

Exhibit 1 – Particulars of Operation

Note 1

For the purpose of the demonstration which is the subject of this license application it is desired to have a minimum of 3 channels (frequencies) assigned which are preferably evenly spaced across the specified range of frequencies in each band, the specific exact frequencies are not important to the purpose of the tests. Simultaneous operation at two frequencies in each band is required for certain of the tests.

Note 2

The operation in the 138 to 151.975 MHz band is based on the Rockwell Collins AN/ARC-186 the output of which is amplified using a linear amplifier to produce the maximum of 150 watts mean output power.

Note 3

In its operation the jammer unit will utilize voice and audio modulations to interfere with a single channel of a network using conventional R/T units such as the VHF-186. The experimental application will involve operating and radiating from the equipment for short periods of time to verify proper installation on the aircraft and integrity of RF cable etc. In addition to testing will be conducted to determine possible interference between the unit and other avionics equipment on board the A/C. In addition electric field intensity measurements will be conducted to verify safety of operators on board the A/C and of ground personnel near the A/C.

Note 4

(For A3E Emissions) While the AN/ARC-186 equipment is capable of FM (F26) emissions, these modes will not be utilized during the tests for which this license application applies.

Note 5

The operation in the 225 to 390.000 MHz band is based on the Magnavox RT-1614/ARC-164(V) device which is amplified using a linear amplifier to produce the maximum of 150 watts mean.

Note 6

(For 800 MHz and higher) The tests for which this license applies will be performed with no modulating signal applied to the carrier, however due to instability of the transmitter the bandwidth is not zero, the maximum bandwidth as specified by contract is shown in the table.

Exhibit 2 - Location

The tests are proposed to be conducted while the equipment is installed on a Falcon Jet aircraft.

The tests are proposed to be carried out at Jones Riverside Airfield near Tulsa, OK, with the aircraft parked at or near the hanger facilities of Aeromet, Inc.

The location of the aircraft while the radiation is occurring is shown on FCC form 422 item 5, 36 degrees 02' 01" North latitude by 95 degrees 59' 31" West longitude

No operation of the subject radio equipment covered by this license application will take place while the aircraft is airborne. Airborne operation of the equipment will occur only at US Government test ranges and will be done subject to regulations that apply to those ranges.

Exhibit 3 - Directional Antennas

Operation in each of the bands utilizes separate antennas each of which has specific parameters as shown in the following table.

In bands three through six multiple fixed directional antennas are fitted to the aircraft, transmission from two antennas at the same time in each band is possible.

Antenna orientations shown in the table are referenced to the nose of the aircraft. During operation of the equipment all of the radiating antennas are less than 6 meters above the ground level.

Band	Frequency	Antenna Vertical plane Orientation	Antenna Vertical plane Beam width	Antenna Orientation in the Horizontal plane Note 1	Antenna horizontal Plane beam width Each antenna
	MHz	Degrees	Degrees	Degrees relative to nose of aircraft	degrees
1	138-151.700	0 (at the horizon)	+/-45	N/A antenna is Omni	360
2	225 to 390.000	0 (at the horizon)	+/-45	N/A antenna is Omni	360
3	803-1600	0 (at the horizon)	+/-35	Four antennas are mounted, they are oriented at 0, 80, 180 and 280 degrees	+/-35
4	2050-3600	0 (at the horizon)	+/-25	Six antennas are Mounted they are Oriented at 0, 40, 80, 180, 280 and 320 degrees	+/-25
5	5260-7125	0 (at the horizon)	+/-25	As for band 4 above	+/-25
6	8,510-16,600	0 (at the horizon)	+/-25	Two antennas are Mounted oriented at 0 and 180 degrees	+/-25

Note 1 Orientation of the radiating antennas with respect to north can be set by movement of the aircraft if required.

Exhibit 4 - Foreign Government

This license application is in support of developing and testing radio equipment for the Government of Norway under Royal Norwegian Air Force Material Command contract LFK-00025152

Exhibit 5 - Station Identification

The equipment identified as bands one and two in Exhibit 1 is capable of station identification using normal DSB AM voice

The equipment identified as bands 3 through 5 were not designed for station identification.

Exhibit 6 Narrative statement describing in detail the program of experimentation proposed, as required by 5.57.(a) of CFR 47

Aeromet Inc. has entered into a contract with the government of Norway to install new VHF communication and VOR/ILS equipment in two customer furnished DA-20 Falcon jet aircraft (s/n 041 and 053).

The aircraft support training activities of the Norwegian Navy by providing simulated jamming of radio assets installed on Norwegian ships in specific bands between 109.075 and 18,000 MHz.

The purpose of the test is to confirm that no unacceptable interference exists with the aircraft systems from the mission systems with transmitters active. The modified aircraft will be deemed acceptable if no safety related effects are identified and if no aircraft operational deficiencies are noted.,

Exhibit 7

The Government of Norway is the owner and operator of the equipment, while the equipment is being operated within and outside the territory of the United States.