

Schuemann, Vance W.

From: Benjapol.Phimsoutham@faa.gov
Sent: Friday, October 12, 2007 7:01 AM
To: Schuemann, Vance W.
Cc: Siddall, David R.; Langfitt, Perry E. (Ship Systems)
Subject: RE: Request for coordination of frequencies 1030 and 1090 MHz by Northrop Grumman Ship Systems, Inc.

Attachments: pic06868.jpg



pic06868.jpg (7 KB)

Mr. Schuemann,

The NGT number is being issued to you based on the condition below.

NG T070297 for 1030 MHz
NG T070298 for 1090 MHz

Regards.

(Embedded image moved to file: pic06868.jpg)

ESA Spectrum Support Center-Atlanta

(404) 305-6675

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

10/11/2007 01:34
PM

Benjapol Phimsoutham/ASO/FAA@FAA
To
cc

"Siddall, David R."
<davidsiddall@paulhastings.com>,
"Langfitt, Perry E. (Ship Systems)"
<perry.langfitt@ngc.com>

Subject
RE: Request for coordination of
frequencies 1030 and 1090 MHz by
Northrop Grumman Ship Systems, Inc.

Ben:

Hope all is well. In light of the following (which was conveyed to us via the Coast Guard), can you please send us the NGT number for the coordination so that we can file the necessary FCC applications:

A conference was held last Thursday (October 4th) between FAA (Mr. Don Nellis), AIMSP0 (Mr. Mark Whiteside), CG 933 (Mr. Ronald Williams, Mr.

Reza Smith, Mr. Lonnell Jackson). A tentative agreement was hammered out as stated below:

- 1) The AN/APX-119 transponder on the NSC will be set to report an altitude of 1000 feet below MSL or more than 90,000 above MSL.
- 2) For in-port testing of the NSC, the interrogation rate of the AN/UPX-37 will be forced to a value of 278 Hz. This testing will be short term to ensure that the system is functioning prior to testing at sea.
- 3) Full testing of the AN/UPX-37 on the NSC will be conducted with the NSC at least 100 nautical miles from shore. The AN/UPX-37 will not be used during transit to and from the test location and will be turned off any time the NSC gets within 100 nautical miles of shore.

Thank you,

Vance

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

From: Benjapol.Phimsoutham@faa.gov [mailto:Benjapol.Phimsoutham@faa.gov]

Sent: Friday, September 21, 2007 11:33 AM

To: Schuemann, Vance W.

Cc: Siddall, David R.; Langfitt, Perry E. (Ship Systems)

Subject: RE: Request for coordination of frequencies 1030 and 1090 MHz by Northrop Grumman Ship Systems, Inc.

Mr. Schuemann,

Please contact Tim Pawlowitz and/or Chris Tourigny of the Office of ATC Spectrum Engineering Services, FAA HQ, Washington, DC. for the solution of subject coordination frequencies. Their telephone numbers are (202) 267-9739 and (202) 267-3071 respectively.

Regards.

(Embedded image moved to file: pic00475.jpg)

ESA Spectrum Support Center-Atlanta

(404) 305-6675

"Schuemann, Vance

W."

To <vanceschuemann@paulhastings.com>

Benjapol Phimsoutham/ASO/FAA@FAA

cc 09/12/2007 03:57 PM

Systems)"

"Langfitt, Perry E. (Ship

<perry.langfitt@ngc.com>,

"Siddall,

David R."

<davidsiddall@paulhastings.com>

Subject

RE: Request for coordination of
frequencies 1030 and 1090 MHz by
Northrop Grumman Ship Systems,

Inc.

Ben:

We are still working on the responses to Item 1. The following are the responses to Item 2 concerning the transponder (1090 MHz).

- How will the transponder respond to Mode C (altitude) interrogations?

Empty framing brackets F1 and F2 with no code.

- Specify the altitude that will be encoded into the transponder!

Shipboard transponders are designed to provide zeroes for data pulses C1, C2, C4, A1, A2, A4, B1, B2, B4, D2 and D4. Empty framing brackets for a Mode C reply do not correspond to a valid altitude according to the modified grey code system for altitude encoding of transponders.

- Mode A code for the transponder must be coordinated with Air Traffic for specifically using.

Agree and acknowledge: According to the NTIA Manual (Red Book) paragraph designating responsibility pasted below.

8.3.16.3(3) Accordingly, all Government agencies requiring the use of 1030 MHz for interrogators or 1090 MHz for ground transponders, and either frequency for test equipment that radiate pulsed emissions, shall, prior to filing applications for new and modified requirements, coordinate the planned operational parameters for each new interrogator or ground transponder and every change of each existing interrogator with the appropriate FAA Regional Coordinator listed in Annex D, Table 1.

Vance

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

From: Benjapol.Phimsoutham@faa.gov [mailto:Benjapol.Phimsoutham@faa.gov]

Sent: Wednesday, September 12, 2007 1:43 PM

To: Schuemann, Vance W.

Subject: RE: Request for coordination of frequencies 1030 and 1090 MHz

by Northrop Grumman Ship Systems, Inc.

Vance,

The NGT numbers cannot be released to you based on the following reasons.

1. The Northrop Grumman and the US Coast Guard must provide the result of the modification of the interrogator (1030 MHz) implementation to the FAA before this assignment can be approved.

2. The following information are needed for the transponder (1090MHz) before the coordination can be approved.

- How will the transponder respond to Mode C (altitude) interrogations?
- Specify the altitude that will be encoded into the transponder!
- Mode A code for the transponder must be coordinated with Air Traffic for specifically using.

Please provide the above data promptly.

Regards.

(Embedded image moved to file: pic04099.jpg)

ESA Spectrum Support Center-Atlanta

(404) 305-6675

"Schuemann, Vance

W."

To <vanceschuemann@paulhastings.com>

Benjapol Phimsoutham/ASO/FAA@FAA

CC 09/11/2007 11:34

Subject AM

RE: Request for coordination of frequencies 1030 and 1090 MHz by Northrop Grumman Ship Systems,

Inc.

Ben:

I just wanted to follow-up regarding the status of this request and to see if you need any additional information. Also, I was wondering if you can provide us with the NGT numbers yet?

Thanks,

Vance

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

From: Schuemann, Vance W.

Sent: Wednesday, August 29, 2007 2:50 PM

To: 'Benjapol.Phimsoutham@faa.gov'

Cc: 'perry.langfitt@ngc.com'; Siddall, David R.

Subject: RE: Request for coordination of frequencies 1030 and 1090 MHz by Northrop Grumman Ship Systems, Inc.

Ben:

Attached please find the modified answers to the questions. It is our understanding that Mark Whiteside of the DoD International AIMS Program Office has spoken to Don Nellis regarding the proposed testing on the National Security Cutter and has provided assurances that the equipment will be operating correctly and the testing will not cause problems.

Please let us know if you require any additional information.

Vance

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

From: Benjapol.Phimsoutham@faa.gov [mailto:Benjapol.Phimsoutham@faa.gov]

Sent: Monday, August 20, 2007 1:59 PM

To: Schuemann, Vance W.

Cc: Siddall, David R.; perry.langfitt@ngc.com

Subject: RE: Request for coordination of frequencies 1030 and 1090 MHz by Northrop Grumman Ship Systems, Inc.

Mr. Schuemann,

This is the recommendation from the Office of ATC Spectrum Engineering Service, FAA HQ, Washington, D.C. for the subject coordination.

For the 1030 MHz request

"It appears from the information provided that Northrop Grumman Ship Systems has implemented the AN/UPX-37 interrogator (1030 MHz) on the National Security Cutter in such a way that the interrogation rate can not be adjusted to ensure that the National Security Cutter operations will not interfere with FAA Air Traffic Control interrogators or with other National Security Cutters operating in the same area. Therefore, in its present configuration, the FAA can not support testing of the AN/UPX-37 on the National Security Cutter in the US&P, US Coastal Waters, Great Lakes, or anywhere within 200 nautical miles of the US Coast. The FAA will reconsider once the system has been modified to allow the interrogation rate of the AN/UPX-37 to be set as required in 47 CFR Part 300 (Section 8.3.16). In addition, we need to know how the AN/UPX-37 side lobe suppression system was implemented on the National Security Cutter."

For the 1090 MHz request

"The FAA is concerned with the operation of the AN/APX-118 transponder (1090 MHz) in port as well as the codes the transponder will report for each interrogation Mode, especially the Mode C (altitude) the transponder will report because improperly coded AN/APX-118 Mode C replies will create phantom targets on aircraft collision avoidance systems. Also be aware that operation of the AN/APX-118 in port, the Great Lakes, or US Coastal Waters will require coordination and will likely be limited to short term tests. In order to process the request for the AN/APX-118, the FAA needs to know what codes the AN/APX-118 will use when responding to Mode 1, 2, 3/A, C, and S interrogations, the specific dates, times, and locations for the AN/APX-118 testing, and a cease buzzer point of contact for the testing."

After modification has been completed, please contact me for further coordination .

Best Regards.

Pben

ESA Spectrum Support Center - Atlanta
(404) 305-6675

"Schuemann, Vance

W."

To <vanceschuemann@paulhastings.com>

Benjapol Phimsoutham/ASO/FAA@FAA

CC 08/15/2007 12:22 PM

perry.langfitt@ngc.com, "Siddall, David R."
<davidsiddall@paulhastings.com>

Subject

RE: Request for coordination of frequencies 1030 and 1090 MHz by Northrop Grumman Ship Systems,

Inc.

Ben:

You are correct. The interrogation rates in the antenna rotation rate table provided in response to Question 11 should be in Hertz rather than kilohertz. Accordingly, attached please find a revised questionnaire documents that corrects the typographical error.

Thanks,

Vance

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

From: Schuemann, Vance W.
Sent: Tuesday, August 14, 2007 5:31 PM
To: 'Benjapol.Phimsoutham@faa.gov'
Cc: 'perry.langfitt@ngc.com'; Siddall, David R.
Subject: RE: Request for coordination of frequencies 1030 and 1090 MHz by Northrop Grumman Ship Systems, Inc.

Ben:

Pursuant to your request, attached please find a document containing the responses to the questionnaire to support the coordination.

Please let us know if you have any further 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 |

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

From: Benjapol.Phimsoutham@faa.gov [mailto:Benjapol.Phimsoutham@faa.gov]

Sent: Friday, August 10, 2007 12:19 PM
To: Schuemann, Vance W.
Subject: RE: Request for coordination of frequencies 1030 and 1090 MHz by Northrop Grumman Ship Systems, Inc.

Vance,

Attached is a questionnaires file for supporting the subject coordination. Some questions have been provided, however, some are still needed, please provide an answer as much as you can. Thanks for your prompt actions.

(See attached file: NGSS10301090C00RINFO.doc)

Regards.
Pben
Ben Phimsoutham, AJW-E15G
Tech Ops Engineer/Frequency Management Officer
Spectrum Support Center Eastern Services Area - Atlanta
Technical Operations/Air Traffic Organization
FAA Southern Region Headquarters
P.O.Box 20636
Atlanta, Georgia 30320-0631
(404) 305-6675 Voice
(404) 305-6677 Fax
benjapol.phimsoutham@faa.gov

"Schuemann, Vance
W."
<vanceschuemann@paulhastings.com>
Benjapol Phimsoutham/ASO/FAA@FAA

To
08/08/2007 01:43 PM
perry.langfitt@ngc.com, "Siddall,
David R."
<davidsiddall@paulhastings.com>,
Timothy J Pawlowitz/AWA/FAA@FAA,
Chris CTR
Tourigny/AWA/CNTR/FAA@FAA

Subject
RE: Request for coordination of
frequencies 1030 and 1090 MHz by
Northrop Grumman Ship Systems,
Inc.

Ben:

To follow-up on our conversation this morning, the power levels provided in the previous email are the maximum range of the equipment and the 600 KW figure was a typo. NGSS can and would test the equipment at 500 watts.

Accordingly, we amend the parameters in the coordination request to read as follows:

- peak envelope power (PEP):

1030 MHz: 500 watts (10M0M1D) and 500 watts (18M0M1D)

1090 MHz: 500 watts (10M0M1D), 500 watts (14M0M1D) and 500 watts (11M9M1D)

In addition, it is likely that the transponder on the NSC will be tested only during the sea trials, not at the shipyard. In general, testing of the equipment will be limited in its duration.

Please let us know if you have any further questions or concerns.

Thanks,

Vance

From: Schuemann, Vance W.
Sent: Wednesday, August 08, 2007 10:32 AM
To: 'Benjapol.Phimsoutham@faa.gov'
Cc: 'perry.langfitt@ngc.com'; Siddall, David R.;
'timothy.j.pawlowitz@faa.gov'; 'Chris.CTR.Tourigny@faa.gov'
Subject: Request for coordination of frequencies 1030 and 1090 MHz

by
Northrop Grumman Ship Systems, Inc.

Dear Ben,

Per my telephone call and your voicemail message, I am writing on behalf of Northrop Grumman Ship Systems, Inc. ("NGSS") to request prior coordination of the proposed use of frequencies 1030 and 1090 MHz, for which NGSS will apply with the FCC to operate under a FCC experimental authorization. See parameters of the proposed operations below.

The Department of Homeland Security ("DHS") and the U.S. Coast Guard ("USCG") have contracted to build a new class of ships known as the National Security Cutter ("NSC"). These ships are being designed and

constructed under the USCG's Deepwater Program by Integrated Coast Guard Systems ("ICGS"), an LLC partnership of Lockheed Martin Corporation and NGSS.

test
NGSS requires the use of the frequencies at 1030 and 1090 MHz to
and demonstrate the IFF Interrogator and Transponder on the NSC
vessels at and South of NGSS's shipyard facility in Pascagoula,
Mississippi, prior to delivery to the USCG, pursuant to contract
number DTCG23-02-C-2DW001. NGSS needs to begin testing as soon as
possible to meet the contract schedule, and requests coordination
for
a period of at least two years.

Please kindly send me the NGT number for this coordination so NGSS
may provide them number to the FCC.

Should you have questions or need any additional information,
please
do not hesitate to contact me (Tele: 202-551-1913; Email:
vanceschuemann@paulhastings.com), David Siddall (Tele:
202-551-1802;
Email: davidsiddall@paulhastings.com) or Perry Langfitt of NGSS
(Tele: 228-935-0848; Email: perry.langfitt@ngc.com).

The following are the parameters of NGSS's proposed use of
frequencies 1030 and 1090 MHz:

- peak envelope power (PEP):

1030 MHz: 4K W (10M0M1D) and 2 KW (18M0M1D)

1090 MHz: 600 W (10M0M1D), 600 KW (14M0M1D) and 600 W (11M9M1D)

- type of antenna:

Radar
1030 MHz: It will be attached to the Rotating EADS Air Search
aboard the NSC vessel

1090 MHz: AN/177B Omni

- transmit antenna gain:

1030 MHz: 15.0 dBi

1090 MHz: 2.80 dBi

- elevation above sea level of the antenna site:

1030 MHz: 45.75 m

1090 MHz: 45.75 m

- height above ground of the focal point of the antenna;

1030 MHz: 45.75 m

1090 MHz: 45.75 m

- antenna polarization:

1030 MHz: vertical

1090 MHz: vertical

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

1030 MHz: Rotating

1090 MHz: Fixed

- 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:

1030 MHz: 450 pps, fixed

1090 MHz: 20000 pps, fixed

- pulse width:

1030 MHz: 0.0008ms and 0.0005ms

1090 MHz: 0.00035 ms and 0.00055 ms

- equipment nomenclatures:

1030 MHz: AN/UPX-37 Digital Interrogator

1090 MHz: AN/APX-118 Transponder

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

1030 MHz: N/A

1090 MHz: N/A

- radius of operations if appropriate:

in 1030 MHz: 240 km, centered around NL 30-20-44; WL 88-34-40 (only the Gulf of Mexico)

in 1090 MHz: 240 km, centered around NL 30-20-44; WL 88-34-40 (only the Gulf of Mexico)

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

The IFF Interrogator and Transporter will be located on the

National

Security Cutter (NSC) vessels. Pursuant to its contract, it is necessary for NGSS to test and demonstrate the equipment on the

NSC

vessels prior to delivery to the U.S. Coast Guard. Operations will

be

mobile within 240 km of Northrop Grumman Ship Systems' Pascagoula Operations shipyard located in Pascagoula, Mississippi (NL

30-20-44;

WL 88-34-40). Specifically, testing will initially occur at the shipyard, and then within 240 km of the shipyard in the Gulf of Mexico.

Testing of the IFF Interrogator aboard the NSC vessel will occur only at 1030 MHz and will operate in Modes 1, 2, 3A, 3C, 4, and 5.

Testing

of the IFF Transponder aboard the NSC vessel will occur only at

1090

MHz and will operate in Modes 1, 2, 3A, 3C, 4, and 5. This not a TCAS. The waveforms meet all of the required ICAO Annex 10 requirements and the appropriate RTCA Document.

If necessary, NGSS will coordinate with the FAA prior to its testing

at 1030 MHz and 1090 MHz to avoid any harmful interference. Should any harmful interference occur, it will stop its transmission.

The stop buzzer points of contacts for the testing are:

* Bruce Cook

Sector Director, Test

Cell: (228) 366-6153

Business: (228) 935-3254

* Joseph D. James (David)

Superintendent, NSC Test

Cell: (228) 366-6226

Business: (228) 935-1905

Thank you for your attention to this matter. Again, please do not hesitate to contact us if you have questions or need any

additional
information.

Sincerely,

Vance Schuemann

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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(See attached file: NGSS10301090C00RINFO Responses (revised).doc)

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