

EXHIBIT 1

FCC FORM 442

Trimble Navigation is developing a low cost Traffic and Collision Avoidance System (TCAS) for equipage by a variety of general aviation operators. The Trimble TCAS, also called Sentinel II, conforms fully with specifications developed and endorsed by the Federal Aviation Administration (FAA) (Reference RTCA (DO-197)). The FAA TCAS Project Office is cognizant of Trimble's development activity.

Once installed in an aircraft, Sentinel II transmits a low power signal at 1,030 MHz, modulated to stimulate a reply from aircraft transponders located within a five (5) mile range. The system generally transmits one interrogation per second, except in high congestion air traffic control environments where the system interrogation rate and power are limited in conformity to FAA specifications.

The objective of the Trimble TCAS development program is the verification of an acceptable system operation in actual use.

The successful demonstration of Sentinel II functionality in actual use is necessary for FAA certification and product marketing. The broad proliferation of TCAS equipage will significantly enhance the safety and efficiency of the national airspace.

| <u>Input Signal Frequency Difference From 1,090 MHz</u> | <u>Output Signal Level Relative to 1,090 MHz</u> |
|---|--|
| +10 MHz | < -20 dB |
| +15 MHz | < -40 dB |
| +25 MHz | < -60 dB |

2.2.3 Active TCAS I Transmitter Characteristics

2.2.3.1 Transmission Frequency

The transmission frequency of Mode C interrogations shall be 1,030 +0.2 MHz.

2.2.3.2 Transmitter RF Power Output

When transmitting at full (unattenuated) output power, the peak RF output power delivered to a quarter wave stub antenna shall be within the following limits:

Maximum RF power: 54 dBm (250W)
 Minimum RF power: 50 dBm (100W)

In the event that antenna gain differs from that of a quarter wave stub antenna (3 dBi), the power limits shall be adjusted accordingly. These limits are based upon range and interference limiting requirements.

NOTE: When transmitting at full (unattenuated) output power, the RF power radiated at the pattern peak shall be within the following limits:

Maximum EIRP: 57 dBm (500W)
 Minimum EIRP: 53 dBm (200W)

It is assumed that the peak gain of a typical quarter wave stub antenna is 3 dBi. EIRP = Effective Isotropic Radiated Power.

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