Schuemann, Vance W.

From: Sydney.Bradfield@faa.gov
Sent: Wednesday, March 28, 2007 8:36 PM
To: Schuemann, Vance W.
Cc: Siddall, David R.; fred.berrong@ngc.com; thuy.t.nguyen@faa.gov; james.motley@faa.gov; timothy.j.pawlowitz@faa.gov; Chris.CTR.Tourigny@faa.gov
Subject: Re: FW: Coordination request for 1378 MHz at Yuma Proving Grounds
Attachments: 0359-EX-ST-2005.pdf

Vance,

In reply to your message, we concur to the requested 6 month extension, duly noted in existing coordination assignment NG T070139.

Sydney Bradfield
WSA Engineering Services
Operations Engineering
Comm/Spectrum Support Center
310-725-3671, DSN 958-3671

"Schuemann, Vance W." <vanceschuemann@paulhastings.com>

03/28/2007 12:07 PM

To Sydney Bradfield/AWP/FAA@FAA
cc fred.berrong@ngc.com, "Siddall, David R." <davidsiddall@paulhastings.com>
Subject FW: Coordination request for 1378 MHz at Yuma Proving Grounds

Sydney,

Northrop Grumman request extension of the coordination below for a 6-month period beginning on April 11, 2007. They have encountered some scheduling problems.

Thanks,

Vance

From: Sydney.Bradfield@faa.gov [mailto:Sydney.Bradfield@faa.gov]
Sent: Wednesday, January 24, 2007 10:20 PM
To: Schuemann, Vance W.
Cc: Siddall, David R.; fred.berrong@ngc.com; donald.nellis@faa.gov; John.Cabala@faa.gov; timothy.j.pawlowitz@faa.gov; Steve.Tozon@navy.mil; Foltz, Andrew P CIV; Nico.Nguyen@faa.gov; james.motley@faa.gov
Subject: RE: Coordination request for 1378 MHz at Yuma Proving Grounds

Vance,

Consistent with our previous conditional approval below of the San Diego Wideband Networking Waveform (WNW) Digital Command and Control Network on 1378 MHz under coordination NG T060359, we concur in the Western Service Area to the requested Yuma Proving Grounds, AZ WNW experimental temporary proposal below under our temporary coordination assignment NG T070139, subject to the below conditions:

(1) Emission Bandwidth is consistent with proposal of 3M00F7W in compliance with STA 0359-EX-ST-2005.

(2) Approval is obtained from DOD to operate on a coordinated basis and scheduling with the DOD Western Area Frequency Coordinator, Andrew Foltz
NAVAIR,WD, Range Operations Division, China Lake, CA. 93555, is required at least 48 hours in advance of the use of the frequency 1378 MHz.

(3) Deployment of Northrop Grumman's WNW Network shall be subject to FAA Policy considerations that may not be favorable to its use of the Aviation band above 1370 MHz and FAA reserves the right to re-visit Northrop Grumman's continued use of the band.

(4) FAA prohibits and will oppose any attempt to operate the WNW system with any emission below 1370 MHz.

Sydney Bradfield
WSA Spectrum Engineering Services
Operations Engineering Section, AWP-471.2
310-725-3671, DSN 958-3671

"Schuemann, Vance W." <vanceschuemann@paulhastings.com>

01/17/2007 07:20 AM

To Sydney Bradfield/AWP/FAA@FAA
cc fred.berrong@ngc.com, "Siddall, David R." <davidsiddall@paulhastings.com>
Subject RE: Coordination request for 1378 MHz at Yuma Proving Grounds

Sydney:

Thank you for contacting me about this coordination request last Friday evening. I just wanted to see if you had a chance to complete the coordination and assigned an NGT number so that we could file the FCC application.

Thank you,

Vance

Vance W. Schuemann, Government Affairs Policy Advisor | Paul, Hastings, Janofsky & Walker LLP | 875 15th Street, N.W., Washington, D.C. 20005 | direct: 202 551-1913 | main: 202 551 1700 | fax: 202 551 0313 |

vanceschuemann@paulhastings.com |

From: Schuemann, Vance W.
Sent: Tuesday, January 09, 2007 5:45 PM
To: 'Sydney.Bradfield@faa.gov'
Cc: Fred Berrong (fred.berrong@ngc.com); Siddall, David R.
Subject: Coordination request for 1378 MHz at Yuma Proving Grounds

Dear Mr. Bradfield:

On behalf of Northrop Grumman Space and Mission Systems Corp. ("NGSMS"), we herein request coordination of frequency 1378 MHz, for which NGSMS will apply with the FCC to operate under a FCC experimental special temporary authorization. NGSMS requires the use of frequency 1378 MHz to demonstrate a Wideband Networking Waveform ("WNW") digital command and control network for the U.S. Army at the U.S. Army Yuma Proving Grounds, Arizona, beginning on January 23, 2007 for up to 2 months.

The FAA's Western-Pacific Regional Office has previously conditionally concurred to a similar request for use of frequency 1378 MHz in San Diego, CA, under coordination NG T060359, and the FAA's Southwest Regional Office also has has previously conditionally approved a similar request for use of frequency 1378 MHz in Arlington, TX, under coordination ASW06-1799.

Please send me the NGT number for this coordination so NGSMS may provide the NGT number to the FCC.

The following are the parameters of NGSMS proposed use of frequency 1378 MHz:

- emission designator

3M00F7W

- peak envelope power (PEP):

100 W

- type of antenna:

omnidirectional

- transmit antenna gain:

N/A

- elevation above sea level of the antenna site and height above ground of the focal point of the antenna:

One airborne transmitters mounted on aircraft (a helicopter), flying at a minimum altitude of 3,050 meters and a maximum altitude of 6,100 meters, within a 60 kilometer radius around a centerpoint of 32-50-15.74 N, 114-23-22.62 W (U.S. Army Yuma Proving Grounds, Yuma, Arizona).

One fixed/base antenna site located at the U.S. Army Yuma Proving Grounds, Yuma, Arizona (32-50-15.74 N, 114-23-22.62 W)
with an omnidirectional antennae that will be positioned at ground level with a height of 6.0 meters AGL and an

elevation of 98 meters ASL.

- antenna polarization:

Vertical

- the azimuth that the antenna is pointed or appropriate designator to indicate whether the antenna is rotating, non-directional, etc.:

N/A

- 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:

134 pulses/sec

- pulse width:

5.234 msec

- equipment nomenclatures:

NGST Radio Systems, model number 000-00-0001, transmitters with omnidirectional antenna

- whether the equipment is capable of blanking transmissions in certain azimuths and any limitations with respect to blanking:

N/A

- radius of operations if appropriate:

One airborne transmitters mounted on aircraft (a helicopter), flying at a minimum altitude of 3,050 meters and a maximum altitude of 6,100 meters, within a 60 kilometer radius around a centerpoint of 32-50-15.74 N, 114-23-22.62 W (U.S. Army Yuma Proving Grounds, Yuma, Arizona).

- detailed description of the proposed operation to include any technical parameters that will be altered during operations:

NGSMS requires the use of frequency 1378 MHz to demonstrate a Wideband Networking Waveform ("WNW") digital command and control network for the U.S. Army.

Please do not hesitate to contact me or Fred Berrong of Northrop Grumman (Tele: (661) 272-7033; Email: fred.berrong@ngc.com) if you have any questions.

Thank you,

Vance

Vance W. Schuemann, Government Affairs Policy Advisor | Paul, Hastings, Janofsky & Walker LLP | 875 15th Street, N.W., Washington, D.C. 20005 | direct: 202 551-1913 | main: 202 551 1700 | fax: 202 551 0313 | vanceschuemann@paulhastings.com |

----- Forwarded by Sydney Bradfield/AWP/FAA on 01/24/2007 07:04 PM -----

Sydney Bradfield/AWP/FAA

06/09/2006 08:35 PM

To "Schuemann, Vance W." <vanceschuemann@paulhastings.com>

cc Donald Nellis/AWA/FAA@FAA, John Cabala/AWA/FAA@FAA, Timothy J Pawlowitz/AWA/FAA@FAA, Steve.Tozon@navy.mil

Subject Fw: Coordination request for 1378 MHz

Vance,

Subject to the below conditions, we conditionally concur to your request for the described Wideband Networking Waveform (WNW) Digital Command and Control Network on 1378 MHz under coordination NG T060359 (includes the San Diego airborne area encompassing the two ground platforms):

(1) Emission Bandwidth complies with STA 0359-EX-ST-2005 requiring Emission Designator of 3M00F7W

(2) Approval is obtained from DOD to operate on a coordinated basis and scheduling with the Western Area Frequency Coordinator, Steve Tozon, (805) 989-7983, is required at least 48 hours in advance of the use of the frequency 1378 MHz.

(3) Deployment of Northrop Grumman's WNW Network shall be subject to FAA Policy considerations that may not be favorable to its use of the Aviation band above 1370 MHz and FAA reserves the right to re-visit Northrop Grumman's continued use of the band.

(4) FAA prohibits and will oppose any attempt to operate the WNW system with any emission below 1370 MHz.

Sydney Bradfield
WSA Spectrum Engineering Services
Operations Engineering Section, AWP-471.2
310-725-3671, DSN 958-3671

----- Forwarded by Sydney Bradfield/AWP/FAA on 06/09/2006 07:49 PM -----

Donald Nellis/AWA/FAA

06/07/2006 07:24 PM

To Sydney Bradfield/AWP/FAA@FAA
cc John Cabala/AWA/FAA@FAA, Timothy J Pawlowitz/AWA/FAA@FAA
Subject Re: Fw: Coordination request for 1378 MHzLink

Sydney,

The FAA had previously coordinated a temporary assignment for the Wideband Networking Waveform on 1378 MHz with an emission designator of 3M00F7W (see attached STA 0359-EX-ST-2005). This previous STA had a requirement for coordinating their operation with the Wester Frequency Coordinator. We can approve this request if it has the same emission bandwidth and they obtain approval from the DoD to operate on a coordinated basis. Remind Northrop Grumman that they may have trouble deploying this system in this band and that the FAA will oppose any attempt to operate the system with any emission that extends below 1370 MHz.

Don Nellis

Sydney Bradfield/AWP/FAA

06/07/2006 09:44 PM

To Donald Nellis/AWA/FAA@FAA, Timothy J Pawlowitz/AWA/FAA@FAA
cc John Cabala/AWA/FAA@FAA
Subject Fw: Coordination request for 1378 MHz

Don and Tim,

I'm working on a request below submitted by Northrop Grumman Space and Mission Systems Corp. (NGSMS) for a two year experimental license on frequency 1378 MHz to test and demonstrate a Wideband Networking Waveform digital command and control network for both airborne (20,000 ft) and ground platforms in San Diego area for their customer in support of the Airborne and Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS), Contract Number: FA8709-04-C-0011.

With respect to technical frequency compatibility considerations, although I do not see the exact bandwidth from the parameters provided below (I'll try to obtain it), within 1 MHz at 1377 MHz, there is a Navy assignment at Miramar 7 miles away for a ground operation, and 91 nmiles away, a co-channel ground ops training use again at 29Palms and Ft. irwin (1378.5) a little further 144 nmiles.

Please review for any national policy and compatibility issues.

Thanks,

Sydney Bradfield
WSA Spectrum Engineering Services
Operations Engineering Section, AWP-471.2
310-725-3671, DSN 958-3671

----- Forwarded by Sydney Bradfield/AWP/FAA on 06/07/2006 06:07 PM -----

"Schuemann, Vance W." <vanceschuemann@paulhastings.com>

05/30/2006 11:51 AM

To Sydney Bradfield/AWP/FAA@FAA
cc
Subject Coordination request for 1378 MHz

Dear Mr. Bradfield:

On behalf of Northrop Grumman Space and Mission Systems Corp. ("NGSMS"), we herein request coordination of frequency 1378 MHz, for which NGSMS will apply with the FCC to operate under a FCC experimental authorization for a two year license term. NGSMS requires the use of frequency 1378 MHz to test and demonstrate a Wideband Networking Waveform ("WNW") digital command and control network for a customer in support of the Airborne and Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS), Contract Number: FA8709-04-C-0011.

Please send me the NGT number for this coordination so NGSMS may provide the NGT number to the FCC.

The following are the parameters of NGSMS proposed use of frequency 1378 MHz:

- peak envelope power (PEP):

100 W

- type of antenna:

omnidirectional

- transmit antenna gain:

N/A

- elevation above sea level of the antenna site and height above ground of the focal point of the antenna:

Two airborne transmitters mounted on aircraft, flying at a minimum altitude of 3,050 meters and a maximum altitude of 6,100 meters, within a 60 kilometer radius around a centerpoint of 32°59'25.3"N and 117° 04'46.3" in San Diego (San Diego County), California.

Two fixed/base antenna sites in Rancho Carmel (San Diego), California:

* 15180 Innovation Drive (32° 59'30.6"N and 117° 04'48.24"W) with an omnidirectional antennae that will be positioned at ground level with a height of 25.0 meters AGL and an elevation of 254.5 meters ASL.

* 1 Rancho Carmel (32° 59'25.3"N and 117° 04'26.5"W) with an omnidirectional antennae that will be positioned at ground level with a height of 2.0 meters AGL and an elevation of 249.0 meters ASL.

- antenna polarization:

Vertical

- the azimuth that the antenna is pointed or appropriate designator to indicate whether the antenna is rotating, non-directional, etc.:

N/A

- 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:

134 pulses/sec

- pulse width:

5.234 msec

- equipment nomenclatures:

NGST Radio Systems, model number 000-00-0001, transmitters with omnidirectional antenna

- whether the equipment is capable of blanking transmissions in certain azimuths and any limitations with respect to blanking:

N/A

- radius of operations if appropriate:

Two airborne transmitters mounted on aircraft, flying at a minimum altitude of 3,050 meters and a maximum altitude of 6,100 meters, within a 60 kilometer radius around a centerpoint of 32°59'25.3"N and 117° 04'46.3" in San Diego (San Diego County), California.

- detailed description of the proposed operation to include any technical parameters that will be altered during operations:

NGSMS requires the use of frequency 1378 MHz to test and demonstrate a Wideband Networking Waveform ("WNW") digital command and control network in support of the Airborne and Maritime/Fixed Station Joint Tactical Radio System (AMF JTRS), Contract Number: FA8709-04-C-0011.

Please do not hestitate to contact me or Fred Berrong of Northrop Grumman (Tele: (661) 272-7033; Email: fred.berrong@ngc.com) if you have any questions.

Thank you,

Vance

Vance W. Schuemann, Government Affairs Policy Advisor | Paul, Hastings, Janofsky & Walker LLP | 875 15th Street, N.W., Washington, D.C. 20005 | direct: 202 551-1913 | main: 202 551 1700 | fax: 202 551 0313 | vanceschuemann@paulhastings.com |

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