

L-3 Communications  
Avionics Systems  
1105 Schrock Road  
Columbus, Ohio 43229

August 19, 2004

To whom it may concern at the FCC:

L-3 Communications is requesting a total of 6 STA's. Four STA's are for fixed ground stations and two STA's are for Aircraft. We have received coordination letters from AFTRCC who has the authority to make recommendations to the FCC for frequency usage in the Aircraft VHF band. These coordination letters contain recommendations to the FCC for usage of four frequencies in two aircraft and at four fixed locations. AFTRCC has recommended to the FCC that we use the following four frequencies for our experiments:

123.250 MHz  
123.275 MHz  
123.350 MHz  
123.475 MHz

L-3 Communications Avionics Systems is developing an integrated cockpit system ( see bottom of webpage <http://www.as.l-3com.com/about/about.asp>) for Cirrus Design (maker of private aircraft). The development of this system includes the development of a VHF Communications Radio. The development of the radio has progressed to a point where we would like to conduct test flights with the radio. These flight tests are needed to test the radio and to test the integration of the radio into the integrated cockpit that we are developing. The radio has been designed to the RTCA DO-186 standard, which is the standard the FAA imposes on manufacturers. The radio is currently functioning and will take approximately 6 more months to get certified by the FAA and authorized by the FCC.

We want to conduct a test program, which requires four base stations and two aircraft. We would like to conduct our tests out to 250 miles from any base station. The base stations will be located at the three engineering locations of L-3 Communications, Avionics Systems. Those locations are:

Grand Rapids, MI  
Columbus, OH  
Beaverton (Dayton), OH

Additionally we will be conducting tests with Cirrus Design in:

Duluth, MN.

The communication radio is being developed to the standards of DO-186 and is in the process of being certified to TSO-C37d and TSO- C38d. The radio will receive a FCC equipment authorization after it has received a FAA TSO. Equipment Authorization is anticipated to take place by Feb. 2005.

The radio is designed to operate on single channel which is 25 KHz wide and can operate across the range of 117.975 MHz – 137.000 MHz.

The FCC emission designator is 6K00A3E which means that it is a voice modulated AM, double sideband signal with an occupied BW of 6 KHz.

The aircraft will fly no higher than 18,000 feet.

Based on our prior communications, I believe that the information provided here and in the applications will be sufficient to obtain STA's. If you need any other information please do not hesitate to call me.

Thank you for your assistance in this matter.

Sincerely,

Brent Locher

Staff Engineer  
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Avionics Systems  
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