

**Exhibit No. 1**  
**(FCC Form 422)**

The Raytheon Tucson, Arizona plant site resides just south of the Tucson International Airport (TIA). The transmitters are located at Building 827C with the direction of radiation being southwest at approximately 237 degrees. This direction is perpendicular to the TIA runway and away from the populated areas of Tucson, Arizona. See attached maps of the TIA area, Raytheon Airport site, and the Tucson Test Facility.

Raytheon (formerly Hughes Missile Systems Company) has been in place for fifty years at this site. We have worked very closely with our neighbors (TIA, National Guard, Davis-Monthan AFB, the City of Tucson, and Pima County) on a non-interference basis.

This application is for a renewal of the existing license, which expires in November of 2000. This FCC experimental Radio Station License was originated in San Diego, which is where the transmitters were relocated from, as KA2XAG file number 0450-EX-MR-87, then modified in 1998 as file number 6283-EX-MR-1998.

**Exhibit No. 2**  
**(FCC Form 442)**

**4. Particulars of Operation (see instruction below) . . . CONTINUED**

| Frequency<br>(A) | Power |       |      | Emission<br>(E) | Modulating<br>Signal<br>(F)                                   | Necessary Bandwidth<br>(kHz)<br>(G) |
|------------------|-------|-------|------|-----------------|---------------------------------------------------------------|-------------------------------------|
|                  | (B)   | (C)   | (D)  |                 |                                                               |                                     |
| 9200-10000 MHz   | 30 W  | 30 k  | Peak | 10M0P0N         | 1-100 kHz<br>PRF .1<br>microsec<br>pulsed<br>for all<br>bands | 10,000                              |
| 13400-14000 MHz  | 30 W  | 30 k  | Peak | 10M0P0N         |                                                               | 10,000                              |
| 15700-17700 MHz  | 30 W  | 30 k  | Peak | 10M0P0N         |                                                               | 10,000                              |
| 32000-39000 MHz  | 100 W | 100 k | Peak | 10M0P0N         |                                                               | 10,000                              |

**Exhibit No. 3**  
**(FCC Form 442)**

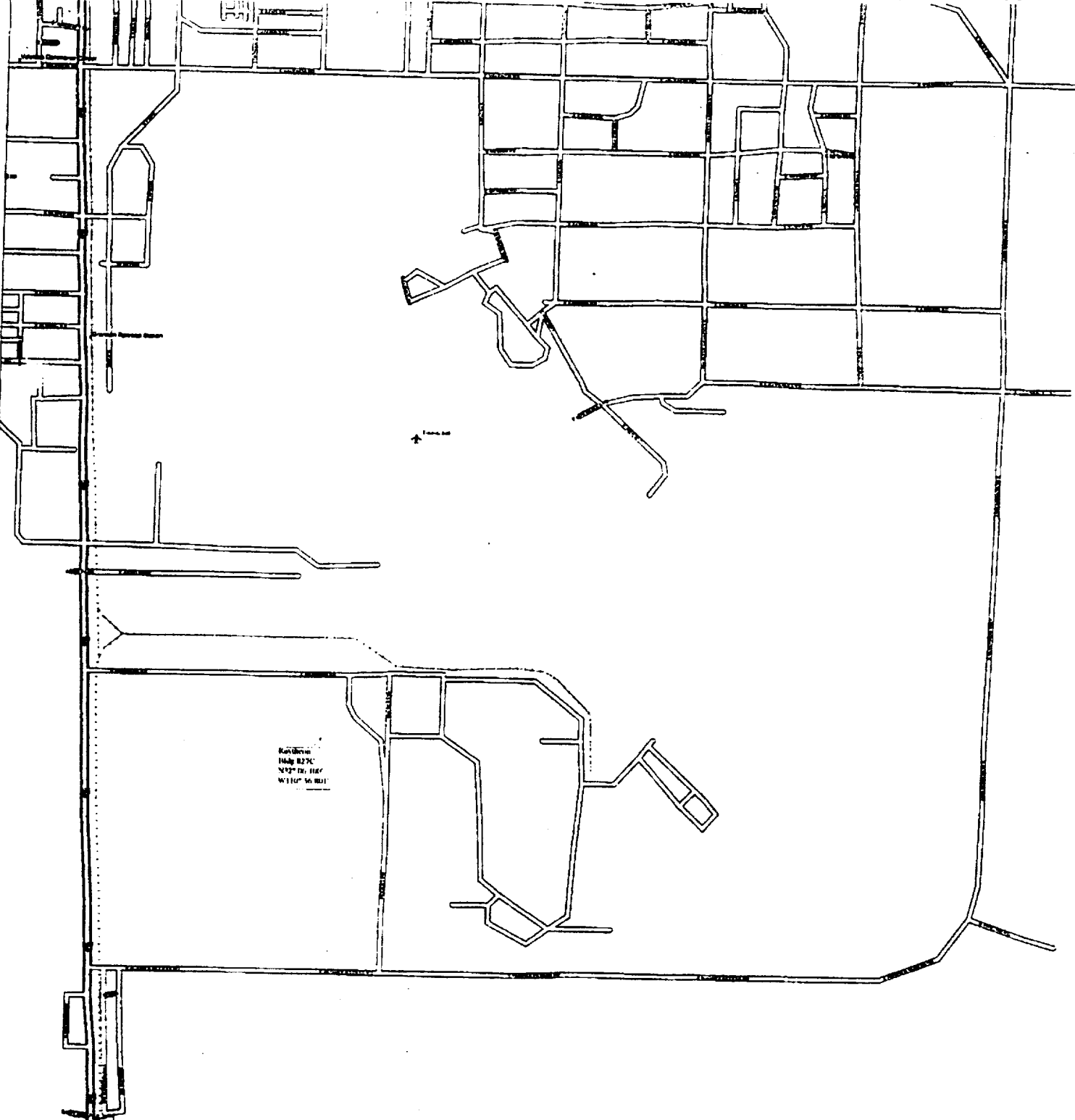
The following is provided to explain the reason Raytheon Systems Company is applying for broadband frequency coverage instead of discrete frequencies.

Current state-of-the-art backscatter and antenna pattern measurement systems are designed to perform high-resolution range measurements. These measurements require that the target be measured at a number of frequencies in the band of interest (i.e., 155, 815, 1300 MHz and stepped frequencies between 2-18 GHz and 32-38 GHz). This frequency data is Fourier transformed to provide backscatter versus range data. This capability of measuring the target data saves countless hours of measurements at single frequencies and is an essential tool in meeting contract requirements.

Raytheon is currently involved in Independent Research and Development (IR&D) for related Department of Defense (DoD) programs in cruise missile and other related weapon systems. Some of these contracts require that measurements be made on materials, components, and full-scale vehicles to insure they meet design specifications.

**Exhibit No. 4**  
**(FCC Form 442)**

[INSERT A VERTICAL PROFILE SKETCH OF TOTAL STRUCTURE]



Rancho  
Mag 15.00  
N 92° 00' 00" E  
W 116° 56' 00" E

© 1996 DeLorme Street Atlas USA

Mag 15.00  
Mon May 11 12:45 1998

Scale 1:28,125 (at center)  
2000 Feet  
1000 Meters

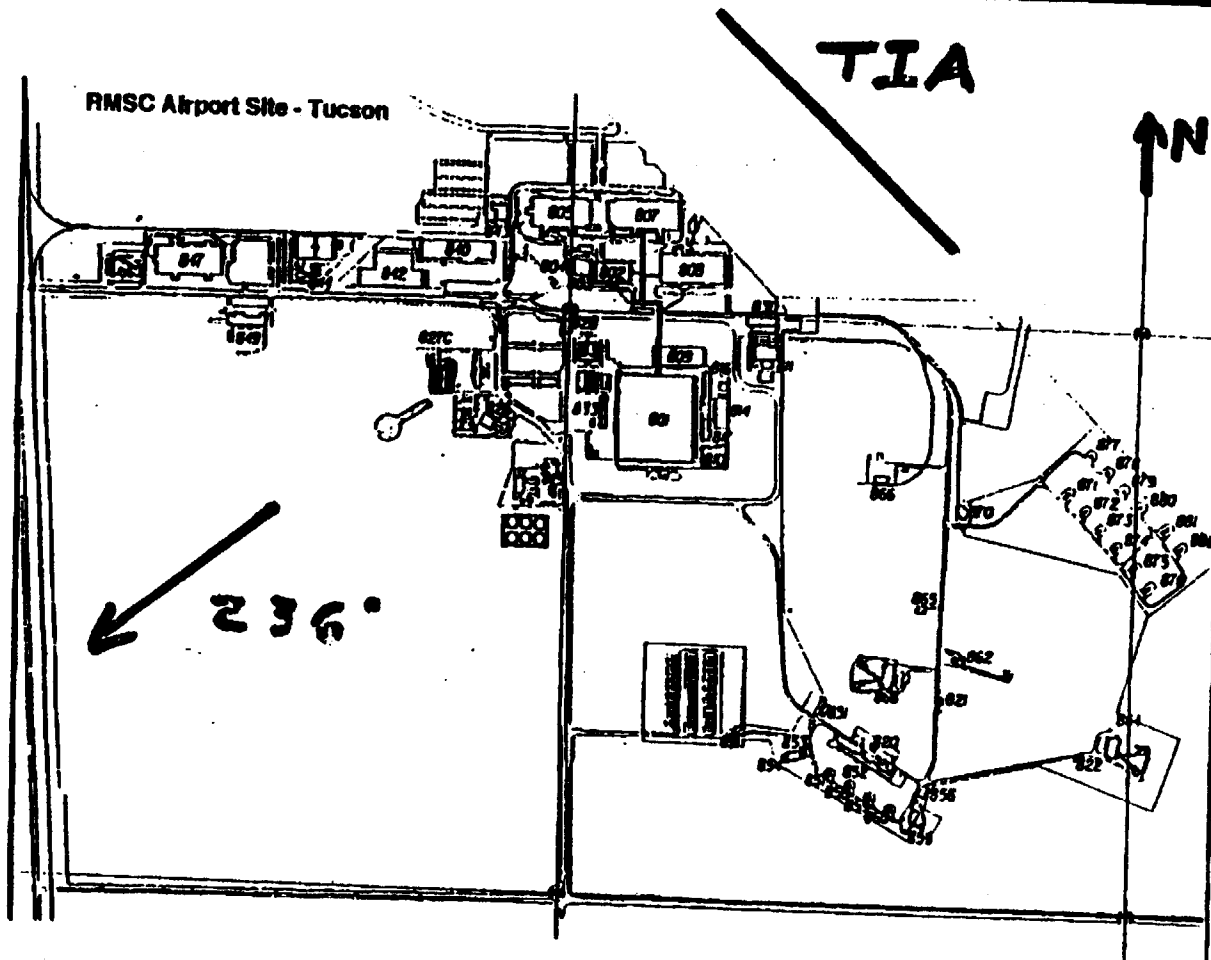
- Secondary SR/Road/Hwy Ramp
- Interstate/Limited Access
- Utility/Pipe
- Railroad

# SITE A TRANSITION PLAN

## FACILITIES

### TUCSON PLOT

**Raytheon**



# SITE A TRANSITION PLAN

## PROPOSED NEW TUCSON FACILITY

### BLDG. 827C

**Raytheon**

