

Technical Description

The Boeing Company

Submitted: 4/4/2013
by
Joel D. Thorsheim
The Boeing Company
Frequency Management Services MC: 2T-22
P.O. Box 3707
Seattle, WA 98124-2207
206-544-6066

JUSTIFICATION:

Direct Commercial Sales (DCS) Contract with India for P-8I Development and Testing under CONTRACT NO: 171/DAA/C/08-09LRMRASW/AIRCRAFT (08)

These frequencies are requested to support Boeing P-8I EMC testing. The P-8I is a long-range anti-submarine warfare, anti-surface warfare, intelligence, surveillance and reconnaissance aircraft capable of broad-area, maritime and littoral operations. The P-8I is a variant of the P-8A Poseidon that Boeing is developing for the U.S. Navy. This is a military derivative of the Next-Generation 737-800. Boeing is building the P-8I at its production facility in Renton, Washington and has a Direct Commercial Sale agreement with India.

OBJECTIVE & TEST DESCRIPTION

This requirement supports aircraft Electromagnetic Compatibility (EMC) Safety of Flight Test (SOFT) testing at Moses Lake, WA.

TEST OVERVIEW

Start Date: April 15, 2013
Stop Date: October 15, 2013

IFF TRANSPONDER

Manufacturer:	Hindustan Aeronautics Limited (HAL)
Model:	2410A TS
Part Number:	N149451
Frequency:	1090 MHz
Emissions:	14M0M1D (Modes 1,2,3/A, C)
Emissions:	11M9M1D (Mode S)
Antenna Type:	Blade
Antenna Polarization:	Vertical
Antenna Gain:	2.5
Effective Radiated Output:	861 Watts (Peak)

PORTABLE ACOUSTIC SONOBUOY SIMULATOR

Model: Portable Acoustic Sonobuoy Simulator (PASSII)
Frequencies in MHz: 138.25 155.50 162.25 163.75
166.00 166.75 172.75
Emissions: 75K0F1B 75K0F3D 199KF1D
210KF3D 360KF9D
Transmit Output Power: 1.0 Watt
Antenna Gain: -6 dBi
Effective Radiated Output: 0.15316 Watts

RAMP TEST SETS

Aeroflex IFR-4000 or IFR-6000

<u>Function</u>	<u>Frequency (MHz)</u>	<u>Emission</u>	<u>Power ERP</u>
LOC	108.1 and 108.15	6K00A9W	10 uW
G/S	334.55 and 334.7	300HA1N	10 uW
VOR	108.0 and 108.05	20K9A9W	10 uW
DME	978.0 and 979.0	2M00M1D	10 uW
DME	1104.0	12M0M1D	10 uW
MB	75.0	6K00A2A	10 uW
TCAS	1090.0	14M0K1D	10 uW
TCAS	1090.0	14M0V1D	10 uW
TCAS	1090.0	6M00M1D	10 uW
TCAS	1030.0	12M0M1D	10 uW
TCAS	1030.0	14M0M1D	10 uW
TCAS	1030.0	6M00M1D	10 uW

AN/USM-708 or Equivalent

<u>Function</u>	<u>Frequency (MHz)</u>	<u>Emission</u>	<u>Power ERP</u>
IFF SIF	1090	8M00V1D	0.5 Watt
IFF Mode S	1090	7M00V1D	0.5 Watt
IFF SIF	1030	8M00V1D	0.5 Watt
IFF Mode S	1030	14M0V1D	0.5 Watt

STOP BUZZER POINTS OF CONTACT:

Primary: Terry Bowman at phone number 206-551-7210
Secondary: Nate Horton at phone number 206-852-3121

LOCATION

Ground tests will be conducted at Moses Lake, WA
Location: Moses Lake, WA (Fixed Location)
Latitude: 47-12-04 N
Longitude: 119-18-01 W