



A Textron Company

January 17, 2020

**Federal Communications Commission 445 12th Street SW  
Washington, DC 20554**

**Attachments:**

- 1. Exhibit A: AFTRCC Coordination Letter – This Filing**
- 2. Exhibit B: Hardware Specifications**
- 3. Exhibit C: Current FCC License, Call Sign KA97185**

**Title: Bell Textron STA – FCC License Request – Yuma, AZ**

Dear FCC,

This request for Special Temporary Authority (STA) is submitted pursuant to 47 CFR 5.61 to request authorization to perform a short flight test demonstration. Bell Textron only lacks the correct emission designator as current FCC license (call sign KA97185 attached as Exhibit C) authorizes transmission (reference location 11). The Aerospace & Flight Test Radio Coordinating Council (AFTRCC) has responded favorably to this request with their attached coordination as exhibit A. The proposed operation is planned for only a few flights between January 27, 2020 and February 28, 2020. Please note that Bell is respectful in allowing ample time to process such requests. This particular request happened rather suddenly and out of the norm. As always, Bell appreciates the efforts of the FCC and apologizes for the late submittal.

The STA is for a bi-directional link between a Ground Control Station (GCS) and Bell's Autonomy Pod Transport (APT-70) air vehicle. Bell needs only **one** frequency but is requesting the three indicated frequencies below to help with frequency conflicts should any arise.

**Location:**

Yuma Proving Grounds  
Yuma, YUMA county, AZ  
Maximum Flight Altitude: 400 feet AGL  
Test Area Center Point (33° 20' 59.9" N 114° 22' 08.2" W)  
MIRAD: 10 miles (16 KM)  
Reference figure 1 below.

Dates of operation: 1/27/2020 to 2/28/2020

Frequency:

- 2370 MHz in the S-band. Emission designators – 5M2D1D, 19M2D1D
- 2375 MHz in the S-band. Emission designators – 5M2D1D, 19M2D1D
- 2380 MHz in the S-band. Emission designators – 5M2D1D, 19M2D1D

Airborne Transceiver:

Persistent model MPU5

Multi-In Multi-Out (MIMO) three antenna array.

Each antenna with a maximum power of 3 watts.

Ground Transceiver:

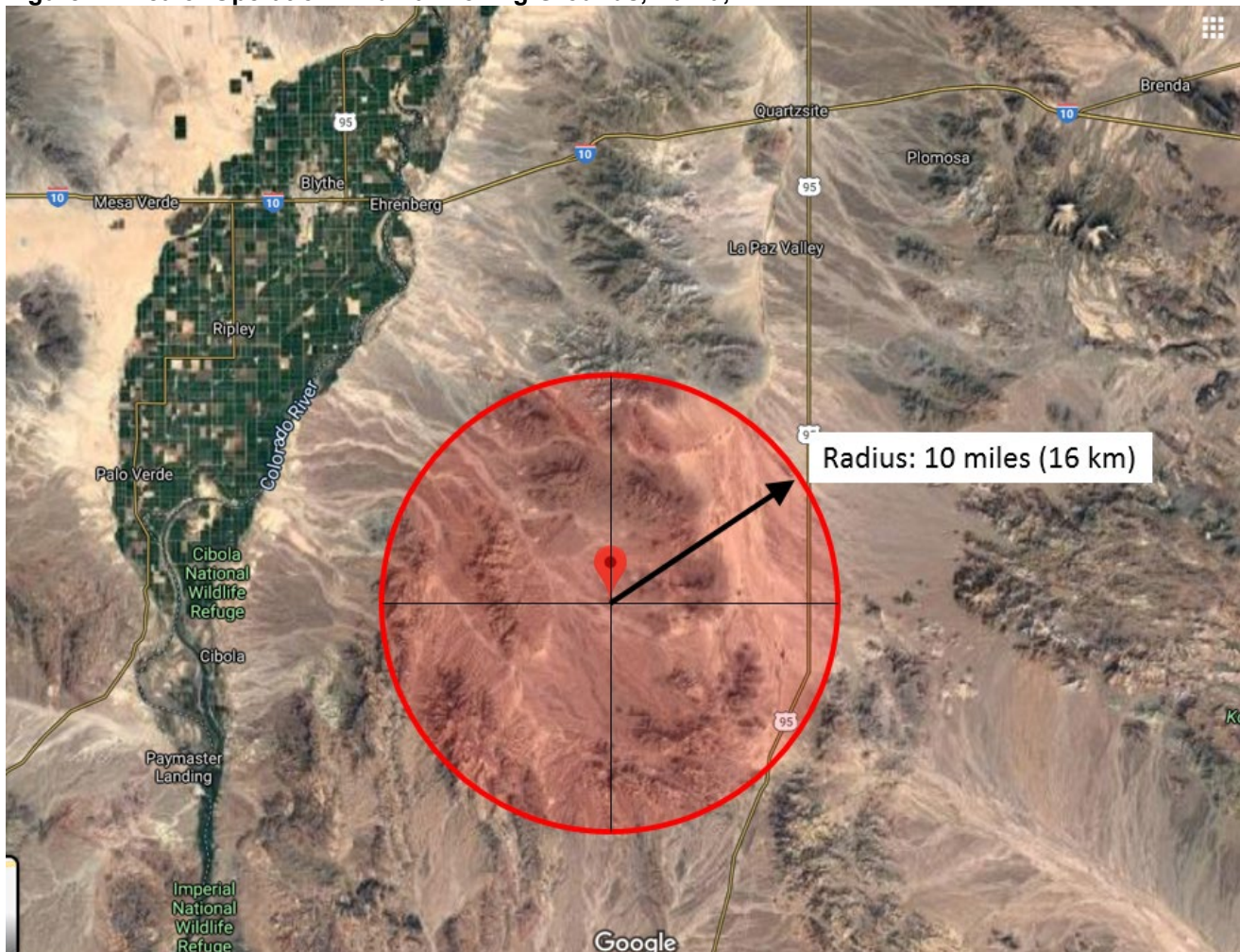
Persistent model MPU5

Multi-In Multi-Out (MIMO) three antenna array.

Each antenna with a maximum power of 3 watts.

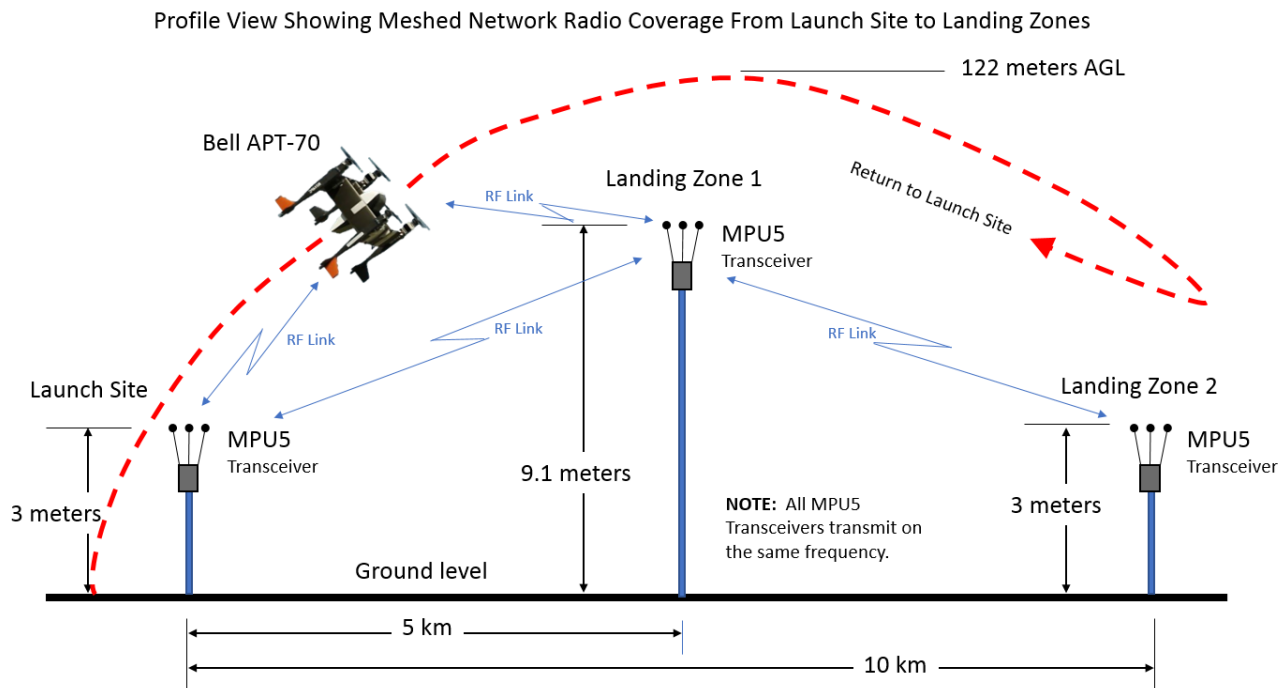
Figure 1 gives a plan view of the test area indicated by the red circle. Although pictorial in nature, the terrain is identified and shows the test area surrounded by low level mountain ranges.

**Figure 1: Area of Operation – Yuma Proving Grounds, Yuma, AZ**



The flight test runs are supported by ground based MPU-5 transceivers at distances close enough to create a meshed network between the three ground-based units and the air-vehicle for Beyond Visual Line of Sight (BVLOS) datalink coverage. This meshed network is illustrated in Figure 2 below.

**Figure 2: Transceiver Meshed Network with Air Vehicle (APT-70) Over Coverage Area**



The MPU-5 transceivers use Multi-In Multi-Out (MIMO) technology and each of the three ground based units have three antennas (Persistent PN: ANT-2005). Specifications for this antenna are contained in exhibit B below.

The Bell Autonomy Pod Transport (APT-70) air-vehicle utilizes two different types of antennas. Making up the set of three antennas are two blade antennas (Persistent PN: ANT-2013) and a whip antenna (Persistent PN: ANT-2034). Specifications for this antenna are contained in exhibit B below.

Stop Buzzer Contact:  
Mark Stoufflet  
Bell Textron  
(817) 280-7984

Kind Regards,

Mark Stoufflet  
Bell Frequency Coordinator

EXHIBIT A:

**AFTRCC Coordination Letter – This Filing**

**From:** [Wayne Morris](#)  
**To:** [Stoufflet, Mark](#)  
**Cc:** [Chriss Brown](#); [Hankins, Danny](#)  
**Subject:** Fwd: [Non-DoD Source] AFTRCC ICN 1141-20/8202 (Bell Helicopter Textron Platform Testing-Yuma, AZ) (UNCLASSIFIED)  
**Date:** Thursday, January 16, 2020 2:03:51 PM

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This email is your AFTRCC coordination.

This coordination includes this header information, DOD Area Frequency Coordinator comments and AFTRCC comments. These messages must not be separated.

This coordination is advisory only and not binding on the FCC. Applicants are advised that this coordination does not constitute a judgment that the frequency(ies) is best suited for the applicant's purpose nor that the frequency(ies) is exclusive to the applicant. Flight Test frequencies are shared and may require scheduling with other users.

In return for AFTRCC's processing of the applicant's coordination request, the applicant agrees to release and hold harmless AFTRCC, its officers, directors, agents, members, and representatives from any claims, losses or expenses that may arise from the use of the frequency.

This coordination is not an authorization to transmit. A copy of this coordination must accompany application to the FCC.

Signed:  
Wayne Morris  
AFTRCC Telemetry Coordinator  
903-450-5942

----- Forwarded message -----

From: **Chaffin, Christopher A CIV USARMY NETCOM (USA)**  
<[christopher.a.chaffin2.civ@mail.mil](mailto:christopher.a.chaffin2.civ@mail.mil)>  
Date: Thu, Jan 16, 2020 at 1:30 PM  
Subject: RE: [Non-DoD Source] AFTRCC ICN 1141-20/8202 (Bell Helicopter Textron Platform Testing-Yuma, AZ) (UNCLASSIFIED)  
To: Wayne Morris <[5600wayne@gmail.com](mailto:5600wayne@gmail.com)>, Rossow, Mark K CIV USARMY NETCOM (USA) <[mark.k.rossow.civ@mail.mil](mailto:mark.k.rossow.civ@mail.mil)>

CLASSIFICATION: UNCLASSIFIED

Wayne,

DoD AFC AZ concurs with coordination control # 20011603.

Thank You

Christopher Chaffin  
DoD Area Frequency Coordinator  
NETCOM, ACoS G-3, CUOPS  
Fort Huachuca, AZ  
Tel: (520) 538-6424  
DSN: 879-6424  
NIPR: [christopher.a.chaffin2.civ@mail.mil](mailto:christopher.a.chaffin2.civ@mail.mil)  
SIPR: [christopher.a.chaffin2.civ@mail.smil.mil](mailto:christopher.a.chaffin2.civ@mail.smil.mil)

-----Original Message-----

From: Wayne Morris [mailto:[5600wayne@gmail.com](mailto:5600wayne@gmail.com)]  
Sent: Thursday, January 16, 2020 11:54 AM  
To: Rossow, Mark K CIV USARMY NETCOM (USA) <[mark.k.rossow.civ@mail.mil](mailto:mark.k.rossow.civ@mail.mil)>;  
Chaffin, Christopher A CIV USARMY NETCOM (USA)  
<[christopher.a.chaffin2.civ@mail.mil](mailto:christopher.a.chaffin2.civ@mail.mil)>  
Subject: [Non-DoD Source] AFTRCC ICN 1141-20/8202 (Bell Helicopter Textron  
Platform Testing-Yuma, AZ)

AFTRCC concurs with and requests DoD Arizona AFC concurrence/coordination on the following STA request.

Applicant:  
Bell Helicopter Textron  
600 I-20 East  
Arlington, TX 76018  
POC: Mark Stoufflet (817-280-7984)

Frequencies: 2370.0 MHz/2375.0 MHz/2380.0 MHz

Station Class: MOEA

Emissions: 5M2D1D/19M2D1D

Power: 10 watts (ERP)

Location: Yuma, AZ (33-20-59 N 114-22-08 W)

MIRAD: 10 miles (16 KM)

Maximum flight altitude: 400',AGL

Dates: 2020-01-27 thru 2020-02-28

AFTRCC comments: bi-directional data link between ground station and Bell APT-70 air vehicle. Only 1 frequency will be used but multiple requested for diversity and ease of scheduling if required.

Please reply via return email as to concurrence, non-concurrence, scheduling, or additional comments.

Signed:

Wayne Morris

AFTRCC Telemetry Coordinator

903-450-5942

CLASSIFICATION: UNCLASSIFIED

EXHIBIT B:

**Hardware Specifications**



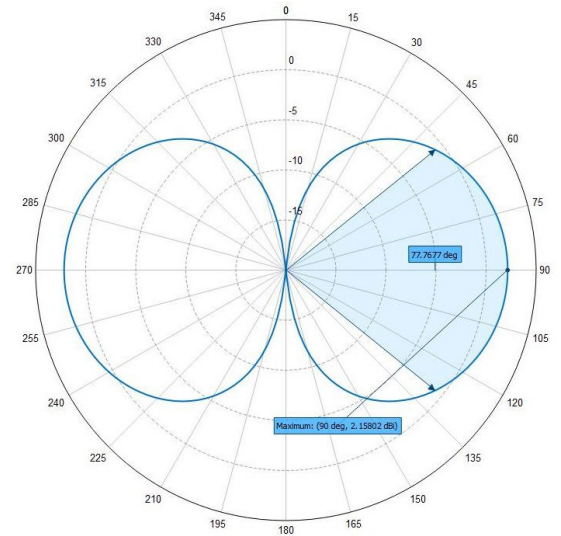


# ANT-2005

## S-Band Omni Gooseneck Antenna

### Features

- ▶ S-Band Antenna
- ▶ Handles up to 50W power
- ▶ Sleeve Dipole
- ▶ Broad Band Coverage
- ▶ Omni Radiation Pattern
- ▶ Integrated RF Co-Axial Gooseneck
- ▶ Black Chrome Non-Rotating RP-TNC Male Connector



**Elevation Pattern**  
Referenced to +5dBi

### Specifications

|                             |                        |
|-----------------------------|------------------------|
| <b>Frequency</b>            | 2.1 - 2.5 GHz          |
| <b>Gain</b>                 | 2.15 dBi               |
| <b>VSWR</b>                 | <2:1                   |
| <b>Impedance</b>            | 50 Ohms                |
| <b>Polarization</b>         | Vertical               |
| <b>Omni or Directional</b>  | Omni                   |
| <b>Horizontal Beamwidth</b> | 360°                   |
| <b>Vertical Beamwidth</b>   | 77°                    |
| <b>RF Connector Type</b>    | RP-TNC(m) Non-Rotating |
| <b>RF Connector Finish</b>  | Black Chrome           |
| <b>Length</b>               | 7.07 in / 18 cm        |
| <b>Radome Diameter</b>      | 0.562 in / 1.4 cm      |
| <b>Radome Length</b>        | 3.53 in / 9 cm         |
| <b>Gooseneck Diameter</b>   | 0.350 in / 0.89 cm     |
| <b>Gooseneck Length</b>     | 3 in / 7.6 cm          |
| <b>Weight</b>               | 1.8 oz / 51 g          |

**ONE SOLUTION. INFINITE POSSIBILITIES.**

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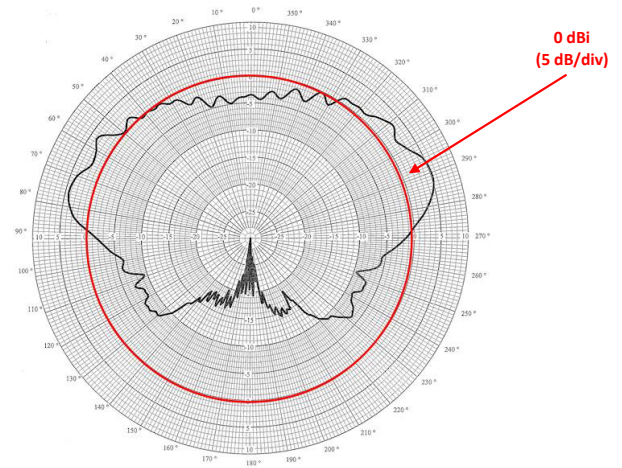
# ANT-2013

## 2.2 - 2.5 GHz 3 dBi Blade Antenna

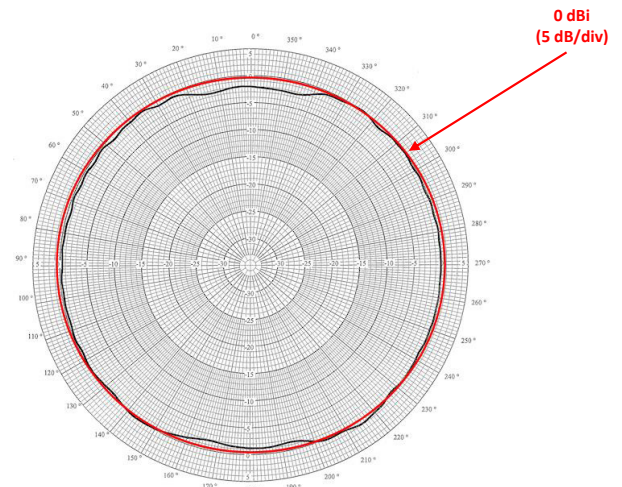


### Specifications

|                         |                                                              |
|-------------------------|--------------------------------------------------------------|
| <b>Frequency</b>        | 2.20 - 2.50 GHz                                              |
| <b>Gain</b>             | 3 dBi                                                        |
| <b>Polarization</b>     | Vertical                                                     |
| <b>Horiz. Beamwidth</b> | 360°                                                         |
| <b>Vert. Beamwidth</b>  | 35°                                                          |
| <b>Max. VSWR</b>        | 1.75:1                                                       |
| <b>Typ. VSWR</b>        | 1.50:1                                                       |
| <b>5kW Altitude</b>     | 110                                                          |
| <b>Peak Power</b>       | 350W                                                         |
| <b>Height</b>           | 1.19 in.<br>3.02 cm                                          |
| <b>Length</b>           | 3 in.<br>7.6 cm                                              |
| <b>Weight</b>           | 0.7 oz.<br>20 g                                              |
| <b>Connector</b>        | SMA Female                                                   |
| <b>Mounting</b>         | 82° Flathead #4 Standard; 100°<br>Flathead #4 or M3 optional |



**Elevation**  
2.250 GHz



**Azimuth**  
2.250 GHz

**ONE SOLUTION. INFINITE POSSIBILITIES.**

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**ISO 9001:2008**

**MADE IN USA**



## ANT-2034



### Specifications:

- ▶ 3.5 in. / 8.9 cm
- ▶ 0.76 oz. / 21.5 g
- ▶ 2.1 - 2.5 GHz
- ▶ 2.15 dBi
- ▶ Vertical Polarization
- ▶ SMA Male

**2.1 - 2.5 GHz 2.15 dBi Omnidirectional Stub Antenna**



STANDARD LEAD TIME





RELEASABLE



## THE WORLD'S FIRST SMART RADIO

Onboard Android™ OS - The MPU5 is Your Computer

Install Existing Android™ Apps

Run Custom Apps Natively

Connect & Use USB Devices

## STAY CONNECTED ANYWHERE

Powered by Wave Relay® MANET - The World's Most Advanced MANET

Designed for Mass Scalability - No Hop Limits

Rapid Self-Forming & Self-Healing

True Peer-to-Peer - No Master Node

## CARRY LESS. DO MORE.

Network, Voice, Video, Computer – All in One Device

Eliminate Extra Batteries, Radios, Encoders, Receivers & More

More Room for Mission Critical Equipment

## INTERCHANGEABLE FREQUENCY MODULE

State-of-the-Art MIMO Technology

High Reliability in Complex Environments

Cost Efficient and Future-Proof

## STREAM HD VIDEO

Fully Integrated H.264 HD Video Encoding/Decoding

Connect Video Cameras Directly to the Unit

View Multiple Video Streams Simultaneously

HD Output Enabling Simple Connection to HDMI-compatible Displays

Stream Video and Voice Simultaneously

## RELIABLE VOICE COMMUNICATIONS

Monitor up to 16 Channels of Voice

Dual Active PTT Voice - Key 2 Channels at Once

Voice Channel Prioritization & Configurable Talk Groups

## INTELLIGENT RoIP TETHERING

Integrated Radio Over IP (RoIP) Functionality

Bring your LMR Radio onto the Network

Communicate Across Separate Organizations Seamlessly

# ONE SOLUTION. INFINITE POSSIBILITIES.

 **PERSISTENT SYSTEMS**

Android™ is a trademark of Google Inc.





# MPU5

THE WORLD'S FIRST SMART RADIO

## PHYSICAL SPECIFICATIONS

- 1.5 x 2.6 x 4.6 in / 3.8 x 6.7 x 11.7 cm
- 13 oz / 368.5 g

### VIDEO

HD-BNC Connection  
3G-SDI & Composite Input  
Integrated HD H.264 Video  
Encoding/Decoding

### GPS

3.3V Active  
Situational Awareness  
Cursor-on-Target Compliant  
1 Second Updates

### FREQUENCY MODULE

Interchangeable Frequency Module (Ordered Separately)

**RF-1100** - L-Band Frequency Range: 1350 - 1390 MHz

**RF-2100** - S-Band Frequency Range: 2200 - 2500 MHz

**RF-4100** - Lower C-Band Freq. Range: 4435 - 4980 MHz

RF Modulations: OFDM (64-QAM, 16-QAM, QPSK, BPSK)

6W Transmit Power\*

Software configurable bandwidths: 5 MHz, 10 MHz, 20 MHz

TX/RX Operating Modes: All modes from SISO to 3x3 MIMO

### WR-5100

MPU5 Chassis

### 3x3 MIMO TECHNOLOGY

Extended Range - LOS and BLOS  
100+ Mbps of throughput  
Maximal Ratio Combining  
Spatial Multiplexing

### PTT / EUD

Dual Active PTT Channels  
End User Device (EUD) Data / Charging  
USB Host / RS-232 Serial  
HD Video Output  
Charging Downstream Port (CDP): Rated for 1,500mA

### DATA

USB On-the-Go  
RS-232 Serial  
Ethernet  
HD Video Input  
Standard Charging Port (SDP): Rated for 500mA

### POWER

Low Battery Alert  
Standard Twist-Lock Connector  
8 - 28 VDC

### INTELLIGENT RoIP

Legacy Radio Tethering  
Legacy Radio Detection  
USB Host / RS-232 Serial  
Standard Charging Port (SDP): Rated for 500mA

## NETWORKING

- Advanced Wave Relay® multicast algorithms
- Seamless Layer 2 network connectivity
- Integrated serial-to-Ethernet capability
- Cloud Relay™
- DLEP Certified
- IPv4 and IPv6 compatible
- Integrated DHCP server
- USB RNDIS Host and Device

## SECURITY

- Integrated Hardware Cryptographic Acceleration
- CTR-AES-256 Encryption
- HMAC-SHA-256 Authentication & Integrity
- Utilizes Suite-B Algorithms
- Cryptographically authenticated Over-the-Air Rekey and Key Zero
- Rechargeable 30 Day Hold-Up for Keys and Configuration Settings

## MANUFACTURING & ENVIRONMENTAL

- IP68 Rated
- MIL-STD Certified
- Anodized Black Coating
- Operating temperature: -40° to 85° C / -40° to 185° F
- Designed and manufactured in USA
- ISO 9001:2008 certified manufacturing facility

\*6W for Military and International sales only

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**EXHIBIT C:**  
**Current FCC License, Call Sign KA97185**



# Federal Communications Commission

Wireless Telecommunications Bureau

## RADIO STATION AUTHORIZATION

LICENSEE: BELL HELICOPTER TEXTRON INC

ATTN: MARK STOUFFLET  
BELL HELICOPTER TEXTRON INC  
PO BOX 482  
FORT WORTH, TX 76101

|                                                     |                 |                                  |
|-----------------------------------------------------|-----------------|----------------------------------|
| <b>Call Sign</b><br>KA97185                         |                 | <b>File Number</b><br>0008668331 |
| <b>Radio Service</b><br>AF - Aeronautical and Fixed |                 |                                  |
| <b>Station Class</b><br>FMA1                        |                 |                                  |
| <b>Coast Id</b>                                     | <b>Sel Call</b> | <b>Aviation Id</b>               |

FCC Registration Number (FRN): 0003596020

|                                 |                                     |                                      |                                 |
|---------------------------------|-------------------------------------|--------------------------------------|---------------------------------|
| <b>Grant Date</b><br>11-25-2019 | <b>Effective Date</b><br>11-25-2019 | <b>Expiration Date</b><br>06-10-2024 | <b>Print Date</b><br>11-27-2019 |
|---------------------------------|-------------------------------------|--------------------------------------|---------------------------------|

## STATION TECHNICAL SPECIFICATIONS

### Fixed Location Address or Mobile Area of Operation

- Loc. 1 Area of operation**  
Operating within a 320.0 km radius around 33-37-35.0 N, 116-09-36.0 W,  
Thermal, RIVERSIDE county, CA  
**No. of units:** Aircraft: 24
- Loc. 2 Area of operation**  
Operating within a 320.0 km radius around 35-11-39.0 N, 106-34-30.0 W,  
Albuquerque, BERNALILLO county, NM  
**No. of units:** Aircraft: 24
- Loc. 3 Area of operation**  
Operating within a 320.0 km radius around 37-29-04.0 N, 105-52-03.0 W,  
Alamosa, ALAMOS county, CO  
**No. of units:** Aircraft: 24
- Loc. 4 Area of operation**  
Operating within a 320.0 km radius around 39-13-13.0 N, 106-19-03.0 W,  
Leadville, LAKE county, CO  
**No. of units:** Aircraft: 24
- Loc. 5 Area of operation**  
Operating within a 320.0 km radius around 35-12-49.0 N, 101-42-31.0 W,  
Amarillo, POTTER county, TX  
**No. of units:** Aircraft: 24

### Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

Licensee Name: BELL HELICOPTER TEXTRON INC

Call Sign: KA97185

File Number: 0008668331

Print Date: 11-27-2019

**Fixed Location Address or Mobile Area of Operation**

- Loc. 6 Area of operation**  
Operating within a 320.0 km radius around 32-40-00.0 N, 097-05-53.0 W,  
Arlington, TARRANT county, TX  
**No. of units:** Aircraft: 24
- Loc. 7 Area of operation**  
Operating within a 320.0 km radius around 34-32-20.0 N, 114-20-33.0 W,  
Lake Havasu City, MOHAVE county, AZ  
**No. of units:** Aircraft: 24
- Loc. 8 Area of operation**  
Operating within a 320.0 km radius around 64-48-57.6 N, 147-51-40.6 W,  
Fairbanks, FAIRBANKS NORTH STAR county, AK  
**No. of units:** Aircraft: 24
- Loc. 9 Area of operation**  
Operating within a 320.0 km radius around 48-33-56.9 N, 093-24-08.5 W,  
International Falls, KOOCHICHING county, MN  
**No. of units:** Aircraft: 24
- Loc. 10 Area of operation**  
Operating within a 320.0 km radius around 38-49-24.7 N, 106-07-37.3 W,  
Buena Vista, CHAFFEE county, CO  
**No. of units:** Aircraft: 24
- Loc. 11 Area of operation**  
Operating within a 320.0 km radius around 32-39-10.5 N, 114-37-20.4 W,  
Yuma, YUMA county, AZ  
**No. of units:** Aircraft: 24

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**Antennas**

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 1       | 1       | 000123.20000000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 1       | 1       | 000123.47500000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 1       | 2       | 001440.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 001464.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |



Licensee Name: BELL HELICOPTER TEXTRON INC

Call Sign: KA97185

File Number: 0008668331

Print Date: 11-27-2019

**Antennas**

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 1       | 2       | 001468.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 001472.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 001480.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 001490.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 001498.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 001505.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 001512.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 002363.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 002371.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 002378.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 002387.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

Licensee Name: BELL HELICOPTER TEXTRON INC

Call Sign: KA97185

File Number: 0008668331

Print Date: 11-27-2019

**Antennas**

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 1       | 2       | 001445.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 001491.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 1       | 2       | 001514.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 1       | 000123.20000000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 2       | 1       | 000123.47500000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 2       | 2       | 001440.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 001464.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 001468.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 001472.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 001480.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 001490.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

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Call Sign: KA97185

File Number: 0008668331

Print Date: 11-27-2019

Antennas

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 2       | 2       | 001498.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 001505.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 001512.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 002363.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 002371.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 002378.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 002387.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 001445.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 001491.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 2       | 2       | 001514.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 1       | 000123.20000000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |

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**Antennas**

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 3       | 1       | 000123.47500000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 3       | 2       | 001464.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 001468.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 001472.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 001480.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 001490.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 001498.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 001505.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 001512.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 002363.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 002371.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

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Antennas

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 3       | 2       | 002378.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 002387.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 001440.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 001445.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 001491.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 3       | 2       | 001514.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 1       | 000123.20000000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 4       | 1       | 000123.47500000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 4       | 2       | 001440.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 001464.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 001468.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

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**Antennas**

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 4       | 2       | 001472.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 001480.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 001490.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 001498.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 001505.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 001512.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 002363.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 002371.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 002378.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 002387.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 001445.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |



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**Antennas**

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 4       | 2       | 001491.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 4       | 2       | 001514.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 5       | 1       | 000123.20000000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 5       | 1       | 000123.47500000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 5       | 2       | 001464.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 5       | 2       | 001468.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 5       | 2       | 001472.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 5       | 2       | 001480.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 5       | 2       | 001490.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 5       | 2       | 001498.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 5       | 2       | 001505.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

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**Print Date:** 11-27-2019

**Antennas**

| <b>Loc No.</b> | <b>Ant No.</b> | <b>Frequencies (MHz)</b> | <b>Emission Designator</b>    | <b>Output Power (watts)</b> | <b>Hours of Operation</b> | <b>Ant. Ht./Tp meters</b> | <b>Construct Deadline Date</b> |
|----------------|----------------|--------------------------|-------------------------------|-----------------------------|---------------------------|---------------------------|--------------------------------|
| 5              | 2              | 001512.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 5              | 2              | 002363.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 5              | 2              | 002371.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 5              | 2              | 002378.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 5              | 2              | 002387.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 5              | 1              | 000123.37500000          | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000                      |                           |                           |                                |
| 5              | 2              | 001440.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 5              | 2              | 001445.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 5              | 2              | 001491.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 5              | 2              | 001514.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 5              | 2              | 001450.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |

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**Antennas**

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 5       | 2       | 001460.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 5       | 2       | 001470.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 5       | 2       | 001500.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 5       | 2       | 001510.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 5       | 2       | 001520.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 1       | 000123.20000000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 6       | 1       | 000123.47500000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 6       | 2       | 001440.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001464.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001468.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001472.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

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**Antennas**

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 6       | 2       | 001480.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001490.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001498.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001505.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001512.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 002363.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 002371.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 002378.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 002387.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 1       | 000123.27500000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 6       | 1       | 000123.52500000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |

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| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 6       | 1       | 000123.55000000   | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000               |                    |                    |                         |
| 6       | 1       | 000123.41670000   | 5K00A3E<br>5K60A3E            | 25.000               |                    |                    |                         |
| 6       | 2       | 001445.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001491.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001514.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001450.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001460.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001470.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001500.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001510.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 6       | 2       | 001520.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

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| <b>Loc No.</b> | <b>Ant No.</b> | <b>Frequencies (MHz)</b> | <b>Emission Designator</b>    | <b>Output Power (watts)</b> | <b>Hours of Operation</b> | <b>Ant. Ht./Tp meters</b> | <b>Construct Deadline Date</b> |
|----------------|----------------|--------------------------|-------------------------------|-----------------------------|---------------------------|---------------------------|--------------------------------|
| 7              | 1              | 000123.20000000          | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000                      |                           |                           |                                |
| 7              | 1              | 000123.47500000          | 5K00A3E<br>5K60A3E<br>6K00A3E | 25.000                      |                           |                           |                                |
| 7              | 2              | 002363.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 7              | 2              | 002371.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 7              | 2              | 002378.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 7              | 2              | 002387.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 7              | 2              | 001440.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 7              | 2              | 001464.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 7              | 2              | 001468.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 7              | 2              | 001472.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |
| 7              | 2              | 001480.50000000          | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000                      |                           |                           |                                |

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| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 7       | 2       | 001490.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 7       | 2       | 001498.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 7       | 2       | 001505.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 7       | 2       | 001512.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 7       | 2       | 001445.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 7       | 2       | 001491.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 7       | 2       | 001514.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 001440.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 001445.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 001464.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 001468.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

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Print Date: 11-27-2019

**Antennas**

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 8       | 1       | 001472.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 001480.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 001490.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 001491.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 001498.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 001505.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 001512.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 001514.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 002363.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 002371.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 8       | 1       | 002378.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |



Licensee Name: BELL HELICOPTER TEXTRON INC

Call Sign: KA97185

File Number: 0008668331

Print Date: 11-27-2019

**Antennas**

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 8       | 1       | 002387.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 001440.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 001445.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 001464.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 001468.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 001472.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 001480.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 001490.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 001491.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 001498.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 001505.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

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**Antennas**

| Loc No. | Ant No. | Frequencies (MHz) | Emission Designator           | Output Power (watts) | Hours of Operation | Ant. Ht./Tp meters | Construct Deadline Date |
|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 9       | 1       | 001512.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 001514.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 002363.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 002371.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 002378.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 9       | 1       | 002387.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 001440.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 001445.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 001464.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 001468.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 001472.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

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|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 10      | 1       | 001480.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 001490.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 001491.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 001498.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 001505.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 001512.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 001514.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 002363.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 002371.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 002378.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 10      | 1       | 002387.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

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|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 11      | 1       | 001440.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 001445.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 001464.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 001468.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 001472.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 001480.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 001490.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 001491.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 001498.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 001505.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 001512.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

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|---------|---------|-------------------|-------------------------------|----------------------|--------------------|--------------------|-------------------------|
| 11      | 1       | 001514.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 002363.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 002371.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 002378.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |
| 11      | 1       | 002387.50000000   | 10M4F9D<br>19M2F9D<br>7M50F2D | 25.000               |                    |                    |                         |

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#### Control Points

##### Control Pt. No. 1

Address: 600 E. Hurst Blvd.

City: Hurst County: TARRANT State: TX Telephone Number: (817)280-7984

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#### Associated Call Signs

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#### Waivers/Conditions:

LOCATION 1: USE OF THIS FREQUENCY OR BAND UNDER THE AUTHORITY OF THIS ASSIGNMENT IS SUBJECT TO FURTHER COORDINATION WITH THE WAFC, AS NECESSARY TO ENSURE COMPATIBILITY WITH THE EXISTING USES. DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD 0180,AGL.

LOCATION 7: DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD 0180,AGL. USE OF THIS FREQUENCY OR BAND UNDER THE AUTHORITY OF THIS ASSIGNMENT IS SUBJECT TO FURTHER COORDINATION WITH THE AFC, FT. HUACHUCA, ARIZONA AND THE WHITE SANDS AREA FREQUENCY COORDINATOR (AFC WSMR), AS NECESSARY TO ENSURE COMPATIBILITY WITH THE EXISTING USES.AS NECESSARY TO ENSURE COMPATIBILITY WITH THE EXISTING USES.

**Licensee Name:** BELL HELICOPTER TEXTRON INC

**Call Sign:** KA97185

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Licensee must coordinate with other users as necessary, to minimize interference.

Renewal of this station is subject to prior coordination with AFTRCC Frequency Advisory Committee at: [www.aftfcc.org](http://www.aftfcc.org)

LOCATION 2: USE OF THIS FREQUENCY OR BAND UNDER THE AUTHORITY OF THIS ASSIGNMENT IS SUBJECT TO FURTHER COORDINATION WITH THE WHITE SANDS AREA FREQUENCY COORDINATOR (AFC WSMR), AS NECESSARY TO ENSURE COMPATIBILITY WITH THE EXISTING USES. DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD 0180,AGL.

LOCATION 8: PRE-SCHEDULING IS REQUIRED WITH JOINT FREQUENCY MANAGEMENT OFFICE ALASKA COMBINED HEADQUARTERS ANR-ALCOM (CHQ ANR-ALCOM) AS NECESSARY. DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD 0180,AGL.

LOCATION 3: DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD 0180,AGL. USE OF THIS FREQUENCY UNDER THE AUTHORITY OF THIS ASSIGNMENT IS SUBJECT TO FURTHER COORDINATION WITH AFMO CONUS, FT SAM HOUSTON, TEXAS,AS NECESSARY TO ENSURE COMPATIBILITY WITH EXISTING USES.

LOCATION 4: DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD 0180,AGL. USE OF THIS FREQUENCY UNDER THE AUTHORITY OF THIS ASSIGNMENT IS SUBJECT TO FURTHER COORDINATION WITH AFMO CONUS, FT. SAM HOUSTON, TEXAS,AS NECESSARY TO ENSURE COMPATIBILITY WITH EXISTING USES.

LOCATION 5: DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD 0180,AGL. USE OF THIS FREQUENCY UNDER THE AUTHORITY OF THIS ASSIGNMENT IS SUBJECT TO FURTHER COORDINATION WITH AFMO CONUS, FT. SAM HOUSTON, TEXAS AND THE WHITE SANDS AREA FREQUENCY COORDINATOR (AFC WSMR), AS NECESSARY TO ENSURE COMPATIBILITY WITH EXISTING USES.

LOCATION 6: DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD 0180,AGL. USE OF THIS FREQUENCY UNDER THE AUTHORITY OF THIS ASSIGNMENT IS SUBJECT TO FURTHER COORDINATION WITH AFMO CONUS, FT SAM HOUSTON, TEXAS,AS NECESSARY TO ENSURE COMPATIBILITY WITH EXISTING USES.

LOCATION 9: DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD 0180,AGL. USE OF THIS FREQUENCY UNDER THE AUTHORITY OF THIS ASSIGNMENT IS SUBJECT TO FURTHER COORDINATION WITH AFMO CONUS, FT SAM HOUSTON, TEXAS, AS NECESSARY TO ENSURE COMPATIBILITY WITH EXISTING USES.

LOCATION 10: DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD 0180,AGL. USE OF THIS FREQUENCY UNDER THE AUTHORITY OF THIS ASSIGNMENT IS SUBJECT TO FURTHER COORDINATION WITH AFMO CONUS, FT. SAM HOUSTON, TEXAS, AS NECESSARY TO ENSURE COMPATIBILITY WITH EXISTING USES.

**Licensee Name:** BELL HELICOPTER TEXTRON INC

**Call Sign:** KA97185

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LOCATION 11: DURING TRANSMISSION, AIRCRAFT SHALL NOT EXCEED THE ALTITUDE LISTED IN THE CIRCUIT REMARKS FIELD 0180,AGL. USE OF THIS FREQUENCY OR BAND UNDER THE AUTHORITY OF THIS ASSIGNMENT IS SUBJECT TO FURTHER COORDINATION WITH THE AFC, FT. HUACHUCA, ARIZONA, AS NECESSARY TO ENSURE COMPATIBILITY WITH THE EXISTING USES.

Official  
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