

Subject: Port of Seattle - Request for Info - File #0420-EX-PL-2014
From: <stephanie.defoe@thespectrumfirm.com>
Date: 7/8/2014 10:50 AM
To: "'Kathi Buczkowske'" <kathi@radiosoft.com>
CC: "'Elaine McManness'" <elainemcmanness@sbcglobal.net>, "Tina Jackson" <tina.jackson@thespectrumfirm.com>

Hi Kathi,

Please see below response. Customer from Port of Seattle provided requested information to the FCC.

Thank you.

Best Regards,

Stephanie DeFoe
(214)557-7546

From: Osmek, Steve [mailto:Osmek.S@portseattle.org]
Sent: Monday, July 07, 2014 8:02 PM
To: oetech@fccsun27w.fcc.gov
Cc: stephanie.defoe@thespectrumfirm.com; tina.jackson@thespectrumfirm.com
Subject: RE: Request for Info - File #0420-EX-PL-2014
Importance: High

Please see the responses to your questions are indented below:

Thanks,
Steve Osmek
Manager, Airport Biologist
Seattle-Tacoma International Airport
Port of Seattle
P.O. Box 68727
Seattle, WA 98168
Phone: 206.431.4453
Cell: 206.419.8666
Fax: 206.433.4645
Email: osmek.s@portseattle.org
Web: <http://www.portseattle.org/Environmental/Water-Wetlands-Wildlife/Pages/Wildlife-Management.aspx>

From: oetech@fccsun27w.fcc.gov [mailto:oetech@fccsun27w.fcc.gov]
Sent: Monday, June 09, 2014 8:53 AM
To: Osmek, Steve
Subject: Request for Info - File #0420-EX-PL-2014

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Steven Osmek, SEATTLE-TACOMA INTERNATIONAL AIRPORT
(SEA)

To:

osmek.s@portseattle.org

Doug Young

From:

Douglas.Young@fcc.gov

SEATTLE-TACOMA INTERNATIONAL AIRPORT (SEA)

Applicant:

0420-EX-PL-2014

File Number:

24181

Correspondence Reference
Number:

06/09/2014

Date of Original Email:

Submit a narrative statement describing in detail the program of research and experimentation proposed, the specific objectives sought to be accomplished;

Phase 1 – Some of the earlier objectives and results of the collaborative effort with the Department of Defense (DOD), Federal Aviation Administration (FAA), University of Illinois and Port of Seattle investigated how existing avian radar technologies might better protect aviation safety with respect to aircraft bird strike hazards. The FAA estimates that over a half billion dollars annually is expended on bird strike related damages to US aircraft alone. The first, FCC license for SEA, was used for the validation and testing of the avian radar system. Although too sensitive at times, the avian radar technologies were modified to exclude the small and non-flocking bird species and at the same time track the large flocks and large birds that are known to threaten the flying public worldwide. For a sample of results from these first studies see:

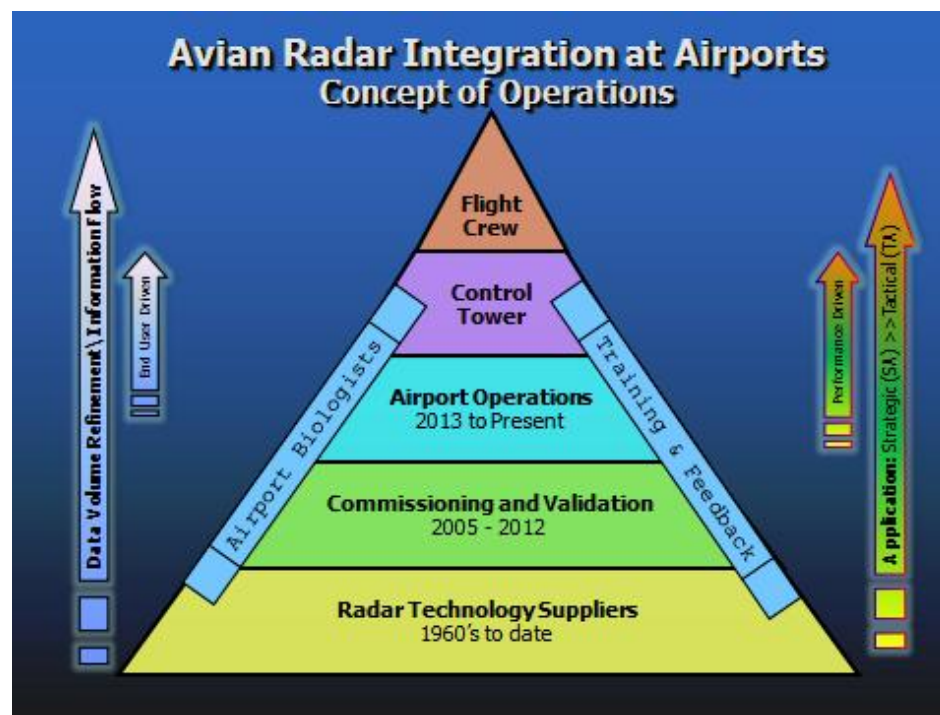
1. http://www.serdp.org/content/download/12691/150867/file/RC-200723-FR_word_Brand_REPLACE_FINAL.pdf&rct=j&frm=1&q=&esrc=s&

[sa=U&ei=Giu7U5XFL4T2oASW2lLgAg&ved=0CBYQFjAA&usg=AFQjCNFDcebMUra5qPSBES0Y0xsiT0tFmA](http://www.faa.gov/documentLibrary/media/Advisory_Circular/150_5220_25.pdf&rct=j&frm=1&q=&esrc=s&sa=U&ei=Giu7U5XFL4T2oASW2lLgAg&ved=0CBYQFjAA&usg=AFQjCNFDcebMUra5qPSBES0Y0xsiT0tFmA)

2. http://www.serdp.org/content/download/12597/150202/file/rc-200723-c%26p.pdf&rct=j&frm=1&q=&esrc=s&sa=U&ei=Wiu7U9-qO4OlogSU9IGQCg&ved=0CBwQFjAB&usg=AFQjCNFmXXfcGtj-NK_bJnofn6MVzRBpGw
3. <http://www.airporttech.tc.faa.gov/Safety/Downloads/TC-13-3.pdf>
4. http://www.faa.gov/documentLibrary/media/Advisory_Circular/150_5220_25.pdf&rct=j&frm=1&q=&esrc=s&sa=U&ei=9Cu7U8cxge6gBJbFgggP&ved=0CBUQFjAA&usg=AFQjCNFQzm71SVNwZpRrY21ACs5sRBSTdg
5. <http://www.aci-na.org/sites/default/files/s2-osmek.pdf> (Slides 9-14).

Phase 2 - This new phase is what this license application is referring too. Avian Radar Commissioning.

The word: “commissioning” means to use the avian radar has also be referred to as “operationalizing” this technology so the 22 people at the Seattle-Tacoma International Airport trained to mitigation wildlife hazards are better informed so steps to remediate these hazards, through the use of pyrotechnics and live rounds when necessary can be done with an increased level of awareness of wildlife issues on and near the airfield. Instead of monitoring single bird tracks, this next phase of research will focus on avian persistence in an areas. For example, if hazardous bird activity persist in a specific area of the airport for 3 minutes over a running 15 minute period, an alert is sent to airport communications center who then dispatch the wildlife patrol to respond to the area of heightened bird activity. This next phase of research to complete is a critical for taking this technology to the next level of moving this hazard information further such as in to the FAA Tower for improved pilot awareness. Specifically, can avian radar technology be practically applied to a working airfield in a manner that makes it a viable method of early detection and consequently hazard abatement?



...and how the program of experimentation has a reasonable promise of contribution to the development,

extension, or expansion, or use of the radio art, or is along lines not already investigated.

Early indications are the avian radar does an extremely good job alerting the airport operations specialists on the whereabouts of birds in a timely fashion. This research is critically needed to prevent future bird strikes. Although we are the first to use this technology today, additional work is needed to determine how to improve airfield coverage and if additional sensors are needed to cover the midfield, the area with the poorest coverage.

The items indicated above must be submitted before processing can continue on the above referenced application.

Failure to provide the requested information within 30 days of 06/09/2014 may result in application dismissal pursuant to Section 5.67 and forfeiture of the filing fee pursuant to Section 1.1108.

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