

Date: October 2, 2020

To: FCC Experimental License Branch

From: Richard Ridgway, The Ohio State University (email: ridgway.57@osu.edu)

Subject: Exhibit for STA Application

STA File Number: 1250-EX-ST-2020

The Ohio State University was granted a Special Temporary Authority license on August 27, 2020 to evaluate a novel waveform (PFSK) developed under a Navy-funded program.

This Exhibit requests that the license include a standard CDMA waveform operating at the same frequency (3.45 GHz) and same bandwidth (up to 100 MHz) using the same antenna placements (Columbus OH and West Jefferson OH) outlined in the original application.

We only add a new waveform, as highlighted below:

City	State	Latitude	Longitude	Mobile	Radius of Operation
Columbus	Ohio	North 39 59 57	West 83 2 41		5.00

Datum: NAD 83

Is a directional antenna (other than radar) used? No

Exhibit submitted: No

(a) Width of beam in degrees at the half-power point:

(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

Will the antenna extend more than 6 meters above the ground, or if mounted on an existing building, will it extend more than 6 meters above the building, or will the proposed antenna be mounted on an existing structure other than a building? No

(a) Overall height above ground to tip of antenna in meters:

(b) Elevation of ground at antenna site above mean sea level in meters:

(c) Distance to nearest aircraft landing area in kilometers:

(d) List any natural formations of existing man-made structures (hills, trees, water tanks, towers, etc.) which, in the opinion of the applicant, would tend to shield the antenna from aircraft:

Action	Frequency	Station Class	Output Power / ERP	Mean Peak	Frequency Tolerance (+ / -)	Emission Designator	Modulating Signal
New	3.35000000-3.45000000 GHz	FX	1.000000 W 1.000000 W	P	0.10000000 %	1M00N0N	CW

Action	Frequency	Station Class	Output Power / ERP	Mean Peak	Frequency Tolerance (+ / -)	Emission Designator	Modulating Signal
New	3.35000000-3.45000000 GHz	FX	1.000000 W 1.000000 W	P	0.10000000 %	100MVXD	Peaky FSK

Action	Frequency	Station Class	Output Power / ERP	Mean Peak	Frequency Tolerance (+ / -)	Emission Designator	Modulating Signal
New	3.35000000-3.45000000 GHz	FX	1.000000 W 1.000000 W	P	0.10000000 %	100MF9W	CDMA

City	State	Latitude	Longitude	Mobile	Radius of Operation
Columbus	Ohio	North 39 59 20	West 83 1 14		5.00

Datum: NAD 83

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Action	Frequency	Station Class	Output Power / ERP	Mean Peak	Frequency Tolerance (+ / -)	Emission Designator	Modulating Signal
New	3.35000000-3.45000000 GHz	FX	1.000000 W 1.000000 W	P	0.10000000 %	100MVXD	Peaky FSK

Action	Frequency	Station Class	Output Power / ERP	Mean Peak	Frequency Tolerance (+ / -)	Emission Designator	Modulating Signal
New	3.35000000-3.45000000 GHz	FX	1.000000 W 1.000000 W	P	0.10000000 %	100MF9W	CDMA

City	State	Latitude	Longitude	Mobile	Radius of Operation
West Jefferson	Ohio	North 39 57 30	West 83 16 2		5.00

Datum: NAD 83

Is a directional antenna (other than radar) used? No

Exhibit submitted: No

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(b) Orientation in horizontal plane:

(c) Orientation in vertical plane:

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New	3.35000000-3.45000000 GHz	FX	1.000000 W 1.000000 W	P	0.10000000 %	1M00N0N	CW

Action	Frequency	Station Class	Output Power / ERP	Mean Peak	Frequency Tolerance (+ / -)	Emission Designator	Modulating Signal
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New	3.35000000-3.45000000 GHz	FX	1.000000 W 1.000000 W	P	0.10000000 %	100MVXD	Peak FSK
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Action	Frequency	Station Class	Output Power / ERP	Mean Peak	Frequency Tolerance (+ / -)	Emission Designator	Modulating Signal
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