

From: Chen, Nick [nick.chen@lmco.com]
Sent: Thursday, November 10, 2005 11:39 AM
To: John Kennedy
Subject: 0545-EX-ST-2005 (FW: FW: Lockheed Martin-PSTAR FCC license)

FYI

-----Original Message-----

From: Charles.Cassella@faa.gov [mailto:Charles.Cassella@faa.gov]
Sent: Wednesday, August 10, 2005 1:18 PM
To: Chen, Nick
Cc: timothy.j.pawlowitz@faa.gov
Subject: Re: FW: Lockheed Martin-PSTAR FCC license

Nick,
I have reviewed the data you sent and can find several clear channels. I still need the coordinates of the test range as well as the elevation of the site and antenna tower before I can give you a coordination number for the test licence.

Charlie

	"Chen, Nick"	
	<nick.chen@lmco.c	
	om>	
To		Charles Cassella/AEA/FAA@FAA
	08/10/2005 11:10	
cc		
	AM	
Subject		FW: Lockheed Martin-PSTAR FCC license

Charles,

Have you had a chance to evaluate the frequency range below for the Lockheed Martin STA license? Please feel free to contact me if you have any questions.

Thanks,

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Nick Chen
Mechanical Engineer

Lockheed Martin Maritime Systems & Sensors
Electronics Park, EP5
Syracuse, NY 13221-4840

Phone: (315) 456-3875

Fax: (315) 456-2440

> -----Original Message-----

> From: Chen, Nick

> Sent: Friday, July 29, 2005 12:22 PM

> To: 'charles.cassella@faa.gov'

> Subject: Lockheed Martin-PSTAR FCC license

>

> Charles,

> Per our phone discussion, I have provided the radar information and current license below. The intent of this inquiry is to have the FAA make a determination on the clearances of the required frequencies for the Lockheed Martin PSTAR radar. This info is needed due to the proximity of the Long Island/McArthur Airport. The FAA's feedback is needed in order to successfully complete/obtain approval for a FCC temporary license, called the "Special Temporary Authorization," which is currently in process by the FCC. The PSTAR radar will be radiating at Bohemia, NY for experimental testing purposes. Please state down any limitations (e.g. frequencies) that the FAA may have with this experimental operation in September - October timeframe.

> Feel free to contact me if you have any questions.

> ~~~~~

> > <<KE2XZF_PSTAR_2006.pdf>>

> - peak envelope power (PEP); - 1 kW Primary Surveillance Radar (PSR),
0.2

kW Secondary Surveillance Radar (SSR)

> - type of antenna; 4 x 8 dipole array PSR, 1 x 8 dipole array SSR

> - transmit antenna gain; 20.89 dBi PSR, 13 dBi SSR

> - height above ground of the focal point of the antenna; 72 inches

> - antenna polarization; H PSR, V SSR

> - the azimuth that the antenna is pointed or appropriate designator to indicate whether the antenna is rotating, non-directional, etc.; Antenna is mechanically scanned in azimuth at 10 or 20 RPM. Sweep indicator on the display denotes current antenna pointing angle.

> - pulse repetition rate (PRR) that the equipment is capable of operating on to include PRR stagger sequences if appropriate, whether the PRR is adjustable and what PRR's the equipment can accept, and any other information that would be helpful in understanding the pulse characteristics (staggered, jittered, fixed) of the equipment;
> Current PSR system PRRs - 3378 pps and 3663 pps, alternating every 135 pulses. System is flash configurable for 1-4000 pps.
> Current SSR system PRR - 442 pps, configurable for 1-500 pps
> - pulse width; 15 us
> - equipment nomenclatures; PSTAR_ER system with TPX-56 SSR Interrogator
> - whether the equipment is capable of blanking transmissions in certain azimuths and any limitations with respect to blanking; 3 blanking areas available, user configurable, minimum blanking width of 14.4 degrees.
> - radius of operations if appropriate;
> - detailed description of the proposed operation to include any technical parameters that will be altered during operations. Standard system operation on available frequencies (19 frequencies on 1220-1400 MHz, 10 MHz apart). No changes to PSR or SSR PRR, Tx power, or system gain. System will be operational during environmental testing.
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> L
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(See attached file: KE2XZF_PSTAR_2006.pdf)