From: daniel.r.orear@faa.gov
To: Center, Ronald E;
cc: Douglass, Bob; Chris.Tourigny@faa.gov; donald.nellis@faa.gov; Thorsheim, Joel D; Thomas.Ahn@faa.gov; vu.pham@faa.gov; timothy.j.pawlowitz@faa.gov; donald.nellis@faa.gov;
Subject: RE: FAA COORDINATION REQUEST
Date: Monday, November 10, 2008 9:46:26 AM

Ron,

We have completed the coordination for the two repositioning flights. The coordination number for the Renton Field to Boeing Military Flight Center is NG T090072. And the coordination number for the Boeing Military Flight Center to Pax River Navy Facility is NG T090073.

The following restrictions and requirements apply:
Only the operation of the civil modes essential to the safety of these flights are authorized. Because the APX-123 is uncertified, each Air Traffic Control Facility affected by these repositioning flights must be notified the day prior to the flight with the following:
1 - Origin and destination locations
2 - Time of the flight
3 - Statement that the aircraft will be using a "red label box" transponder
4 - stop buzzer point of contact information.

Dan O'Rear
ATO Western Service Area
Northwest Mountain Region
Spectrum Engineering Services
425-227-2637

"Center, Ronald E" <Ronald.E. Center@boeing.com>

11/10/2008 08:58 AM

To Daniel R ORear/ANM/FAA@FAA

cc Chris Tourigny/AWA/FAA@FAA, "Thorsheim, Joel D" <Joel.D.Thorsheim@boeing.com>, Khoat Nguyen/ANM/FAA@FAA, Thomas Ahn/AWA/FAA@FAA, Vu Pham/ANM/FAA@FAA, "Douglass, Bob" <bob.douglass@boeing.com>, Donald Nellis/AWA/FAA@FAA, Timothy J Pawlowitz/AWA/FAA@FAA

Subject RE: FAA COORDINATION REQUEST

Dan,

I was wondering where we stand on this issue. Just for everyone's background the APX-123 is currently undergoing AIMS "box level" certification. That has been partially completed, and the civil modes are supposed to be operating normally. The latest word that I have is that there will be a software release, probably sometime in late December, which is projected to clear up many of the remaining "box level" certification issues. The platform certification process cannot really begin until the complete box cert is done. We need to move the aircraft from Renton to Seattle sometime after March 2009, and then deliver it to the PAX River Navy facility sometime after August. We need these experimental Special Temporary Authorities (STA) to ensure that we can meet our production and delivery schedule. We only require a total of two aircraft moves, one under each license. Again, no other testing will be conducted under these STAs. These moves will only

require use of the Civil Modes, which have passed the "box level" cert.
Once the actual flight dates are scheduled we are willing to pre-coordinate them with the FAA/ATC.

We appreciate your consideration in the coordination of these STAs.

Sincerely,
Ron Center
The Boeing Company
Frequency Management Services
Seattle, WA
(206) 544-6583

-----Original Message-----
From: Center, Ronald E
Sent: Monday, November 03, 2008 9:56 AM
To: 'donald.nellis@faa.gov'; timothy.j.pawlowitz@faa.gov
Cc: Chris.Tourigny@faa.gov; daniel.r.orear@faa.gov; Thorsheim, Joel D;
Khoat.Nguyen@faa.gov; Thomas.Ahn@faa.gov; vu.pham@faa.gov; Douglass, Bob
Subject: RE: FAA COORDINATION REQUEST

All,

The two STA's are needed to conduct one flight of one aircraft for
each STA. These support the production and delivery of the first P-8A.

The first STA is for a window of opportunity to re-position aircraft
one from our production facility in Renton, WA to our Military Flight
Center at Boeing Field, Seattle, WA. This initial move is necessary to
continue aircraft modifications necessary to install other military
equipment per the Navy specifications. There will be only one flight
conducted using the first STA, which is that re-positioning flight.

The second STA is needed to support our delivery of the aircraft to the Navy. This also will involve only a single flight from the Boeing Military Flight Center in Seattle to the Navy facility at Patuxent River. MD.

We understand the concerns and will only operate the Civil Modes, which are essential to safety of these flights. There will be no testing or other operations conducted under these STA's, we just need the window to provide some flexibility in our schedule to re-position the aircraft as well as deliver the aircraft to the Navy.

We would appreciate any consideration in supporting these applications. We will comply with any pre-flight notification requirements that you may apply to our license. Your assistance in this effort will be greatly appreciated.

Sincerely,
Ron Center
The Boeing Company
Frequency Management Services
Seattle, WA
(206)544-6583

-----Original Message-----
From: donald.nellis@faa.gov [mailto:donald.nellis@faa.gov]
Sent: Monday, November 03, 2008 9:28 AM
To: timothy.j.pawlowitz@faa.gov
Cc: Chris.Tourigny@faa.gov; daniel.r.orear@faa.gov; Thorsheim, Joel D; Khoat.Nguyen@faa.gov; Center, Ronald E; Thomas.Ahn@faa.gov; vu.pham@faa.gov
Subject: Re: FAA COORDINATION REQUEST

Dan,

To reiterate what Tim said below. The AN/APX-123 is an uncertified (a "red label box" in FAA equipment certification terms), so if it is to be used in the NAS, the affected Air Traffic facilities must be aware of the status of the box and must agree to allow the aircraft to fly in their airspace.

We also need to check to see if AIMS has conducted a platform Certification review of the AN/APX-123 installation on the P-8A aircraft. If they have not, then no Certification authority has reviewed the installation on the P-8A aircraft and it will have to be done before the P-8A aircraft starts flying.

Aslo, I do not believe that the aircraft will have a different transponder on board so use of a different transponder in case the AN/APX-123 is not performing properly, will not be possible.

Don Nellis

Timothy J

Pawlowitz/AWA/FAA

AJW-63, Spectrum

To

Assignment & Eng Office

Daniel R ORear/ANM/FAA@FAA, Donald Nellis/AWA/FAA@FAA

cc

"Thorsheim, Joel D"

11/03/2008 12:12 PM

<Joel.D. Thorsheim@boeing.com>, Khoat Nguyen/ANM/FAA@FAA, "Center, Ronald E" <Ronald.E. Center@boeing.com>, Thomas Ahn/AWA/FAA@FAA, Vu Pham/ANM/FAA@FAA, Chris Tourigny/AWA/FAA@FAA

Subject

Re: FAA COORDINATION REQUEST (Document link: Donald Nellis)

Dan,

For transponders that are only responding (vs. initiating the interrogations) to Mode-S interrogation there is nothing

special to be
done. The use of uncertified transponders, however, does present a
potential problem. We have supported a couple of other test flights that
involved the use of the APX-123 transponder, but with several
restrictions and conditions for operating. What I suspect will need to
be done for this request is to limit the number of aircraft operating
with the APX-123 (ideally, the aircraft will have another transponder
that they can turn on if anomalies are noticed when using the APX-123)
and to require that they coordinate with every ATC TRACON/ ARTCC that
will be tracking them. Don has been working this system with the SPS and
the following was his comments on a recent request:

"....since the transponder is not Certified, all operations outside
restricted airspace must be coordinated with Air Traffic ad they must
agree to allow the uncertified transponder to operate in their airspace.
Further, they will probably want to allow additional separation in case
the transponder has problems. We must ensure that Air Traffic is
informed about the transponder. We should not be making any decisions
for air traffic."

To avoid inconsistencies between guidance that I provide and/or
operations that I approve, I have been conferring with Don Nellis on
anything that involves providing support for a system that is not
certified or that is before the SPS (he is in Geneva at this time, but
has been answering e-mail). Because the system does have at

least Stage
3 certification for Modes-3A/C and S (the other requests involved Mode-5
which has some issues), Don may go ahead concur with the granting of the
requested STA. If he only concurs with conditions, then you will need to
figure out what facilities they will be tracked by and provide them the
phone numbers (if they don't already have them---Boeing normally has all
of the ATC POC's) of those that they will need to coordinate with prior
to each test flight.

Don,

Based on everything that is presented here, what do you think?

Thank you,
Tim

Daniel R

ORear/ANM/FAA

AJW-W15M,
Comm/Spectrum Spt
Ctr - WSA

To "Center, Ronald E" <Ronald.E.Center@boeing.com>, Thomas Ahn/AWA/FAA@FAA, Timothy J Pawlowitz/AWA/FAA@FAA

11/03/2008 10:31

cc

AM "Thorsheim, Joel D"

<Joel.D.
Thorsheim@boeing.com>, Vu

Pham/ANM/FAA@FAA,
Khoat

Nguyen/ANM/FAA@FAA

Subject

Re: FAA COORDINATION
REQUEST

(Document link:
Timothy J

Pawlowitz)

Ron,

Currently our guidance requires mode S issues to be worked through HQ
FAA.
So once Thomas and/or Tim do their part we will finish the rest.

Dan O'Rear
ATO Western Service Area
Northwest Mountain Region
Spectrum Engineering Services
425-227-2637

"Center, Ronald
E"
<Ronald.E.Center@
boeing.com>

To
Vu Pham/ANM/FAA@FAA,
Daniel R
ORear/ANM/FAA@FAA

10/30/2008 02:39
PM

cc
"Thorsheim, Joel D"
<Joel.D.
Thorsheim@boeing.com>

Subject
FAA COORDINATION
REQUEST

Vu/Dan,

In preparation for delivery of the first P-8A Poseidon
Aircraft to the
U.S. Navy, we are filing two STA's to support use of the
installed IFF

system using the Civil Mode Transponder, with operation of only the modes 3A, 3C and S. The system is currently undergoing AIMS certification, and a partial cert has been completed, with the Civil modes all operating in accordance with required government specifications. However, since the system is not fully certified we are filing for experimental licenses to cover the anticipated flight windows.

The first flight will be from our production facility at Renton Field to our Military Flight Center at Boeing Field. That flight is scheduled to occur sometime after February 1, 2009. The second flight will be the delivery flight to the U.S. Navy. That flight is scheduled to occur sometime after July 1, 2009. Since the flights are so far apart we are submitting two separate applications, one for the repositioning and the other for the delivery. I have attached a technical description for each of the flights, and each technical description contains a copy of the Partial AIMS certification.

The IFF system to be used is the AN/APX-123, using a 2.5 dBi blade antenna. The antenna is a Sensor Systems Model S65-8282-123, and is vertically polarized. The ERP and emission data is included in the technical description.

We request an NG number for each of the applications. If it is easier to provide the NG for the local repositioning flight, then please send that one first, as that flight is our nearest concern.

Your assistance is greatly appreciated. If you have any questions
please let me know.

Thanks,
Ron Center
The Boeing Company
Frequency Management Services
Seattle, WA
(206) 544-6583

<<Repositioning Flight Test Description.pdf>> <<Delivery Flight Test
Description.pdf>> (See attached file: Repositioning Flight Test
Description.pdf)(See attached
file: Delivery Flight Test Description.pdf)