From: Frederick Peabody

To: Jose Trevino
Date: August 09, 2012

Subject: FCC file number 0633-EX-ST-2012

Message:

DopplerTech POC to terminate transmission:
Frederick S Peabody
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DopplerTech is requesting an STA to utilize its 2 company owned CW Doppler Radar's in support of the U.S. Air Force KEP Warhead Test at Holloman AFB Alamogordo NM.

The warhead is to be propelled down the holloman test track on a rocket sled and then detonated at the end of the track. The DopplerTech Doppler radars will be positioned so as to collect doppler data on the parts of the warhead and their associated velocity, drag coefficient, beta, and dispersion patterns.

The first radar the Raptor 80:

Power	80 watts
Duty Cycle	Continuous (CW)
Modulation	None
Frequency	10.1 GHz
Antenna Gain	36.5 dBi
Antenna beamwidth	2.8 deg (mis-printed as 2.1 deg in electronic submission)
ERP	53.382 dBw 217894.441 Watts
Keep out area (potentially hazardous per OSHA 10mW/cmsq)	15m

Keep out area enforced with signs, cones, flashing blue light, and monitered safety camera

The Raptor 80 will be positioned ~200m short of the end of the track and ~30m east of the track and will be in the fixed or stare mode (not tracking) pointed at the end of track impact area at ~Azimuth 345.053 deg and Elevation -0.2896 deg this radar will only be radiating during the launch sequence once the impact area has been cleared of all personel, and then radiating will terminate immediatley following the launch, before personel return to the impact area. The purpose of this radar supporting is to collect the longitudinal velocity and dispersion data which is present in its doppler return for post mission data analysis.

The Second radar the Raptor 450:

Power	450 watts
Duty Cycle	Continuous (CW)
Modulation	None
Frequency	10.0 GHz
Antenna Gain	38.5 dBi
Antenna beamwidth	2.0 deg
ERP	62.883 dBw 1942536.339 Watts
Keep out area (potentially hazardous per OSHA 10mW/cmsq)	55m

Keep out area enforced with signs, cones, flashing blue light, and monitered safety camera

The Raptor 450 will be positioned ~2600m crossrange (east) of the end of the track and ~100m downrange (north) of the end of the track and will be in the fixed or stare mode (not tracking) pointed at the end of track impact area at ~Azimuth 278 deg and Elevation -0.880 deg this radar will only be radiating during the launch sequence once the impact area has been cleared of all personel, and then radiating will terminate immediatley following the launch, before personel return to the impact area. The

purpose of this radar supporting is to collect the latitudinal velocity and dispersion data which is present in its doppler return for post mission data analysis.

DopplerTech is 12 years old and provides its DOD customers with radar: operations, maintenance, and data analysis support. Its personel have many years of experience as radar operators and maintainers, and have supported tens of thousands of live fire experiments for many of its DOD customers, until now all DopplerTech support has been with government owned Doppler Tracking radars, now DopplerTech has developed its own Doppler Tracking radars to better support its customers. DopplerTech is recognized worldwide in the operation of these types of radars in the ballistic testing arena. DopplerTech provides training courses to the various US test range personel in the operation of these types of radars. DopplerTech personel receive scheduled training in radiation safety, and one of its principles is a Radiation safety instructor. DopplerTech has radiation safety, and safe radar operation Standard Operating Procedures (SOP's) that have been accepted by many major US test ranges including: White Sands Missile Range, Vandenberg AFB, Tonopah Test Range, Eglin AFB. DopplerTech radiation safety and radar operation SOP's adhere to OSHA and US armed forces guidelines for permissable exposure levels, potentially hazardous levels, hazardous levels, and exposure prevention measures etc. There are 3 levels of control for this mission: 1st access to Holloman AFB property, 2nd access to the Test track, 3rd DopplerTech radiation and radar operation SOP's which also call for communicating the hazard to all personel on the test and applying the safe operation procedures in the SOP's