

EXHIBIT 1 - GEOGRAPHIC LOCATIONS OF OPERATION

| <u>LOCATION/MILITARY BASE</u> | <u>GEOGRAPHIC LOCATION</u> |
|---|----------------------------|
| 10 Brigg AAF (Fort Bliss) Texas | 31°51'N 106°23'W |
| Eglin AFB, Florida | 30°29'N 86°32'W |
| Fort Irwin, California | 35°11'N 116°04'W |
| * Santa Monica, California | 34°01'N 118°27'W |
| MCB, Twenty-nine Palms, EAF, California | 37°17'N 116°10'W |
| Yakima Air Trml. Washington | 46°34'N 120°33'W |
| Yuma MCAS, Arizona | 32°39'N 114°37'W |
| * Lear Astronics Manufacturing Facility | |

EXHIBIT 2 - NARRATIVE STATEMENT

- a) The equipment to be operated is the Tactical Defense Alert Radar (TDAR) which was developed in the early 1980's. It is currently being demonstrated to potential customers, modified and maintained by Lear Astronics Corp. The TDAR is a short range air defense radar system designed for the detection of low flying fixed and rotary wing aircraft. It has an approximate detection range of 20 Km and an altitude coverage of 10,000 feet against the above types of target. It uses pulse techniques for range measurement and Doppler frequency discrimination for the measurement of radial velocity and the rejection of ground clutter. The transmitter consists of a crystal controlled frequency synthesizer and solid state amplifier. The receiver is a homodyne (zero IF) design, with both baseband 'matched' filtering and Doppler filtering. The antenna is fixed in evaluation and scans 360 degrees in azimuth every 4 seconds.
- b) Specific objectives to be accomplished are the demonstration, continued technical development and the maintenance of the TDAR units.
- c) It is probable that the TDAR will be procured and operationally deployed by the U.S. Marine Corps and U.S. Army and will therefore contribute to the national defense effort. In addition, the continued development of the radar will contribute to the radio art in the areas of solid state transmitters and advanced target tracking techniques.