

Douglas Young

From: Tim Royce [TRoyce@gdatp.com]
Sent: Friday, January 11, 2008 7:51 AM
To: Douglas Young
Subject: Requested Information for File #'s 0111-, 0175-, 0207-, 0258- and 0359-EX-PL-2007
Attachments: Outdoor Ranges_ FCC_NTIA Data_Stations.xls

Mr. Young -

In response to your e-mail of December 13, 2007 requesting further information for the NTIA portion of our 2 year applications and your subsequent response of January 4, 2008 to my e-mail questions about polarizations, I have prepared the attached spreadsheet file for you. The spreadsheet contains the data you requested in regards to the NTIA XAP and XAD fields and includes application data to understand how the antennas relate to the applications. You specifically requested information for file #'s 0111-, 0175-, 0207-, 0258- and 0359-EX-PL-2007, but I have also included data for our Radar 3 application, 0694-EX-PL-2007, since that application has been submitted since your December 13th request.

Based on the questions I asked about polarization choices, you mentioned that you may leave XAP blank in the application. I will leave that decision up to you, but I have entered XAP values into the spreadsheet based on my best estimates in an effort to provide you with as much information as I can.

I hope the spreadsheet contains everything you need to answer the NTIA's questions. If I can be of any further assistance, please don't hesitate to call or e-mail me.

Finally, it is my understanding that this response to your e-mail address is sufficient, and that no separate response is required through the ELS. Please let me know if this understanding is incorrect.

Sincerely,
Tim

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1/11/2008

**MARION OUTDOOR TEST RANGES
NTIA TRANSMIT ANTENNA DATA**

RANGE	FCC 2 Year License Application Number	ANTENNA REGISTRATION / STATION LOCATION NUMBER	RANGE LENGTH (Feet)	TX ANTENNA GPS APPROX. ALTITUDE (feet)	GROUND ALTITUDE AT TX ANTENNA (feet)	GROUND ALTITUDE AT TX ANTENNA (meters)	TRANSMIT ANTENNA LOCATION LATITUDE (NAD 83 Format)	TRANSMIT ANTENNA LOCATION LONGITUDE (NAD 83 Format)	TRANSMIT ANTENNA POINTING DIRECTION (GPS Degrees)	TRANSMIT ANTENNA VERTICAL POINTING DIRECTION (Degrees Bubble Level)
RADAR 3 RANGE (Subtower TX) (12.0 - 14.47, 14.5 - 15.35, and 15.4 - 18.0 GHz)	0694-EX-PL-2007	1	300	2175	2153	656	N 36° 50' 2.9"	W 81° 30' 27.1"	207° SSW	0°
RADAR 3 RANGE (Radome TX) (12.0 - 14.47, 14.5 - 15.35, and 15.4 - 18.0 GHz)	0694-EX-PL-2007	2	300	2175	2150	655	N 36° 50' 5.9"	W 81° 30' 26.0"	27° NNE	0°
RADAR 4 - NORTH RANGE (0.5 - 2.0 GHz)	0111-EX-PL-2007	1	60	2180	2154	657	N 36° 50' 8.3"	W 81° 30' 25.4"	163° SSE	0°
RADAR 4 - NORTH RANGE (6.0 - 8.0, 8.0 - 10.6, 10.7 - 14.47, 14.5 - 15.35, and 15.4 - 18.0 GHz)	0111-EX-PL-2007	2	333	2180	2154	657	N 36° 50' 10.8"	W 81° 30' 26.3"	163° SSE	0°
RADAR 4 - NORTHEAST RANGE (6.0 - 10.6, 10.7 - 14.47, 14.5 - 15.35, and 15.4 - 18.0 GHz)	0207-EX-PL-2007	1	333	2194	2170	661	N 36° 50' 10.1"	W 81° 30' 22.1"	230° SW	-2.5°
RADAR 4 - NORTHEAST RANGE (Ka) (31.8 - 36.0 GHz)	0207-EX-PL-2007	1	333	2194	2170	661	N 36° 50' 10.1"	W 81° 30' 22.1"	230° SW	-2.5°
RADAR 4 - SOUTH RANGE (6.0 - 8.0, 8.0 - 8.065, 8.145 - 8.19, 8.27 - 8.31, 8.39 - 10.6, 10.7 - 14.47, 14.5 - 15.35, and 15.4 - 18.0 GHz)	0359-EX-PL-2007	1	330	2180	2149	655	N 36° 50' 4.2"	W 81° 30' 23.8"	352° N	0°
RADAR 4 - SOUTHWEST RANGE (6.0 - 8.0, 8.0 - 10.6, 10.7 - 14.47, 14.5 - 15.35, and 15.4 - 18.0 GHz)	0258-EX-PL-2007	1	180	2180	2146	654	N 36° 50' 6.1"	W 81° 30' 26.4"	40° NE	0°
EAST RANGE (2.0 - 6.0 GHz)	0175-EX-PL-2007	1	240	2215	2196	669	N 36° 50' 44.1"	W 81° 29' 23.2"	46° NE	-0.6°
EAST RANGE (9.0 - 10.5 GHz)	0175-EX-PL-2007	1	240	2215	2196	669	N 36° 50' 44.1"	W 81° 29' 23.2"	46° NE	-0.6°

MARION OUTDOOR TEST RANGES NTIA TRANSMIT ANTENNA DATA

RANGE	TRANSMIT ANTENNA NOMINAL HEIGHT ABOVE GROUND (ft, in)	TRANSMIT ANTENNA NOMINAL HEIGHT ABOVE GROUND (meters)	NTIA TRANSMIT POLARIZATIONS E = Elliptical F = 45 degrees S = Horizontal and Vertical T = Right and Left Hand Circular	NTIA XAD Field: Nominal Gain in dB (Characters 1 - 3)	NTIA XAD Field: Antenna Name (Characters 4 - 13)	NTIA XAD Field: Terrain Elevation in meters above MSL (Characters 14 - 19)	NTIA XAD Field: Antenna Height in meters above Terrain (Characters 20 - 24)	Complete NTIA XAD Transmitter Antenna Dimensions (24 Character Designation)
RADAR 3 RANGE (Subtower TX) (12.0 - 14.47, 14.5 - 15.35, and 15.4 - 18.0 GHz)	22' 5"	7	S	31G	R3S2FTDISH	00656H	0007T	31GR3S2FTDISH00656H0007T
RADAR 3 RANGE (Radome TX) (12.0 - 14.47, 14.5 - 15.35, and 15.4 - 18.0 GHz)	25'	8	S	31G	R3R2FTDISH	00655H	0008T	31GR3R2FTDISH00655H0008T
RADAR 4 - NORTH RANGE (0.5 - 2.0 GHz)	26' 4"	8	ES	03G	R4NL5FTDSH	00657H	0008T	03GR4NL5FTDSH00657H0008T
RADAR 4 - NORTH RANGE (6.0 - 8.0, 8.0 - 10.6, 10.7 - 14.47, 14.5 - 15.35, and 15.4 - 18.0 GHz)	26' 4"	8	EFS	30G	R4NR2FTDSH	00657H	0008T	30GR4NR2FTDSH00657H0008T
RADAR 4 - NORTHEAST RANGE (6.0 - 10.6, 10.7 - 14.47, 14.5 - 15.35, and 15.4 - 18.0 GHz)	24' 8"	7	EFST	30G	R4NE2FTDSH	00661H	0007T	30GR4NE2FTDSH00661H0007T
RADAR 4 - NORTHEAST RANGE (Ka) (31.8 - 36.0 GHz)	24' 8"	7	EFST	34G	R4NEKABAND	00661H	0007T	34GR4NEKABAND00661H0007T
RADAR 4 - SOUTH RANGE (6.0 - 8.0, 8.0 - 8.065, 8.145 - 8.19, 8.27 - 8.31, 8.39 - 10.6, 10.7 - 14.47, 14.5 - 15.35, and 15.4 - 18.0 GHz)	31' 2"	9	EFS	31G	R4SR2FTDSH	00655H	0009T	31GR4SR2FTDSH00655H0009T
RADAR 4 - SOUTHWEST RANGE (6.0 - 8.0, 8.0 - 10.6, 10.7 - 14.47, 14.5 - 15.35, and 15.4 - 18.0 GHz)	34' 1"	10	EFST	30G	R4SW18DISH	00654H	0010T	30GR4SW18DISH00654H0010T
EAST RANGE (2.0 - 6.0 GHz)	18' 8"	6	ES	22G	ER20ILPDSH	00669H	0006T	22GER20ILPDSH00669H0006T
EAST RANGE (9.0 - 10.5 GHz)	18' 8"	6	EFS	28G	ERXB2FTDSH	00669H	0006T	28GERXB2FTDSH00669H0006T