LICENCE No.: SL-0012PR-1-10



## **AERONAUTICAL MOBILE RADIO & SPECTRUM LICENCE**

[ISSUED UNDER PART IV OF THE TELECOMMUNICATIONS ORDINANCE 2014]

ISSUED TO: ARINC TURKS AND CAICOS LTD

ISSUED ON: MARCH 4, 2008

**AMENDED: AUGUST 10, 2018** 

# TABLE OF CONTENTS

# LICENCE

Interpretation	3
Scope of the Licence	3
Payment of Licence Fees	4
Use of Spectrum and Apparatus	4
Remedies for Non-Compliance	5
Information Requirements	5
SCHEDULE I [Assigned Radio Spectrum]	6
SCHEDULE II [Station Information]	7-13
ATTESTATION CLAUSES	14

to P.A.

This **Spectrum Licence** ("the Licence") dated **March 4, 2008** is issued by the **Turks and Caicos Islands Telecommunications Commission** ("the Commission") in accordance with Section 35 of the Telecommunications Ordinance 2014 to **ARINC Turks and Caicos Ltd.** A company duly incorporated in the Turks and Caicos Islands ("the Licensee").

## Interpretation

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.

Ins P.A.

## 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**

- 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.
- 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.
- 9. 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.
- 10. 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.
- 11. The Licensee shall ensure that its radiocommunication service and apparatus complies with relevant Technical Conditions.
- 12. The Licensee shall assist the Commission in coordinating and managing the efficient use of radio frequencies with neighbouring countries.
- 13. 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.
- 14. 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.
- 15. 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.
- 16. 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.
- 17. 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.
- 18. 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.

the p.A.

- 19. 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.
- 20. The Licensee shall exhibit all notices and instructions given to it by the Commission at its radiocommunication station.

# **Remedies for Non-Compliance**

21. 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**

22. 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.

fre P.A.

# **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
Private Network/ Air to ground operations data-link	136.975 MHz	25MHz	VHF	Providenciales International Airport	25	Mar 4, 2008	Mar 4, 2023
Private Network/ Air to ground operations data-link	131.550 MHz	25MHz	VHF	Providenciales International Airport	25	Mar 4, 2008	Mar 4, 2023
Private Network/ Air to ground operations data-link	130.700 MHz	25MHz	VHF	Providenciales International Airport	25	Jan 18, 2012	Mar 4, 2023

har P.A.

#### **SCHEDULE II**

## [Base Station Information]

Station Index

1

Station Location:

Providenciales International Airport

Station Coverage Zone:

Providenciales

Station Administration:

TCI Telecommunication Commission

Sub-Type

Data Link Station

Station Operation Time: From

00:00

To

24:00

Station Identical licenses:

1

Multi-Station Type:

N/A

Tolerance:

N/A

Coverage Radius:

50

Location Latitude hemisphere

N

Location Longitude hemisphere

W

Location Latitude

V

21046'25"

**Location Longitude** 

W

72 015'57"

Natural Modulation

Data-link

**Operation Type** 

Private Network / Air to ground operations data-link

Number of Base Radios

1

**Emission Designator** 

13K0A2D

Bandwidth

25 kHz

RX Antenna Parameters

TX Antenna Parameters

Pattern:

Omni

Omni

Polarization:

Vertical

Vertical

Manufacturer:

Comtelco BS100U Comtelco BS100U

Model No:

THE OWNER WAY

n/a

Azimuth Beam width: Vertical Beam Width: n/a n/a

n/a

Gain:

1 dB

1 dB

Above Sea Level:

-

n/a

n/a

Elevation angle:

Above Ground Height:

75ft

75ft

30 ft

30 ft

Azimuth Angle:

N/A

N/A

Iny P.A

RX Radio Type

TX Radio Type

Manufacturer:

Park Air

Park Air

Model Number:

5525D-8

5525D-8

Minimum Frequency:

118.000000 MHz

118.000000 MHz

Maximum Frequency:

137.000000 MHz

137.000000 MHz

Power Output:

25 Watt

25 Watt

Certification:

C8L5525-D8

C8L5525-D8

# [Base Station Information]

Station Index

2

Station Location:

Providenciales International Airport

Station Coverage Zone:

Providenciales

Station Administration:

TCI Telecommunication Commission

Sub-Type

Data-link Station

Station Operation Time: From

00:00

To

24:00

Station Identical licenses:

.

Multi-Station Type:

N/A

Tolerance:

N/A

Coverage Radius:

50

Location Latitude hemisphere

Location Longitude hemisphere

N

Location Latitude

A.T

21046'25"

**Location Longitude** 

W

72 015'57"

Natural Modulation

Data-link

Operation Type

Private Network / Air to ground operations data-link

Number of Base Radios

1

**Emission Designator** 

14K0G1D

Bandwidth

25 kHz

RX Antenna Parameters

TX Antenna Parameters

Pattern:

Omni

Omni

Polarization:

Vertical

Vertical

Manufacturer:

Comtelco

Comtelco

Model No:

BS100U

BS100U

Azimuth Beam width:

n/a

n/a

Vertical Beam Width:

n/a

n/a

fro P.A

Gain:

1 dB

1 dB

Above Sea Level:

n/a

n/a

Elevation angle:

75ft

75ft

Above Ground Height:

30 ft

30 ft

Azimuth Angle:

N/A

N/A

RX Radio Type

TX Radio Type

Manufacturer:

Park Air

Park Air

Model Number:

5525D-8

5525D-8

Minimum Frequency:

118.000000 MHz

118.000000 MHz

Maximum Frequency:

137.000000 MHz

137.000000 MHz

Power Output:

25 Watt

25 Watt

Certification:

C8L5525-D8

C8L5525-D8

# [Base Station Information]

Station Index

3

Station Location:

Providenciales International Airport

Station Coverage Zone:

Providenciales

Station Administration:

TCI Telecommunication Commission

Sub-Type

Voice-Station

Station Operation Time: From

00:00

To

24:00

Station Identical licenses:

1 N/A

Multi-Station Type:

N/A

Coverage Radius:

Tolerance:

50

Location Latitude hemisphere

N

Location Longitude hemisphere

W

Location Latitude

w

21°46'25" 72 °15'57"

Location Longitude

Natural Modulation

Data-link

Operation Type

Private Network / VHF Voice

Number of Base Radios

1

**Emission Designator** 

6K00A3E

Bandwidth

25 kHz

Ing P.A.

RX Antenna Parameters

TX Antenna Parameters

Pattern:

Omni

Omni

Polarization:

Vertical

Vertical

Manufacturer:

Comtelco

Comtelco

Model No:

BS100U

BS100U

Azimuth Beam width:

n/a

n/a

Vertical Beam Width:

75

75

Gain:

1 dB

30.50

Above Sea Level:

n/a

1 dB n/a

Elevation angle:

16ft

11,0

Above Ground Height:

30 ft

16ft 30 ft

Azimuth Angle:

N/A

N/A

RX Radio Type

TX Radio Type

Manufacturer:

Park Air Systems

Park Air Systems

Model Number:

6525

6525

Minimum Frequency:

118.000000 MHz

136.975000 MHz

118.000000 MHz 136.975000 MHz

Maximum Frequency:

25 Watt

25 Watt

Power Output: Certification:

C8LB6525MDR

C8LB6525MDR

# [Base Station Information]

Station Index

4

Station Location:

Providenciales International Airport

Station Coverage Zone:

Providenciales

Station Administration:

TCI Telecommunications Commission

Sub-Type

Data-Link Station

Station Operation Time: From

00:00

To

24:00

Station Identical licenses:

1

Multi-Station Type:

N/A

Tolerance:

N/A

Coverage Radius:

50

Imy P.A.

Page 10

Location Latitude hemisphere

N

Location Longitude hemisphere

W

Location Latitude

N

Location Longitude

W

21º 46' 34.5" 72º 16' 14.6"

Natural Modulation

Voice

**Operation Type** 

Private Network / Air to ground operations - data-link

Number of Base Radios

1

**Emission Designator** 

14K0G1D

Bandwidth

25 kHz

RX Antenna Parameters

TX Antenna Parameters

Pattern:

Omni

Omni

Polarization:

Vertical

Vertical

Manufacturer:

Taco

Taco

Model No:

D2212-S

D2212-S

Azimuth Beam width:

3600

3600

Vertical Beam Width:

100

100

Gain:

1.5 dB

1.5 dB

Above Sea Level:

n/a

n/a

Elevation angle:

n/a

n/a

Above Ground Height:

32.8 ft

32.8 ft

Azimuth Angle:

n/a

n/a

RX Radio Type

TX Radio Type

Manufacturer:

Park Air Systems

Park Air Systems

Model Number:

6525D8

6525D8

Minimum Frequency:

118.000000 MHz

118.000000 MHz

Maximum Frequency:

136.975000 MHz

136.975000 MHz

Power Output:

25 Watt

25 Watt

Certification:

N/A

N/A

fro P.A.

# [Base Station Information]

Station Index

5

Station Location:

Providenciales International Airport

Station Coverage Zone:

Providenciales

Station Administration:

TCI Telecommunications Commission

Sub-Type

Data-Link Station

Station Operation Time: From

00:00

To

24:00

Station Identical licenses:

1

Multi-Station Type:

N/A

Tolerance:

N/A

Coverage Radius:

50

Location Latitude hemisphere

Location Longitude hemisphere

N

Location Latitude

N

21046'34.5"

Location Longitude

W

720 16' 14.6"

Natural Modulation

Voice

**Operation Type** 

Private Network / Air to ground operations - data-link

Number of Base Radios

1

**Emission Designator** 

13K0A2D

Bandwidth

25 kHz

RX Antenna	Parameters
------------	------------

TX Antenna Parameters

Pattern:

Omni

Omni

Polarization:

Vertical

Vertical

Manufacturer:

Taco

Taco

Model No:

D2212-S

D2212-S

Azimuth Beam width:

360°

360°

Vertical Beam Width:

100

100

Gain:

1.5 dB

1.5 dB

Buch

n/a

Above Sea Level:

n/a

11/ a

Elevation angle:

n/a

n/a

Above Ground Height:

32.8 ft

32.8 ft

Azimuth Angle:

n/a

n/a

for8 P.A.

RX Radio Type

TX Radio Type

Manufacturer:

Park Air Systems

Park Air Systems

Model Number:

6525D8

6525D8

Minimum Frequency:

118.000000 MHz

118.000000 MHz

Maximum Frequency:

136.975000 MHz

136.975000 MHz

Power Output:

25 Watt

25 Watt

Certification:

N/A

N/A

fre P.A.

## ATTESTATION CLAUSES

Name: PRONO ANIZA

Position: CHAINMAN

For and on behalf of the

Turks and Caicos Islands Telecommunications Commission



Name: Lisa M. Groat

Position: Director

Signature: