

## **Area of operations**

The requested area of operations for the use of the AIFF equipment operating on 1090 and 1030 MHz is as follows:

The states of AR, LA, NM, OK and TX.

We are also requesting additional coverage area for operations in the Gulf of Mexico. The rectangles listed allows coverage within the Gulf:

- |                  |                 |                  |
|------------------|-----------------|------------------|
| a.) Rectangle 1: | 30° N, 98° W    | 30° N, 94° W     |
|                  | 26° 30' N 98° W | 26° 30' N, 94° W |
| b.) Rectangle 2: | 30° N, 94° W    | 30° N, 89° W     |
|                  | 28° N, 94° W    | 28° N, 89° W     |

Particulars of operations:

| 4. Particulars of Operation |                                                                                          |           |      |          |                                                          |                    |
|-----------------------------|------------------------------------------------------------------------------------------|-----------|------|----------|----------------------------------------------------------|--------------------|
| Frequency                   | Power                                                                                    |           |      | Emission | Modulating Signal                                        | Bandwidth          |
| A                           | B                                                                                        | C         | D    | E        | F                                                        | G                  |
| 1030 MHz                    | 2500W PEP                                                                                | 2500W PEP | PEAK | 6M00M1D  | pulse duration 0.8us; repetition rate 300-1200 pps       | 6.00 MHz; measured |
| 1030 MHz                    | 2500W PEP                                                                                | 2500W PEP | PEAK | 7M50M1D  | pulse duration 0.5us; repetition rate 1800-7200 pps      | 7.50 MHz; measured |
| 1090MHz                     | 500W PEP                                                                                 | 500W PEP  | PEAK | 7M00M1D  | pulse duration 0.45us; repetition rate 900pps-18kpps pps | 7.00 MHz; measured |
| 1090MHz                     | 500W PEP                                                                                 | 500W PEP  | PEAK | 6M90M1D  | pulse duration 0.5 - 1.0 us; repetition rate 1.7-7 kpps  | 6.90 MHz; measured |
| REMARKS:                    |                                                                                          |           |      |          |                                                          |                    |
|                             |                                                                                          |           |      |          |                                                          |                    |
|                             | 1. 6M00M1D is for SIF Modes 1, 2, 3/A, C, and Mode 4 interrogations (0.8 us pulsewidth). |           |      |          |                                                          |                    |
|                             | 7M50M1D is for Mode 4 interrogations (0.5 us pulsewidth).                                |           |      |          |                                                          |                    |
|                             |                                                                                          |           |      |          |                                                          |                    |
|                             | 2. SIF maximum mode rate of 1200 pps sets the maximum interrogations per second at 400.  |           |      |          |                                                          |                    |
|                             | The Mode 4 maximum rate of 7200 pps allows up to 200 interrogations per second.          |           |      |          |                                                          |                    |
|                             |                                                                                          |           |      |          |                                                          |                    |
|                             | 3. 3.6 Kpps is max pulse rate for IFF Mode 4.                                            |           |      |          |                                                          |                    |
|                             | 7.0 pps is max pulse rate for IFF Mode S.                                                |           |      |          |                                                          |                    |
|                             | 18 Kpps is max pulse rate for IFF Modes 1, 2, 3/A, C.                                    |           |      |          |                                                          |                    |
|                             |                                                                                          |           |      |          |                                                          |                    |
|                             | 4. 7M00M1D is for SIF Modes 1, 2, 3/A, C, and Mode 4 replies.                            |           |      |          |                                                          |                    |
|                             | 6M90M1D is for Mode S replies.                                                           |           |      |          |                                                          |                    |
|                             |                                                                                          |           |      |          |                                                          |                    |
|                             |                                                                                          |           |      |          |                                                          |                    |