Delete existing 3.3.4.1 – 3.3.4.6.5

Replace with following text.

3.3.4.1 Gain Performance Verification

3.3.4.1.1 Transmit Gain

Measure the power of the transmitted ADS-B messages in each quadrant of the antenna pattern (forward, aft, left, right).

Verify that the transmitted power for each quadrant exceeds 18.5 dBW and is less than 27.0 dBW for Class A0, B0, B2, and B3 equipment.

Verify that the transmitted power for each quadrant exceeds 21.0 dBW and is less than 27.0 dBW for Class A1, A1S, B1, B1S, and A2 equipment.

Verify that the transmitted power for each quadrant exceeds 23.0 dBW and is less than 27.0 dBW for Class A3 equipment.

3.3.4.1.2 Receive Gain

The test equipment used to simulate targets must vary the transmitted power to accurately simulate the received power of an aircraft at range.

3.3.4.1.2.1 Class A0 Receivers

Simulate a Class A0 (70 W) aircraft at 10 mile range in each quadrant of the antenna pattern (forward, aft, left, right). Verify that the simulated target is displayed and does not intermittently drop off the display.

3.3.4.1.2.2 Class A1/A1S Receivers

Simulate a Class A1 (125 W) aircraft at 20 mile range in each quadrant of the antenna pattern (forward, aft, left, right). Verify that the simulated target is displayed and does not intermittently drop off the display.

3.3.4.1.2.3 Class A2 Receivers

Simulate a Class A2 (125 W) aircraft at 40 mile range in each quadrant of the antenna pattern (forward, aft, left, right). Verify that the simulated target is displayed and does not intermittently drop off the display.

3.3.4.1.2.4 Class A3 Receivers

Stimulate a Class A3 (200 W) aircraft at 90 mile range in the front quadrant of the antenna pattern. Verify that the simulated target is displayed and does not intermittently drop off the display.

Simulate a Class A3 (200 W) aircraft at 45 mile range in the left and right quadrant of the antenna pattern. Verify that the simulated target is displayed and does not intermittently drop off the display.

Simulate a Class A3 (200 W) aircraft at 30 mile range in the aft quadrant of the antenna pattern. Verify that the simulated target is displayed and does not intermittently drop off the display.