

**United States of America
FEDERAL COMMUNICATIONS COMMISSION
EXPERIMENTAL
SPECIAL TEMPORARY AUTHORIZATION**

EXPERIMENTAL
(Nature of Service)

W A 2 X P C
(Call Sign)

XD MO
(Class of station)

S-3135-EX-97
(File number)

NAME Lockheed Martin Corporation

Vicinity of Orlando, FL - as Described in Application
(Location of station)

Special Temporary Authority is hereby granted to operate the radio transmitting apparatus described below:

Frequency (MHz)	Authorized Power (watts)	Emission Designator
420.15	140	25K0G7W
429.85	140	25K0G7W
16,500	3.2 M	500MP0N

Purpose of Operation: System performance characterization and demonstration of a prototype RF missile sensor's capabilities against several different advanced airborne threats.

This special temporary authorization is granted upon the express condition that it may be terminated by the Commission at any time without advance notice or hearing if in its discretion the need for such action arises. Nothing contained herein shall be construed as a finding by the Commission that the authority herein granted is or will be in the public interest beyond the express terms hereof.

This special temporary authorization shall not vest in the grantee any right to operate the station nor any right in the use of the frequencies designated in the authorization beyond the term hereof, nor in any other manner than authorized herein. Neither the authorization nor the right granted hereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934. This authorization is subject to the right of use of control by the Government of the United States conferred by Section 706 of the Communications Act of 1934.

This authorization effective December 15, 1997 and
will expire 3:00 A.M. EST. June 15, 1998



5-3135-EX-97

LOCKHEED MARTIN



Lockheed Martin Enterprise Information Systems
Radio Frequency Management Office
P. O. Box 4906
Baltimore, MD 21220-0906
Tel. No. (410) 682-2156
Fax No. (410) 682-0300
MARCALL 8-682-2156

November 7, 1997

Federal Communications Commission
Experimental Radio Services
P. O. Box 358320
Pittsburgh, PA 15251-5315

Re: Special Temporary Authorization Request
AADS Program applications pending

We, the Lockheed Martin Corporation, respectfully request a Special Temporary Authorization for program operations for the development of AADS RF Sensor. This program is an Independent Research and Development for future defense requirements to meet both US and NATO standards. We are scheduled to begin local testing and evaluation on or about the 15th of December 1997 in the greater Orlando, Orange County, FL region. The initial testing and evaluation is crucial to the success of the program and future testing at remote Government Test Ranges.

You will find attached fact sheet information containing all the technical and administrative data, as previously filed for the permanent Experimental Radio Station Authorization in September and October 1997. You will also find enclosed the required FCC Form 159, Admittance Advise Form, and the license processing fees, \$45.00.

If you should have any questions or comments regarding the technical aspects of this request, please feel free to call **Charles Partin, Manager AADS Test Program, (407) 356-3893**. If you have any questions regarding the filing of this Special Temporary Authorization Request, please call the undersigned on **(410) 682-2156**.

Very Truly Yours,

Claude E. Wells
Corporate
Sr. Tech. Support Analyst

10 November, 1997

Additional information pertaining to 410 to 430 Mhz frequency allocation request.

System operation:

The frequency request in the 410 to 430 Mhz band is to support transmission of test data needed during the conduct of the test and post test analyses. The transceivers in question are programmable for operation on any channel within the band designated. Therefore, it is not necessary to obtain clearance for the entire frequency band at all requested locations. We need two (2) channels allocated within the band at each requested location in order to successfully complete our activities. It is not necessary that the same channels be allocated at each location. The transceivers will be programmed to use the channels allocated at each location. Details of the test set up follow.

Up to four transceivers are used depending on the test to be conducted

Transceivers are located as follows

- One in the captive flight test aircraft; receives all coordinate information and may down link data if required
- One in an airborne vehicle sending coordinate information to the captive flight aircraft; vehicle type will vary according to test conducted
- One on the ground which provides transmission coordination and GPS correction data if necessary for test conduct
- One on the ground which sends special coordinate information to the captive flight aircraft; it may be fixed in place or mobile

I hope this provides all additional information required for request approval. Please contact me for further explanation or questions. Thanks for your help.

24 September, 1997

To: S. Lentz

CC: M. Percella, J. Serafin, J. Schmidt

From: Charles Partin 6-3893

Subject: Inputs for FCC Form 442 - Data Link Hardware

Skip, the inputs for FCC Form 442 are provided below. Please review and let me know if further information or explanation is needed. We would like to begin operation of the Data Link on or before 1/1/98 in the greater Orlando area. Approval for Government Test Range and elsewhere can be by 3/1/98. Thanks for your help.

Page 1 of the form

I assume page one of the form will be handled by you, Corporate or the FCC as appropriate.

Page 2 of the form

Block 1: I assume you or Corporate fills in this one.

Block 2(a): Check New Station box
2(b): NA

Block 3: NA

Block 4(A): 410 through 430 MHz
4(B): 35 W
4(C): 140 W
4(D): PEAK
4(E): GMSK
4(F): 9600 Baud
4(G): 25 Khz; manufacturer design

Page 3 of the form

Block 5(a): Check the Mobile box
5(b): NA
5(c): See table below for location information
5(d): Check NAD 27 box

Area of Operation Description	N Latitude (DMS)	W Longitude (DMS)
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LME&M Sand Lake Road facility and a 7 mile radius	28° 26' 44"	81° 27' 09"
LME&M Eastern Test Site and a 10 mile radius	28° 23'	81° 5' 30"
Kissimmee Florida Airport and a 7 mile radius	28° 18'	81° 26'
Orlando Executive Airport and a 5 mile radius	28° 33'	81° 20'
Sanford Florida Airport and a 10 mile radius	28° 47'	81° 13'
Avon Park Range in Florida - entirety		
Eglin Air Force Base - entirety		
Nellis Air Force Base - entirety		
White Sands Missile Range - entirety		
Holloman Air Force Base - entirety		
Edwards Air Force Base - entirety		
China Lake - entirety		
Point Mugu - entirety		
Fort Wauchuka - entirety		
Syracuse NY Airport and a 5 mile radius	43° 7'	76° 7'
LM Ocean, Radar & Sensor Systems Antenna Development & Test Site and a 10 mile radius located west of Cazenovia NY	42° 55' 59"	75° 54' 01"
Crestview Florida Airport and a 10 mile radius	30° 47'	86° 31'
Patrick Air Force Base - entirety		

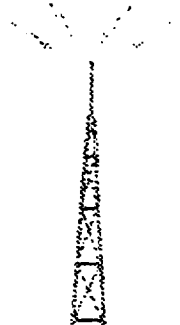
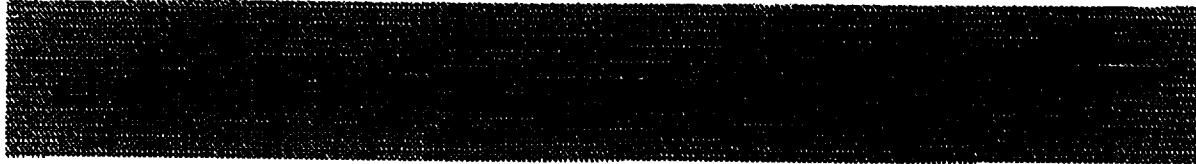
Blocks 6, 7, 8, and 9: check the NO box

Block 10: Exhibit No. 1 attached

Block 11(a): 3 years
11(b): NA

Block 12: No environmental impact

Block 13: Manufacturer: Litton; Model Number: L5869-51; Number of Units: One

FAX COVER PAGE**Radio Frequency Management Office**

MARCALL 682-2156 FAX 682-0300 (410) 682-2156 FAX (410) 682-0300



To: Doug Young

From: Claude E. Wells

Subject: Additional Info for Data Links on AADS Application Request for Orlando

Pages: 3 (include. Cover Page)

Doug,

Here is the description sheets for the use of the 410 to 430 Mhz frequencies. They also sent me a second message, which I included, that requests specific frequencies. Apparently the systems they will be using have default frequencies already programmed into the units and they are requesting these frequencies as preference frequencies if possible, if not available they will take what you can give them. I gather from the info supplied they are requesting three frequencies for operations.

Claude E. Wells

Author: Charles P Partin at ORL-TWR2-CC-P
Date: 11/11/97 09:35 AM
Priority: Urgent
TO: Claude Wells at BAL-IIS-CC-P
CC: Michael Percella at ORL-TWR3-CC-P
CC: Wilton C Lentz at ORL-MPLANT11-CC-P
CC: Jeff A Serafin at ORL-MPLANT6-CC-P
CC: Stephen F Maloney at ORL-MPLANT9-CC-P
Subject: Update to data link frequency allocation request

----- Message Contents -----

11 November, 1997

Claude,

This is an update to the data link frequency allocation request.

I have been informed our hardware has the following three frequencies factory programmed into them as defaults for operation.

410.15 Mhz
420.15 Mhz
429.85 Mhz

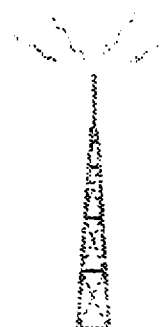
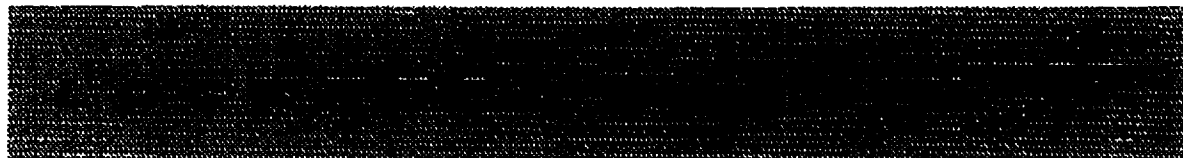
OK'd by HFW along w/ 16.5 GHz for Orlando Area.
DJ

It is our preference to have the FCC give us approval to use these frequencies for our data link. However, if this is not possible for all locations of operation, we can go back to the factory and get others programmed.

Additionally, WSMR has informed us they use 412.5 Mhz for data transmission. I assume we will obtain approval to use that frequency direct from WSMR and not the FCC. Is my assumption correct? Further, is it our responsibility in Orlando to obtain this approval from WSMR or are you involved as well?

Please contact me if you have any further questions about the data link and I look forward to your response regarding WSMR operation.
Thanks.

Charles

FAX COVER PAGE**Radio Frequency Management Office**

MARCALL 682-2156 FAX 682-0300 (410) 682-2156 FAX (410) 682-0300



To: Doug Young
From: Claude E. Wells
Subject: STA Request for AADS
Pages: 7 (include Cover Page)

Sorry about the delay in getting this to you. The Personnel in FL who issue checks accidentally sent it direct to Pittsburgh and not back to me to attach to the application request. The Original STA request and check, #502684, are being posted today to Pittsburgh.

I respectfully request that all possible steps be taken to issue a STA for our site in Orlando, FL so they can begin operations on a limited basis by the 15th of December in the Orlando, Orange County, FL area. I have attached the original fact sheets, the program sent to me, to be a part of this request. The top five listed sites are the projected initial test areas, with the first and second being top priority. Any assistance you can give in this matter would be greatly appreciated.

Claude E. Wells

READ INSTRUCTIONS CAREFULLY
BEFORE PROCEEDING

APPROVED BY OMB 3060-0589

FEDERAL COMMUNICATIONS COMMISSION
REMITTANCE ADVICE

SPECIAL USE

FCC USE ONLY

(1) LOCKBOX #

PAGE NO. 1 OF 1

SECTION A - PAYER INFORMATION

(2) PAYER NAME (if paying by credit card, enter name exactly as it appears on your card)

Lockheed Martin Corporation

(3) TOTAL AMOUNT PAID (dollars and cents)

\$ 45.00

(4) STREET ADDRESS LINE NO. 1

Attn: John S. Hickey

(5) STREET ADDRESS LINE NO. 2

P. O. Box 4906

(6) CITY

Baltimore

(7) STATE

MD

(8) ZIP CODE

21220-0906

(9) DAYTIME TELEPHONE NUMBER (include area code)

(410) 682-2156

(10) COUNTRY CODE (if not in U.S.A.)

IF PAYER NAME AND THE APPLICANT NAME ARE DIFFERENT, COMPLETE SECTION B
IF MORE THAN ONE APPLICANT, USE CONTINUATION SHEETS (FORM 159-C)

SECTION B - APPLICANT INFORMATION

(11) APPLICANT NAME (if paying by credit card, enter name exactly as it appears on your card)

STREET ADDRESS LINE NO. 1

(13) STREET ADDRESS LINE NO. 2

(14) CITY

(15) STATE

(16) ZIP CODE

(17) DAYTIME TELEPHONE NUMBER (include area code)

(18) COUNTRY CODE (if not in U.S.A.)

COMPLETE SECTION C FOR EACH SERVICE, IF MORE BOXES ARE NEEDED, USE CONTINUATION SHEETS (FORM 159-C)

SECTION C - PAYMENT INFORMATION

(19A) FCC CALL SIGN/OTHER ID

STA AADS

(20A) PAYMENT TYPE CODE (PTC)

E

A

E

(21A) QUANTITY

(22A) FEE DUE FOR (PTC) IN BLOCK 20A

\$ 45.00

FCC USE ONLY

(23A) FCC CODE 1

(24A) FCC CODE 2

(19B) FCC CALL SIGN/OTHER ID

(20B) PAYMENT TYPE CODE (PTC)

(21B) QUANTITY

(22B) FEE DUE FOR (PTC) IN BLOCK 20B

\$

FCC USE ONLY

(23B) FCC CODE 1

(24B) FCC CODE 2

(19C) FCC CALL SIGN/OTHER ID

(20C) PAYMENT TYPE CODE (PTC)

(21C) QUANTITY

(22C) FEE DUE FOR (PTC) IN BLOCK 20C

\$

FCC USE ONLY

(23C) FCC CODE 1

(24C) FCC CODE 2

(19D) FCC CALL SIGN/OTHER ID

(20D) PAYMENT TYPE CODE (PTC)

(21D) QUANTITY

(22D) FEE DUE FOR (PTC) IN BLOCK 20D

\$

FCC USE ONLY

(23D) FCC CODE 1

(24D) FCC CODE 2

SECTION D - TAXPAYER INFORMATION (REQUIRED)

(25)

PAYER TIN

0 5 2 1 8 9 3 6 3 2

(26) COMPLETE THIS BLOCK ONLY IF APPLICANT NAME IN B-11 IS DIFFERENT FROM PAYER NAME IN A-2

APPLICANT TIN

0

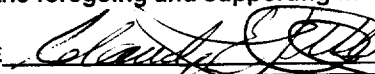
SECTION E - CERTIFICATION

(27) CERTIFICATION STATEMENT

I, Claude E. Wells, Certify under penalty of perjury that the foregoing and supporting information
(PRINT NAME)

are true and correct to the best of my knowledge, information and belief.

SIGNATURE



SECTION F - CREDIT CARD PAYMENT INFORMATION

(28)

MASTERCARD/VISA ACCOUNT NUMBER:

EXPIRATION DATE:

MASTERCARD

VISA

I hereby authorize the FCC to charge my VISA or MASTERCARD
for the service(s)/authorizations(s) herein described.

AUTHORIZED SIGNATURE

DATE



FAX COVER SHEET

Page 1 of 2 pages

DATE: December 11, 1997

FROM: Douglas A. Young 1300 - E1
FEDERAL COMMUNICATIONS COMMISSION
Experimental Licensing Branch
2000 M Street, Suite 230
Washington, DC 20554

PHONE: (202) 418-2440

FAX: (202) 418-1918

TO: Mr. Claude E. Wells

NAME

Lockheed Martin Corporation

COMPANY

(410) 682 - 2156

PHONE

(410) 682 - 0300

FAX

Mr. Wells:

Here is a copy of Lockheed Martin Corporation's STA for station WA2XPC, File Number S-3135-EX-97. The original license will be mailed upon receipt of the original application.

Doug Young
