

Exhibit 1: Additional Information

Antenna Information

- Aircraft:
 - o Dayton Grainger VHF 10-829
 - o Gain: +4 dBi
 - o Additional technical information is contained in Exhibit 2: Aircraft Antenna.
- Fixed Ground:
 - o Antenna Products DPV-40B
 - o Gain: +4 dBi
 - o Additional technical information is contained in Exhibit 3: Ground Antenna.

Transceiver Information

- Aircraft:
 - o Collins VHF-4000E
 - o Additional technical information is contained in Exhibit 4: Aircraft Transceiver
- Fixed Ground:
 - o Park Air M7X
 - o Note that transmit power is programmed in 1 W steps from 5 W up to max power. We will limit to 5 W for this test.
 - o Additional technical information is contained in Exhibit 5: Ground transceiver

Test Description

The Collins VHF-4000E has VHF range extended to 151.975 MHz. This capability has not previously been certified in this aircraft configuration. Testing is required to verify proper operation of the aircraft transceiver in the extended VHF range and that there are no EMI/EMC problems associated with the extended range.

Testing will be performed with the aircraft on the ground at Cessna facilities adjacent to Wichita Mid-Continent Airport, which also house the fixed ground transceiver. The aircraft will perform a brief 2-way radio check with the ground transceiver using AM Voice with 6K00A3E emissions. The test should take less than a minute to complete. If communications are clearly received at both ends and there is no interference detected in any of the test aircraft's avionics, there is no need for further testing.

FAA & JAA Certification Basis

FAA Certification Basis is achieved through compliance with Code of Federal Regulations, Title 14, Part 25 Amendments 25-1 through 25-74. Amendment levels are indicated in square brackets:

- 25.1301(d)
- 25.1322 [38]
- 25.1353(a)[43]
- 25.1381[72]
- 25.1431(c)
- 25.1581(a)(2)[72]

JAA Certification Basis is achieved through compliance with Joint Aviation Regulations Part 25, Change 13:

- 25.1301(d) change 13 with Amendments 90/1, 91/1, and 93/1
- 25.1322 change 13 with Amendments 90/1, 91/1, and 93/1
- 25.1353(a) change 13 with Amendments 90/1, 91/1, and 93/1
- 25.1381 change 13 with Amendments 90/1, 91/1, and 93/1
- 25.1431(c) change 13 with Amendments 90/1, 91/1, and 93/1
- 25.1581(a)(2) change 13 with Amendments 90/1, 91/1, and 93/1