

From: radiodataservices@radiodataservices.com
To: [Arthur Doak](#)
Cc: JDSOUTHMAYD@MSN.COM; 40belowbroadcasting@gmail.com; screensounds@gmx.com
Subject: RE: [EXTERNAL]: Palmer, AK Class D
Date: Tuesday, July 20, 2021 10:18:01 AM
Attachments: [RF exhibit Palmer AK v2.pdf](#)

Art,

Thanks for the follow-up on the Palmer, AK Class D proposal. Yes, please change the polarization to vertical only per the applicant's request for the Jampro model antenna.

I've revised the RF study using EPA Type 1 antenna and removing the horizontal polarization (please see attached). At 90 watts ERP, the predicted power density does not exceed 86% of the uncontrolled limit.

Thanks!
Rob Robbins

Robert J. Robbins
www.radiodataservices.com
radiodataservices@radiodataservices.com
(305) 234-9309

From: Arthur Doak <Arthur.Doak@fcc.gov>
Sent: Tuesday, July 20, 2021 9:07 AM
To: radiodataservices@radiodataservices.com
Cc: JDSOUTHMAYD@MSN.COM; 40belowbroadcasting@gmail.com; screensounds@gmx.com
Subject: RE: [EXTERNAL]: Palmer, AK Class D

Mr. Robbins:

The application proposed circular polarization (both a horizontal and vertical ERP component). Do you want me to change it to vertical polarization only?

Also FYI: For RF radiation calculations the only thing I can use is the FCC's FMModel program. I cannot use the manufacturer's vertical pattern or any other data like that to get the calculated RF radiation lower. Therefore, any RF calculations you do, you should check with the FCC's FMModel program.

Thank You
Art Doak
Audio Division
Media Bureau
FCC

From: radiodataservices@radiodataservices.com <radiodataservices@radiodataservices.com>
Sent: Tuesday, July 13, 2021 11:12 AM
To: Arthur Doak <Arthur.Doak@fcc.gov>
Cc: 'Jeff Southmayd' <jdsouthmayd@msn.com>; 'Brian Landrum' <40belowbroadcasting@gmail.com>; 'Brian Landrum' <screensounds@gmx.com>
Subject: RE: [EXTERNAL]: Palmer, AK Class D

Art,

The applicant is proposing a single bay Jampro JFWD vertically polarized antenna. I've attached an RF study based on the antenna data supplied by Jampro. The maximum uncontrolled RF exposure remains below 12% of the uncontrolled area limit. If the application could be granted with the condition that this specific antenna model be used with automatic program test authority, that would be great. Please let me know if anything further is needed.

Rob Robbins

Robert J. Robbins
www.radiodataservices.com
radiodataservices@radiodataservices.com
(305) 234-9309

From: Arthur Doak <Arthur.Doak@fcc.gov>
Sent: Friday, July 9, 2021 10:53 AM
To: radiodataservices@radiodataservices.com
Subject: RE: [EXTERNAL]: Palmer, AK Class D

Mr. Robbins:

For the application, as amended to 90 watts (H&V), I can put a 3 meter fence

condition which does not require RF measurement to be taken. However, this condition also requires the applicant remain off the air and request PTA the same as the RF measurement condition.

You seemed to indicate that taking measurements was easy now. Also, depending on the type of antenna they use, RF measurements or a fence may not be required. I could put on a specific antenna condition and the station would have automatic PTA (as long as they do not change the antenna).

Let me know how you would like to proceed: RF measurement condition, fence condition or specific antenna condition (I will need the specific information on the antenna).

Thanks
Art Doak
Audio Division
Media Bureau
FCC

From: radiodataservices@radiodataservices.com <radiodataservices@radiodataservices.com>

Sent: Friday, July 9, 2021 10:31 AM

To: Arthur Doak <Arthur.Doak@fcc.gov>

Subject: [EXTERNAL]: Palmer, AK Class D

CAUTION: This email originated from outside of the Federal Communications Commission. Do not click on links or open attachments unless you recognize the sender and trust the content to be safe. If you suspect this is a phishing attempt, please use the 'Report Message' feature in Microsoft Outlook or forward the email to the NSOC.

Art,

I looked back at the original RF study and reproduced it using the revised FM model. It does show that the RF power density is over 200 inside a distance of 3 meters from the tower, and then approaches 50 at a distance of about 10 meters. I typically assume that a tower is fenced, or access restricted with a minimum of 30 feet radius or 10 meters. That is usually where I consider the transition from controlled to uncontrolled environment to occur. I am assuming this site is already fenced or will be. In this case, as long as access is restricted to at least 3 meters (10 feet) from the tower or mast, there should be no public exposure in excess of the uncontrolled limit. That is how I

understand the study.

I think that it would be appropriate to place a condition requiring restricted access or fence, with an RF warning sign at least 10 feet from the tower. Or, if appropriate, requiring RF measurements in the uncontrolled access area surrounding the antenna mast or tower.

Here is a (very long) link to the RF meter that I mentioned. I've used this in the past to take measurements around a site. It cost \$300:

https://www.grainger.com/product/1TZR3?ef_id=CjwKCAjw55-HBhAHEiwARMCszu16-s_tc3Mq3cneZIRGAvvJx8NK1eZRaejZ73dmxH5LgaLE90aYwxC4vIQAvD_BwE:G:s&s_kwcid=AL!2966!3!496359978196!!g!442140938772!&gucid=N:N:PS:Paid:GGL:CSM-2295:4P7A1P:20501231&gclid=CjwKCAjw55-HBhAHEiwARMCszu16-s_tc3Mq3cneZIRGAvvJx8NK1eZRaejZ73dmxH5LgaLE90aYwxC4vIQAvD_BwE&gclsrc=aw.ds

Please let me know if you need more information regarding the Palmer, AK proposal.
Thanks.

Rob

Robert J. Robbins

www.radiodataservices.com

radiodataservices@radiodataservices.com

(305) 234-9309