

LMCO-Syracuse IFF Coordination of Special Temporary Authorization Test Plan:

Mode S testing scenarios: Factory Acceptance test procedures request the Mode S operation checking to consist of the following operation scenarios proposed. Minimal trials repeated for 2 hour periods occasionally within the allowed FCC Special Temporary Authorization dates. Proposed dates listed in the attached STA are May 31, 2011 to November 30, 2011.

1) Antenna rotation rate set to 10 RPM. Apply Interrogator Identifier "II" code address setting =7, and blanking 316-225 degrees true north. Set for a SIF + Mode S Interlace such as: 3-C-S or 2-C-S interlace, or SIF non-mode S interlace patterns 2-3-C, or 3-C. The MSSR 2000i will have an All Call Period (Mode 3,C,and S All Call will be interrogated), and a Roll Call period where just Mode S is interrogated using addressed interrogations directed at targets already acquired in All Call. Enable "Multi-Site Lock-Out protocol". Set the Mode S Probability of Reply (PR) setting to 50% maximum for the stochastic acquisition. Set the pulse repetition rate(PRR)to 50Hz. Experiment to include UF11 (for All-Call), UF4 (for Roll-Call), and UF5 (for Roll-Call). The use of Combined Mode Interrogation (Mode S All-Call UF11 followed by Intermode with short "P4") will be minimized, and if possible avoided all together.

2) The maximum detection range of the IFF system will be 100 nmi. MSSR 2000I Mode S features a variable RF output control that reduces RF power automatically as a function of the aircraft range.

3) Once acquired in Roll Call, the Multi Site Lockout Protocol is enabled to lock out aircraft transponder replies to our future All/Call interrogations from our assigned II code of 7. The IFF systems used in Syracuse will interrogate a given aircraft in Roll Call at a rate of 1 per scan.