SAIC is a leading provider of scientific, engineering, systems integration and technical services and solutions. SAIC’s Surveillance and Reconnaissance Business Unit provides maritime intelligence, surveillance, and reconnaissance (ISR) as well as airborne reconnaissance, with an emphasis on mission capability integration and services and products for the military space domain. Working in high-risk environments, SRBU employees leverage full spectrum phenomenology, including sensors and signature detection, to deliver superior technology-driven, mission-responsive ISR collection and associated processing, exploitation, and dissemination solutions to support our nation's security in the space, air, land, and maritime domains. The testing for which authority is sought in the instant Application is a critical part of the manufacture and delivery of systems designed to support the Warfighter in ISR activities.

SAIC is building the UHF-Tx1 system for the U.S. government. The instant Application seeks authority to operate the system for the sole purpose of insuring that the equipment functions properly before delivering it to the government. To do so, it is necessary to verify that the system functions correctly at full power. The specific purpose of the system for which authority is requested is addressed at Exhibit 3, which is subject to SAIC’s “Confidentiality Request” attached to the Application at Exhibit 2. As a general matter, the instant Application seeks Commission authority to operate the specified Facilities in the vicinity of the specified centerpoints.

SAIC respectfully requests a waiver of the Station Identification rules specified in Section 5.115 of the Commission’s rules.

3. Other Technical Information

Single Aperture:	Maximum CW transmit power is 1000 Watts
	Multiple antennas will be tested
	Antenna gain is less than 16 dBi from 431-439 MHz

4. Interference Mitigation

Operation of the requested Facilities will not be continuous. Rather, authority for only limited and sporadic operation of the Facilities is requested during the authorized timeframe, i.e., at any given authorized location, the cumulative period of operation in any given 24 hour period will be no more than 8 hours. In the off state, no measurable power will be radiated. In addition, only one unit will be operated at any given time at any of the specified locations in the Application.

The transmit antenna has a wide beamwidth but will be fixed in pointing direction rather than rotating during transmission. In this regard, the following directionality information is provided for the antennas:

Width of Beam in Degrees at half-power point	Orientation in Vertical Plane	Orientation in Horizontal Plane
25-35°	0-360°	0-90°

SAIC understands that FAA (or other stakeholders) may require certain limited azimuth and/or elevation blanking in order to ensure that the proposed Facilities do not pose a threat of interference to adjacent emitters. Accordingly, this is to confirm that the subject system has such blanking capabilities and that SAIC stands ready to work with FAA to identify any reasonably necessary azimuth and/or elevation restrictions for the system.

Authority is requested for only limited and sporadic operation of the Facilities during the authorized timeframe. The majority of operations of the Facilities will be conducted inside the laboratory. As stated above, the purpose of the outdoor testing is to verify that the system functions correctly at high power. An un-modulated CW carrier will be used for this verification test. It is envisioned that the carrier will first be transmitted at low power, e.g. 1 Watt. The power will then be increased in increments until the full system power is reached. Furthermore, it is envisioned that the duration of transmission at full system power will be less than 30 minutes.

Based on the location of the experiment, the technical parameters of the operation, and the manner in which the experiment will be conducted, interference to any co-channel or adjacent channel operations (including for example radio astronomy) is mitigated.

5. Discussion re: Power

The ERP indicated in the application is on the order of 10s of kilowatts, however the maximum power into transmit antenna is under 1000 Watts. The ERP is the Equivalent or Effective Radiated Power.

6. Prevention of Interference

SAIC hereby advises the Commission that SAIC's Timothy M. Bielawa or L. Cole Howard will personally monitor the experiments for which authority is requested, and will act as a "stop buzzer" if any issues regarding interference arise during testing. Mr. Bielawa can be reached on his cell phone at 571-245-3534, and Mr. Howard can be reached on his cell phone at 703-593-9402.