

AMENDMENT

LOCKHEED MARTIN



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June 24, 1998

To: Doug Young

From: Claude E. Wells

Subject: Admendment to FCC Application for Eagan, Dakota County, MN
File No.: 6187-EX-PL-98

You will find attached a fax I received requesting an admendment to an existing filing for our operations at Eagan, Dakota County, MN. The attached info is for operations in addition to the data already supplied for our proposed operations on the same program filed under FCC File No. 6187-EX-PL-98. If you should have any questions regarding the proposal please feel free to cantact Terry L. Hoke at our Eagan facilities on (612) 456-2023 or email terry.l.hoke@lmco.com he is the program engineer in charge of this project. If you have problems reaching him please call me and I will chase him down for the data or have him contact you directly.

Claude E. Wells
Sr. Tech. Support Analyst
(410) 682-2156

Author: Terry L (Exchange) Hoke at MAILHUB

Date: 06/24/98 07:35 AM

Priority: Normal

TO: Claude Wells at BAL-LEGACY-CC-P

Subject: New Ku VSAT License Application

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

Hi Claude:

Hope your stuffiness gets better. You could try sticking one of those sponge toys (they come in a capsule and expand to big) up your nose or something. That should soak up all that moisture. Of course, your nose might have an odd bulge.....

Do you have any idea when we might have the 800MHz freq coordinated? The radio vendor has the unit in and is itching to ship it to us.

The following is the info for the Ku VSAT license application form 493:

Tx/Rx antenna is a Prodelin 1251 2.4m offset prime focus unit...

midband Tx gain = 49.2 dBi

midband Rx gain = 47.6 dBi

Lat/Long/elev/mounting height:

44 50' 01"N 93 10' 03"W 933'AMSL 35' AGL

(Located on the roof of the LM-TDS building)

Hub-mounted transceiver is an 8 watt SSE 8/wkstar

RF MODEM is a ComStream CM701 (common Viterbi coding)

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Data for question 16 of Form 493:

Frequency Bands (for all 12 emissions) = 14,000 - 14,500 mHz.

Antenna Polarization (for all 12 emissions) = H, V

Emission Desig.	Max EIRP	Max EIRP dens.	Description
180KG7W	51.75	35.2	128 kBpS, 1/2R,QPSK
538KG7W	56.44	35.1	384 kBpS, 1/2R,QPSK
2M15G7W	58.23	30.9	1.536 mBpS, 1/2R,QPSK
358KG7W	54.64	35.1	128 kBpS, 1/2R,BPSK
1M07G7W	58.23	33.9	384 kBpS, 1/2R,BPSK
4M30G7W	58.23	27.9	1.536 mBpS, 1/2R,BPSK
119KG7W	49.61	34.9	128 kBpS, 3/4R,QPSK
358KG7W	54.64	35.1	384 kBpS, 3/4R,QPSK
1M42G7W	58.23	32.7	1.536 mBpS, 3/4R,QPSK
239KG7W	52.62	34.8	128 kBpS, 3/4R,BPSK
717KG7W	57.65	35.1	384 kBpS, 3/4R,BPSK
2M85G7W	58.23	29.7	1.536 mBpS, 3/4R,BPSK

The above calculations represent the maximum power levels which may be routinely licensed (-14 dBW/4kHz @ flange) at each emission's necessary bandwidth (1.4 SF) using the 8 watt SSPA.

The various emissions are requested to give us some latitude. If this doesn't work, let me know.

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I might be necessary to submit a radiation hazard analysis (attached as an exhibit) to the FCC as well as to our facilities people here. If I can be of any further help don't hesitate to contact me. The guy at Minnesota Teleport who is the technical rep is Dick Becvar (800) 847-8396. He is providing most of the info.

Thanks for your help!
Regards,

TLHoke, P.E.
Lockheed Martin
(612) 456-2023