From:	Blitz, James
To:	Laverentz, Jennifer
Subject:	RE: Request to radiate Snow Radar for Flight Test at Edwards Air Force Base
Date:	Wednesday, January 27, 2021 6:51:21 PM

Jennifer - Sirius XM has no objections to the proposal for spectrum use at Edwards Air Force Base as described in your email.

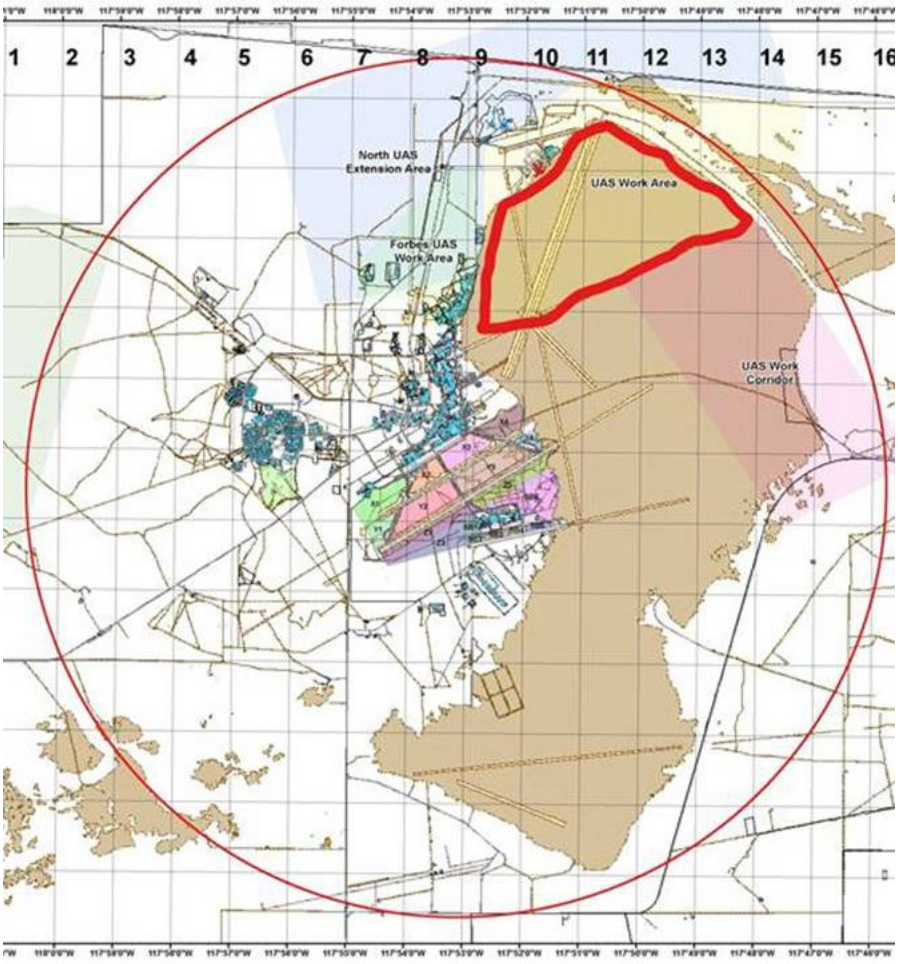
Jim Blitz
Sirius XM Radio/Pandora

From: Laverentz, Jennifer <jenlav@ku.edu>
Sent: Tuesday, January 19, 2021 5:05 PM
To: Blitz, James <James.Blitz@siriusxm.com>
Subject: Request to radiate Snow Radar for Flight Test at Edwards Air Force Base

Jim,

I hope that this email finds you well and having a good New Year. We are working to test the performance of our snow radar for sounding sea ice when operated on board the Vanilla Unmanned VA001 aircraft (**https://vanillaunmanned.com/**). The radar system will transmit a waveform in the S and C bands, with its antennas looking towards the nadir direction.

Proposed Location: Measurements will be conducted at Edwards Air Force Base in Edwards, California. Flights will be conducted within the Red box outlined in the image below. This is within the Edwards base in their UAS work Area.



Radar Parameters:

Parameter	Value
Lower Frequency	2 GHz
Upper Frequency	8 GHz
Transmit Power (Max)	0.63 W (28 dBm)
EIRP	7.1W ; 8.5 dBw
ERP	4.3W ; 6.4 dBw
Frequency Tolerance	2 MHz
Waveform	Chirp

Dates: This will be a 1-day test either the week of Feb 8th or Feb 15th. We are requesting a window from Feb 1 to March 31, 2021.

They have requested that we coordinate and obtain a written consent from you prior to the issuance of this permit. I have attached the proposed flight lines in and around Black Hills.

Please feel free to contact me via email or at the numbers below with any questions.

Best Regards,

Jennifer

Jennifer Laverentz
Administrative Manager
Center for Remote Sensing of Ice Sheets
2335 Irving Hill Road Rm. 334
Lawrence, Kansas 66045
Phone (785) 864-7722
Fax (785) 864-7753
cresis.ku.edu

Jennifer Laverentz
Administrative Manager
Center for Remote Sensing of Ice Sheets
University of Kansas
2335 Irving Hill Road Rm. 334
Lawrence, Kansas 66045
Cell Phone (785) 640-2568
Phone (785) 864-7722
Fax (785) 864-7753
cresis.ku.edu