Radiocommunications Regulations (General User Radio Licence for Aeronautical Purposes) Notice 2016

Pursuant to section 111 of the Radiocommunications Act 1989 and Regulation 9 of the Radiocommunications Regulations 2001, and acting under delegated authority from the chief executive, I give the following notice.

Notice

1. Short title and commencement—(1) This notice is the Radiocommunications Regulations (General User Radio Licence for Aeronautical Purposes) Notice 2016.

(2) This notice comes into force on **1 October 2016**.

2. Licence—

(1) Licence Name: General User Radio Licence for Aeronautical Purposes.

(2) Licence: Any person may operate aeronautical radio transmitters, including portable radio transmitters and on-board aircraft transmitters (but not including fixed or repeater transmitters), in accordance with the applicable terms, conditions and restrictions of this notice.

(3) Licence number: 254932

(4) Commencement date: **1 October 2016**.

3. Spectrum—

(1) Frequency ranges applicable to aeronautical radiocommunications purposes in the High Frequency (HF) band:

Low (MHz)	High (MHz)	Reference Frequency (MHz)	Maximum Power dBW e.i.r.p.	Remarks
2.8500	3.0250	2.9375	26	Special conditions 1, 3 and 4
3.0250	3.1550	3.0900	23	Special condition 2
3.4000	3.5000	3.4500	26	Special condition 1
4.6500	4.7000	4.6750	26	Special condition 1
4.7000	4.7500	4.7250	23	Special condition 2
5.4800	5.6800	5.5800	26	Special condition 1
5.6800	5.7300	5.7050	23	Special conditions 2, 3 and 4
6.5250	6.6850	6.6050	26	Special condition 1
6.6850	6.7650	6.7250	23	Special condition 2
8.8150	8.9650	8.8900	26	Special condition 1
8.9650	9.0400	9.0025	23	Special condition 2
10.0050	10.1000	10.0525	26	Special condition 1
11.1750	11.2750	11.2250	23	Special condition 2
11.2750	11.4000	11.3375	26	Special condition 1
13.2000	13.2600	13.2300	23	Special condition 2
13.2600	13.3600	13.3100	26	Special condition 1
15.0100	15.1000	15.0550	23	Special condition 2
17.9000	17.9700	17.9350	26	Special condition 1
17.9700	18.0300	18.0000	23	Special condition 2
21.9240	22.0000	21.9620	26	Special condition 1

(2) Frequency ranges applicable to aeronautical radiocommunications purposes in the Very High Frequency (VHF) band:

Low (MHz)	High (MHz)	Reference Frequency (MHz)	Maximum Power dBW e.i.r.p.	Remarks
117.9875	129.9875	123.9875	14	Special condition 5
119.0875	119.1125	119.1000	14	Special conditions 8 and 9
121.4875	121.5125	121.5000	14	Special condition 7
123.0875	123.1125	123.1000	14	Special condition 7
123.4375	123.4625	123.4500	14	Special condition 9
128.9375	128.9625	128.9500	14	Special condition 9
130.0000	136.0000	133.0000	14	Special conditions 6 and 10
136.0125	136.9875	136.5000	14	Special condition 6

(3) Frequency ranges applicable to on-board aircraft transmitters for satellite communication purposes:

Low (MHz)	High (MHz)	Reference Frequency (MHz)	Maximum Power dBW e.i.r.p.	Remarks
1610.00	1660.50	1635.25	25	Special condition 11
14000.00	14500.00	14250.00	56	Special condition 11
29500.00	30000.00	29750.00	62	Special conditions 11 and 12

(4) Frequency ranges applicable to on-board aircraft transmitters for aeronautical radionavigation and radiodetermination purposes:

Low (MHz)	High (MHz)	Reference Frequency (MHz)	Maximum Power dBW e.i.r.p.	Remarks
960.00	1215.00	1087.50	30	Special condition 13
4200.00	4400.00	4300.00	30	Special condition 14
5350.00	5470.00	5410.00	57	Special condition 15
8750.00	8850.00	8800.00	57	Special condition 16
9300.00	9500.00	9400.00	57	Special condition 15
13250.00	13400.00	13325.00	43	Special condition 16

4. Location—

(1) Transmit Location: All New Zealand.
(2) Receive Location: All New Zealand.

5. Special conditions—

Special conditions applicable to aeronautical radiocommunications purposes in the High Frequency (HF) bands:

1. Use is limited to aeronautical mobile (Route) services for a channel bandwidth of up to 2.8 kHz. The list of carrier (reference) frequencies and classes of emissions are described in Appendix 27 of International Radio Regulations. The following maximum power limits shall be applied:

Class of emission	**Maximum power dBW e.i.r.p.**
H2B, J3E, J7B, JXX	26 dBW
A1A, A1B, F1B	20 dBW

2. Use is limited to aeronautical mobile (Off-Route) services for a channel bandwidth of up to 2.8 kHz. The list of carrier (reference) frequencies and classes of emission are described in Appendix 26 of International Radio Regulations. The following maximum power limit shall be applied:

Class of emission	Maximum power dBW e.i.r.p.
A1A, A1B, F1B	17 dBW
A2A, A2B	19 dBW
H2A, H2B	20 dBW
J3E, (R,J)2(A,B,D), J(7,9)(B,D,X)	23 dBW

3. Carrier (reference) frequencies 3023 kHz and 5680 kHz may be used for communication between aircraft and participating land/ship stations during co-ordinated search and rescue operation.
4. Carrier (reference) frequencies 3023 kHz and 5680 kHz are intended for worldwide common use in both aeronautical mobile (Route) and aeronautical mobile (Off-Route) services with classes of emission “A3E” and “H3E”.

Special conditions applicable to aeronautical radiocommunications purposes in the Very High Frequency (VHF) band:

5. Use is limited to aeronautical mobile (Route) services with class of emission “A3E”. The channel arrangements in the band 117.9875 – 129.9875 MHz are prescribed in PIB 23 – Mobile Service Bands in New Zealand. These channels are restricted to communications relating to air traffic operations.
6. Use is limited to aeronautical mobile (Off-Route) services with classes of emission “A3E” in the band 130.000 – 136.000 MHz and “A2D” in the band 136.0125 – 136.9875 MHz. The channel arrangements in the band 130.0000 – 136.9875 MHz are as prescribed in PIB 23 – Mobile Service Bands in New Zealand.
7. Use is limited to emergency communications.
8. Use is limited to unattended airfields.
9. Use is limited to aircraft-to-aircraft communication only.
10. In the band 130 – 136 MHz, the following frequencies have been allocated for specific purposes on a national basis, and communications must conform to these provisions:

Reference Frequency (MHz)	Service Allocations
132.650	Oil spillage control
133.350	Hang-gliders
133.375	Microlights
133.400	Balloons
133.450	Parachutists
133.500	Radio reporter
133.525	Radio reporter
133.550	Gliders
133.575	Radio reporter
133.600	Radio reporter
133.625	Parachutists
134.000	General air-to-ground and air-to-air
134.350	Forest fire fighting
134.450	Gliders
134.475	Gliders

134.500	Unattended airfields
134.550	Forest fire fighting
134.600	Forest fire fighting
134.750	Forest fire fighting
134.850	Gliders
134.875	Gliders
134.900	Fish spotting
134.950	Air patrol

These frequencies may also be used for aircraft to communicate with portable land-based or ship-borne stations.

Special conditions applicable to aircraft station transmitters for satellite communication purposes:

11. Use is limited to aircraft earth station for the purpose of mobile satellite service (MSS).
12. Use is limited to aircraft earth station operating in accordance with the class of station known as “Earth Station in Motion” (ESIM) as defined in the International Radio Regulations.

Special conditions applicable to aircraft station transmitters for aeronautical radio navigation and radiodetermination purposes:

13. The band 960 – 1215 MHz is reserved for the following purposes:
    a. DME – distance measuring equipment transponder;
    b. TACAN – tactical air navigation;
    c. SSR – secondary surveillance radar;
    d. ACAS – airborne collision; avoidance system;
    e. ADS-B – automatic dependent surveillance broadcast.
14. Use is limited to radio altimeter and Wireless Avionics Intra-Communication (WAIC) as defined in the International Radio Regulations.
15. Use is limited to airborne weather radar.
16. Use is limited to airborne doppler radar.

6. General conditions applying to all transmissions under this licence—

1. A person may, in accordance with the provisions of this notice, operate aeronautical radio transmitters, including portable radio transmitters and on-board aircraft transmitters (but not including fixed or repeater transmitters), for the purposes of:
    a. the safe and expeditious conduct of civil aviation;
    b. an emergency;
    c. a matter that relates to the particular occupation, industry or activity in which an aircraft is engaged; or
    d. providing telecommunications services to passengers of aircraft.
2. In accordance with the provisions of Articles 19 and 37 of the International Radio Regulations, a person operating an aeronautical service transmitter must:
    a. except as provided in Note 1, use the aeronautical identification allocated by the chief executive; and
    b. be the holder of an applicable operator’s certificate of competency issued in accordance with the Radiocommunications Regulations 2001.
3. In accordance with the provisions of Schedule 1 of the Act, a person operating a transmitter pursuant to this licence must also comply with all relevant provisions of the Civil Aviation Act 1990, and regulations and rules made under that Act.
4. Transmitters not required to be registered pursuant to the Civil Aviation Act 1990 must conform to technical standards as prescribed in notices made under Regulation 32(1)(b) of the Regulations.

5. Frequency use is on a shared basis and the chief executive does not accept liability under any circumstances for any loss or damage of any kind occasioned by the unavailability of frequencies or interference to reception.
6. Should interference occur to services licensed pursuant to a radio licence or a spectrum licence, the chief executive reserves the right to require and ensure that any transmission or any emission pursuant to this General User Radio Licence change frequency, reduce power or cease operation.
7. Words and expressions that are defined in:
    a. The Radiocommunications Act 1989, and the Radiocommunications Regulations 2001 and notices made under the Act;
    b. the International Radio Regulations; and
    c. annex 10 to the Convention on International Civil Aviation (ICAO), have the meanings so defined.

Note 1: Aeronautical identifications for most aircraft are allocated directly by the Civil Aviation Authority (CAA).

7. Consequential revocation of licence—(1) The Radiocommunications (General User Radio Licence for Aeronautical Purposes) Notice 2005, dated 20 June 2005 and published in the *New Zealand Gazette*, 23 June 2005, No. 94, page 2246, is revoked.

(2) Notwithstanding the revocation of the notice under subsection (1), every transmitter capable of making transmissions compliant with the requirements of that notice on the commencement date of this notice is deemed to be compliant with the requirements of this notice.

Dated at Wellington this 27th day of September 2016.

JEFFREY DENNIS HICKS, Manager, Radio Spectrum Management Licensing, Ministry of Business, Innovation and Employment.

Explanatory note

This note is not part of the notice, but is intended to indicate its general effect.

This notice:

a. adds a new provision in the frequency range 29.5 – 30 GHz for the use of satellite uplink transmission by aircraft earth station in line with the definition of Earth Station in Motion (ESIM); and
b. permits the frequency range of 4.2 – 4.4 GHz for shared use between radio altimeter and Wireless Avionics Intra-Communication (WAIC) applications.

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