

BAE SYSTEMS

Philip A. D'Ancona
Legal Counsel

January 23, 2006

VIA HAND DELIVERY

Kathryn Hosford
Spectrum Coordination Branch Chief
Policy and Rules Division
Office of Engineering and Technology
Federal Communications Commission

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JAN 25 2006

**Federal Communication Commission
Bureau / Office**

Re: Request For Brief Extension of End Date of Experimental License
File No. 0121-EX-PL-2005 (WD2XRB)

Dear Ms. Hosford:

You may recall that in mid-October 2005, the Commission granted to BAE Systems Information and Electronic Systems Integration Inc. ("BAE Systems") a limited experimental license pursuant to File No. 0121-EX-PL-2005 (WD2XRB) to operate limited flight tests north of Eglin Air Force Base in the high resolution band of 16.2-18.2 GHz.

The license period currently specified on the license is November 15, 2005-February 15, 2006. The testing authorized by the Commission was three flight tests (the "3 Authorized Flights"), with each flight test to last about 1 hour during which the AN/APY-8 radar SAR is to operate about 30 minutes (i.e., total operational time of the SAR not to exceed 2 hours).

In connection with the implementation of this grant, this is to advise you of the following:

1. Although the first of the 3 Authorized Flights has not yet occurred, it is possible that the first flight may be conducted in early February.¹ In accordance with "Special Condition No. 4" on the grant, once the flight plan for this first flight has been confirmed, BAE Systems will submit to the Commission a copy of the flight plan.
2. Although the first flight may be conducted in the near future, BAE Systems has been advised by the 46th Test Squadron and the Eglin Range Spectrum Manager that, based on airspace and aircraft availability, unforeseen issues requiring minor modification by Eglin of its aircraft, weather and other priority missions, "there is no reasonable chance

¹ It should be noted that although the 46th Test Squadron recently indicated that the first flight was tentatively scheduled for January 19 (See attached e-mail of David Nitzel, Test Engineer, dated January 12, 2005 ["Nitzel E-Mail"]), BAE Systems was just advised that a minor issue to be handled by Eglin and concerning its aircraft has pushed back the timing of the first flight. At the time of this letter, no date for the first flight had been set, although BAE Systems is hopeful that the first flight will be ready to be conducted in early February.

to complete the approved flight test program (third flight) by February 15....". See Nitzel E-Mail, ¶3.

Accordingly, on behalf of BAE Systems, a brief extension of the February 15 End Date - to April 30, 2006 - is respectfully requested in order to address the unavoidable scheduling issue raised by the 46th Test Squadron and Eglin Range management.

In support of this request for an extension of the End Date to April 30, 2006, the following is respectfully submitted:

- The need for the extension resulted from circumstances wholly beyond the control of BAE Systems. In fact, as confirmed by Mr. Nitzel, "BAE Systems did everything possible to be ready to fly the approved 3 flights within the original grant window....", including shipping the SAR pod to Eglin immediately upon grant of the experimental license. See Nitzel E-Mail, ¶1.
- As confirmed by Mr. Nitzel, unforeseen and unavoidable delays did not permit the first flight to be conducted in November, 2005, as originally planned. These delays occurred because higher priority military missions prevented access to the F-16 test aircraft to perform necessary GPS and other antenna modifications, and similarly delayed the completion of the paperwork necessary to obtain flight approval. See Nitzel E-Mail, ¶2.
- Based on airspace and aircraft availability, Eglin maintenance issues, weather and other priority missions, Mr. Nitzel has concluded that not only is there "no reasonable chance" that the third flight test can be completed by the current End Date of February 15, 2006, there is a possibility that there may not be sufficient time to conduct the second flight test by that End Date as well. See Nitzel E-Mail, ¶3.
- BAE Systems is mindful of the limited scope of the grant issued under File No. 0121-EX-PL-2005, and the company is well aware of the Commission's expressed desire to not expand the scope of the authorized tests beyond those approved in October. To that end:
 - BAE Systems has explained to Mr. Nitzel and Mr. Giangrosso that this extension request could not be submitted to the Commission unless the company received confirmation that there was no reasonable chance that the 3 Authorized Flights could be completed by the current End Date. Having received such confirmation, BAE Systems has no alternative but to seek a limited extension of the End Date to April 30, 2006, to permit the 3 Authorized Flights to be completed within the parameters identified by the 46th Test Squadron and Eglin Range management.
 - BAE Systems wishes to make clear that it is not requesting any additional testing authority beyond the already approved 3 Authorized Flights. The only transmissions to occur under the license will be, as always, the 3 Authorized Flights. An extension of the End Date to April 30, 2006, will merely permit

BAE Systems to conduct the previously approved tests in a timeframe that recognizes the availability of Air Force resources, and appropriately responds to the notification received by BAE Systems from the 46th Test Squadron and Eglin Range management.

- As confirmed by Mr. Nitzel, "Both BAE Systems and the 46th Test Squadron have committed significant resources to getting the approved testing done, and failing to approve an extension of the authorization to complete the scope that's already been approved (three flights) would create a significant impact to both our organizations." See Nitzel E-Mail, Final Paragraph. Regarding the importance of this experiment, also attached hereto is a letter from Capt. Christensen of the United States Air Force confirming the Air Force's support for this effort.
- Since BAE Systems will in no event exceed the scope the tests authorized in connection with the 3 Authorized Flights (i.e., three flight tests, each lasting about 1 hour during which the AN/APY-8 radar SAR is to operate about 30 minutes - total operational time of the SAR not to exceed 2 hours), grant of the requested brief extension should have no impact with respect to interference or coordination issues.

Accordingly, for the foregoing reasons, a brief extension of the February 15 End Date to April 30, 2006 would be in the public interest, convenience and necessity, and Commission grant of this extension request is hereby requested.

Should any questions arise concerning this request, please communicate directly with the undersigned.

Respectfully submitted,



Philip A. D'Ancona
Legal Counsel

BAE Systems Information and Electronic Systems Integration, Inc.
Communication, Navigation, Information and Reconnaissance

Enclosures

cc:w/encl.: (via hand-delivery)

Mr. James R. Burtle
Experimental Licensing Branch Chief

Mr. Tony Serafini
Office of Engineering and Technology
Federal Communications Commission

D'Ancona, Philip (US SSA)

From: Nitzel David D CIV USAF 46 TS/OGEE [david.nitzel@eglin.af.mil]
Sent: Thursday, January 12, 2006 11:38 AM
To: Zywiec, Michael (US SSA)
Cc: Law, Richard J (US SSA); D'Ancona, Philip (US SSA); Valentino, Pasquale A (US SSA); Topping, John M (US SSA); Rummel.Jeffrey@ARENTFOX.COM; Nitzel David D CIV USAF 46 TS/OGEE; Stevens Cecil D Jr Mr CTR USAF 46 TS/OGEX
Subject: RE: Reasons for frequency extension for TARS SAR effort JON: CZZC0021
Importance: High

Mike,

46th Test Squadron at Eglin supports the BAE Systems request to extend the FCC Experimental Radio Station Construction Permit and License expiration date to 30 April 2006 for the following reasons:

1. BAE Systems did everything possible to be ready to fly the approved 3 flights within the original grant window (Nov 15 05 through Feb 15 06). BAE Systems delivered the podded radar system to Eglin in the middle of October (the clearance started 15 November).
2. Unforeseen delays at Eglin moved the first flight from November 2005 into January 2006. The most significant delay was in getting access to the F-16 test aircraft for GPS and other antenna modifications. This modification work was originally planned for the early November time frame, and didn't happen until mid December. The reason for this delay was since this is a commercial venture with no military sponsor the Eglin AFB military mission comes first which gave the BAE systems project (Job Order Number (JON): CZZC0021) a low priority of 492. The priority was also the reason for the delays in getting the paper work completed for the flight approval to fly F-16C 83-1163 aircraft.
3. There is no reasonable chance to complete the approved flight test program (third flight) by 15 February, when the current frequency grant expires. Until we get our first flight in (right now tentatively planned for 19 January), I'm not much more confident on when the second flight will take place and whether even that second flight can be completed by 2/15. I do think that the extension through the end of April will allow us a good chance of successful completion of the approved three flights. This assessment is based on the priority of 492, F-16C 83-1163 availability and possible maintenance issues to fly the requested missions, weather, TARS SAR pod maintenance (if the pod breaks we have no recover time in the schedule) and the scheduling of FAA airspace. Historical data at Eglin AFB indicates that it will take five missions to get three fully successful flights.

Both BAE Systems and the 46th Test Squadron have committed significant resources to getting the approved testing done, and shutting us down before we complete the scope that's already been approved (three flights) would create a significant impact to both our organizations. Thank you in advance for your consideration on this matter, and should you have any questions, feel free to contact me.

v/r

David Nitzel
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1/20/2006



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS AERONAUTICAL SYSTEMS CENTER (AFMC)
WRIGHT-PATTERSON AIR FORCE BASE OHIO

14 JUN 2005

MEMORANDUM FOR AAC/PKZB (MR. JEFFREY COX)
46th TW/OGEE (MR. CECIL STEVENS)
46th TS/OGEE (MR. DAVID D. NITZEL)
96th CG/SCWF (MR. JOE P. GIANGROSSO)

FROM: ASC/RAJI
2640 Loop Road West, Rm 213
Wright-Patterson AFB OH 45433

SUBJECT: Government Sponsor BAE TARS Demonstration Flights for RFA BAE SAR
Program JON CZZC0021

1. I lead a government/industry team working to upgrade the USAF ANG Theater Airborne Reconnaissance System (TARS) in support of deployed operations. Part of my comprehensive roadmap strategy for this program is to leverage ongoing industry projects such as the current BAE Systems effort to fuse radar and electro-optical sensor data. I understand that you are under contract to support a flight demonstration in connection with the first phase of this effort.
2. It is my understanding that the DoD Gulf Area Frequency Coordinator, Eglin Range Spectrum Manager requires a sponsoring contract number as part of the frequency authorization process (ref: RFA).
3. In response, I am authorizing you to reference Contract # F33657-96-C-6502 for this purpose, as long as there is no cost, obligation or modification necessary to this referenced TARS contract with BAE.
4. If you need any additional clarification, don't hesitate to contact me at Michael.Christensen@wpafb.af.mil (DSN 785-2566) or my contracting officer, Mr. Tom Smith (DSN 785-4333), Tom.Smith@wpafb.af.mil.

MICHAEL CHRISTENSEN, 1Lt, USAF
TARS Program Manager