LICENCE No.: SL-0041PR-1-07



## SPECTRUM LICENCE

[ISSUED UNDER PART IV OF THE TELECOMMUNICATIONS ORDINANCE 2009]

ISSUED TO: BLUE HERON AVIATION LTD.

ISSUED ON: NOVEMBER 6, 2014



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This **Spectrum Licence** ("the Licence") dated **November 6, 2014** is issued by the **Turks and Caicos Islands Telecommunications Commission** ("the Commission") in accordance with Section 35 of the Telecommunications Ordinance 2009 to **Blue Heron Aviation Ltd.** A company duly incorporated in the Turks and Caicos Islands ("the Licensee").

## Interpretation

1. In this Licence unless the context requires otherwise:

"assigned radio spectrum" means the radio frequencies assigned in the Schedule;

"harmful interference" means interference that is or is likely to: (a) cause loss or damage to any person; (b) impair the normal operation of a licensed radiocommunication service or apparatus; (c) corrupt a message conveyed by any such service or apparatus (d) endanger the functioning of a radio navigation service or of other safety services;

"interference" means the prejudicing by emissions or reflections from the Licensee's radiocommunication station or apparatus of any of the forms of electromagnetic energy or the fulfillment of the purposes for which a terrestrial technical system is installed or maintained;

"international standards body" means the International Telecommunication Union (ITU), the International Organization for Standardization (ISO), the International Electrotechnical Committee (IEC), the American Standards Organizations, the European Standards Organization and any other body that may be specified by the Commission to be an international standards body;

"Licensed Service" means the services authorized to be provided under this Licence;

"Ordinance" means the Telecommunications Ordinance 2004 and includes the regulations made under it;

"radiocommunication station" means a site upon which radiocommunication apparatus is deployed, including any vehicle, ship or aircraft;

"Spectrum Plan" means the Turks and Caicos Islands Table of Frequency Allocations published by the Commission under the Ordinance;

"Technical Conditions" means the conditions relating to radiated power limits, technical standards, modulation techniques or other characteristics established by international standards bodies that apply to the use of the assigned radio spectrum.

- 2. Any word, phrase or expression used in this Licence shall, unless the context requires otherwise, have the same meaning that it has in the Ordinance.
- 3. Words importing the singular include the plural and vice versa. All references to legislation are deemed to refer to such legislation as amended or re-enacted from time to time.

#### Scope of the Licence

- 4. The Licensee is authorized to use the assigned radio spectrum in accordance with the Spectrum Plan; to install, operate and use the radiocommunications apparatus identified in Schedule II for the operation of its Licensed Service. The Licensee may not use the assigned radio spectrum for any other purpose.
- 5. The Licensee is authorized to use of the radio frequencies in its assigned radio spectrum for the period of validity mentioned in Schedule I for each of the radio frequencies.
- 6. This Licence replaces any spectrum licence that may have been granted to the Licensee by the Commission or any other person in the past.

You

#### **Payment of Licence Fees**

7. The Licensee shall pay to the Commission in respect of the radio frequencies in its assigned radio spectrum the fees that are applicable to those frequencies under the Telecommunications Fee Structure Regulations.

### Use of Spectrum and Apparatus

- 8. The Licensee shall ensure that its use of the assigned radio spectrum or radiocommunication apparatus authorised by this Licence does not cause harmful interference to any other licensed radiocommunication service or radiocommunication apparatus.
- 10. This licence may be revoked in the event that the Licensee does not commence, use or operate the radiocommunication service or radiocommunication apparatus authorized by this licence within nine (9) months of the effective date.
- 11. The Licensee shall ensure that its radiocommunication apparatus are adequately protected from interference that may be caused by other radiocommunication stations and apparatus operating in the same geographical area or radio frequency band, or in adjacent geographical areas or frequency bands.
- 12. The Licensee shall ensure that its use of the assigned radio spectrum, radiocommunication station or radiocommunication apparatus authorised by this Licence does not cause any danger to the public.
- 13. The Licensee shall ensure that its radiocommunication service and apparatus complies with relevant Technical Conditions.
- 14. The Licensee shall assist the Commission in coordinating and managing the efficient use of radio frequencies with neighbouring countries.
- 15. The Licensee shall obtain all consents and approvals required under the Turks and Caicos Island laws before the commencement of any installation of its radiocommunication station or apparatus.
- 16. Where the Licensee's radiocommunication station or apparatus causes the emission of harmful interference or causes any other radiocommunication station or apparatus to emit harmful interference, the Licensee shall take such steps as the Commission may direct to remove the source of such harmful interference and furnish such information as the Commission may request concerning the interference. Before making a direction the Commission may consult the Licensee or any other person that it considers may be affected by the direction.
- 17. The Licensee shall investigate immediately upon being notified in writing by the Commission any complaint alleging that harmful interference has been, is being or is about to be emitted by its radiocommunication station or apparatus.
- 18. The Licensee shall ensure that all persons using its radiocommunication apparatus are made aware of the conditions of this Licence and comply with those conditions.
- 19. The Licensee shall keep accurate, up to date and detailed records of the operation of its radiocommunication apparatus and shall make this information available, promptly and without charge to the Commission.
- 20. The Licensee shall notify the Commission of any proposed material change to its radiocommunication station or apparatus and shall provide such information as the Commission may require for the purpose of assessing the effect of such change.
- 21. Upon receiving reasonable prior notice, the Licensee shall allow the Commission to inspect its radiocommunication station or apparatus and shall provide such assistance as the Commission may require verifying that the radiocommunication station or apparatus are in compliance with the conditions of this Licence.

22. The Licensee shall exhibit all notices and instructions given to it by the Commission at its radiocommunication station.

## Remedies for Non-Compliance

23. In the event of any failure by the Licensee to comply with the conditions of this Licence the Commission may take such action as it deems appropriate, including suspension and revocation of the Licence, in accordance with the provisions of the Ordinance.

## **Information Requirements**

24. The Licensee shall furnish to the Commission in such manner and at such times as the Commission may request in writing such information related to the activities of the Licensee under this Licence as the Commission may reasonably require in the performance of its functions.



# **SCHEDULE I**

# [Assigned Radio Spectrum]

License Services	Assigned Frequency (MHz)	Bandwidth	Type of Service	Coverage Area	Emission Power Level (Watts)	Period of Validity	
						From	То
Aeronautical Air-to-Ground	122.0000 MHz	25 KHz	VHF	Country	36	Nov 06, 2014	Nov 06, 2029
Land Mobile	458.1000 MHz	12.5 KHz	UHF	Country	4	Nov 06, 2014	Nov 06, 2029



#### **SCHEDULE II**

# [Base Station Information]

Station Index

1

Station Location:

Blue Heron Aviation FBO

Providenciales, Turks and Caicos

Station Coverage Zone:

Providenciales

Station Administration:

**TCI Telecommunication Commission** 

Sub-Type

**Base Station** 

Station Operation Time: From

00:00

To

24:00

Station Identical licenses:

1

Multi-Station Type:

None

Tolerance:

N/A

Coverage Radius:

50

Location Latitude hemisphere

N

Location Longitude hemisphere

. . . .

**Location Latitude** 

IV

21046'19.05"

Location Longitude

W

72 016'18.83"

Natural Modulation

Voice

Operation Type

Single frequency simplex

Number of Base Radios

1

Maximum Transmit Power

36 Watts

**Emission Designator** 

F1EGF

Bandwidth

25 kHz

RX Antenna Parameters

TX Antenna Parameters

Pattern:

Omni

Omni

Polarization:

N/A

N/A

Manufacturer:

Radiall Larsen

Radiall Larsen

Model No:

B-Ant

B-Ant

Azimuth Beam width:

N/A

N/A

Vertical Beam Width:

N/A

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Gain:

....

N/A

.....

0 dbd

0 dbd

Above Sea Level:

N/A

N/A

Elevation angle:

N/A

N/A

Above Ground Height:

N/A

N/A

Azimuth Angle:

N/A

N/A

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RX Radio Type TX Radio Type

Manufacturer: Icom Icom

Model Number: A110 A110

Minimum Frequency: 118.000000 MHz 118.000000 MHz

*Maximum Frequency:* 136.975000 MHz 136.975000 MHz

**Power Output:** 36 Watts 36 Watts

Certification: N/A N/A

#### **SCHEDULE II**

## [Portable Station Information]

Station Index 2

Station Location: Blue Heron Aviation FBO

Providenciales, Turks and Caicos

Station Coverage Zone: Providenciales

Station Administration: TCI Telecommunication Commission

Sub-Type Portable Station

Station Operation Time: From 00:00

*To* 24:00

Station Identical licenses: 1

Multi-Station Type: None

Tolerance: N/A

Coverage Radius: 50

Location Latitude hemisphere N

Location Longitude hemisphere W

Location Latitude N 21°46′19.05"

Location Longitude W 72 °16'18.83"

Natural Modulation Voice

Operation Type Single frequency simplex

Number of Portable Radios 6

Maximum Transmit Power 4 Watts

Emission Designator F1EGF

Bandwidth 12.5 kHz

RX Antenna Parameters TX Antenna Parameters

Pattern: Omni Omni

Polarization: Horizontal Horizontal

Manufacturer: RCA RCA

Model No: BR250U BR250U

Azimuth Beam width: N/A N/A

Vertical Beam Width: N/A N/A

Gain: 0 dbd 0 dbd

Above Sea Level: N/A N/A

Elevation angle: N/A N/A

Above Ground Height: N/A N/A

Azimuth Angle: N/A N/A

RX Radio Type

TX Radio Type

Manufacturer:

RCA

RCA

Model Number:

BR250U

BR250U

Minimum Frequency:

450.000000 MHz

450.000000 MHz

Maximum Frequency:

470.000000 MHz

470.000000 MHz

Power Output:

4 Watts

4 Watts

Certification:

N/A

N/A

De Cott

#### ATTESTATION CLAUSES

Name: HEATHER ALLEN Position: CHAIRMAN

Signature:

For and on behalf of the

**Turks and Caicos Islands Telecommunications Commission** 

Name:

ROGER K MURPHY.

Signature:

Position:

For and on behalf of Blue Heron Aviation Ltd.