

April 30, 2021

In re Application of

Textron Systems
124 Industry Lane
Cockeysville, Maryland 21030

To operate in the 310-390MHz, 1350-1390MHz, 2200-2290MHz and 4335-4395MHz Telemetry Bands above Salisbury, Virginia.

ATTN.: Microwave Branch

Textron Systems hereby requests Special Temporary Authority (STA) to operate within the 310-390MHz, 1350-1390MHz, 2200-2290MHz and 4335-4395MHz telemetry bands pursuant to Section 21.25 of the Commission's Rules. Textron Systems requests that the Commission grant it temporary authority to operate on the frequencies centered at 320MHz with a 280KHz bandwidth, 1350-1390MHz (frequency hopping) with a 280KHz bandwidth, 2220MHz with a 15MHz bandwidth, and 4340MHz with a 6MHz bandwidth from August 02, 2021 through August 13, 2021 with intermittent usage. As explained below, Textron Systems is filing an STA request to demonstrate their UAV payload capacity as it relates to wide area searches and maritime radar. Textron Systems submits that there are extraordinary circumstances warranting a grant of the STA request.

Textron Systems is demonstrating their Aerosonde UAV payload capacity for multiple clients as it relates to wide area search radios, specifically Command and Control, Intelligence, Surveillance and Reconnaissance radios. Due to the extreme frequency congestion in the Salisbury area, Textron Systems requests the use of these channels.

Textron Systems certifies that the operation of the requested channels for the purposes specified herein will not cause interference to any established stations.

Grant of the instant request for STA for the 310-390MHz, 1350-1390MHz, 2200-2290MHz and 4335-4395MHz bands would serve the public interest by enabling Textron Systems to demonstrate how the Aerosonde UAV has the payload capacity to integrate multiple radio systems to support long distance Command and Control, Intelligence, Surveillance and Reconnaissance missions. The proposed service would enable demonstration of multiple radio systems in an aerial exercise.

In accordance with Section 74.633 of the Commission's Rules, the following is provided:

Applicants Name:	Textron Systems
Address:	124 Industry Lane Cockeysville, Maryland 21030
Type and Manufacturer Of Equipment:	Microhard Systems Corporation MHX 320
Power Output:	1W
ERP:	1W
Emission:	280KF1D
Frequency:	320MHz
Antenna:	1.5dBi Vertical linear AERIAL
Antenna Gain:	1.5dBi

Type and Manufacturer Of Equipment: Textron Systems Unmanned Systems D/B/A AAI Corporation
Telemetry and Control Modem, L-band, AES Encrypted, 40393-40005-10

Power Output: 1W

ERP: **1W**

Emission: 185KF1D

Frequency: 1350-1390MHz (Frequency Hopping)

Antenna: 1dBi Vertical linear **AERIAL**

Antenna Gain: 1dBi

Type and Manufacturer Of Equipment: AAI Corporation
Telem Modem M13-NCF + 40393-95014-10 Amplifier

Power Output: 20W

ERP: 1100W (dish) / 20W omni

Emission: 185KF1D

Frequency: 1350-1390MHz (Frequency Hopping)

Antenna: 16dBi Vertical linear **TERRESTRIAL**

Antenna Gain: 16dBi

Type and Manufacturer Of Equipment: AAI Corporation
Hi-Def Bandit S-band Video TX / 12B01A Amp

Power Output: 10W

ERP: **10W**

Emission: 4M79G1D

Frequency: 2220MHz

Antenna: 0dBi Vertical linear **AERIAL**

Antenna Gain: 0dBi

Type and Manufacturer Of Equipment: Textron Systems
40393-42280 Wave Relay, C-band w/VHF-3800+FILTR

Power Output: 6W

ERP: **6W**

Emission: 4M06D1D

Frequency: 4410MHz

Antenna: 3dBi Vertical linear **AERIAL**

Antenna Gain: 3dBi

Type and Manufacturer Of Equipment: Textron Systems
40393-42280 Wave Relay, C-band w/VHF-3800+FILTR

Power Output: 4W

ERP: **4112W (dish) / 6W omni**

Emission: 4M06D1D

Frequency: 4410MHz

Antenna: 26dBi Vertical linear **TERRESTRIAL**

Antenna Gain: 26dBi

Area of Operation: 186Km

Coordinates: N 38 20 20.76
W 075 30 27.36

Antenna Height: **UNMANNED FIXED WING @ OR BELOW 15000' MSL
TERRESTRIAL 4'AGL**

Dates of Operation: August 02, 2021 – August 13, 2021
(Intermittent Usage during these days)

Textron Systems requests an STA to operate on the above-referenced frequency for a period not to exceed six months. No application for regular authorization will subsequently be filed.

Textron Systems certifies that no party to the application is subject to a denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C § 853(a).

Should you have any questions regarding this matter, please contact, John Winch, by telephone 626 676 1470.

Respectfully submitted,

By: John Winch
Frequency Coordinator