SA/ZA HF- UHF

Amateur Radio Frequency Bands

Table of Contents

2200 metre band [135.7 - 137.8 kHz]	3
630 metre band [472 - 479 kHz]	4
160 metre band [1810 - 2000 kHz]	5
80 metre band [3500 - 3800 kHz]	6
60 metre band [5351.5 - 5366.5 kHz]	7
40 metre band [7000 - 7200 kHz]	8
30 metre band [10100 - 10150 kHz]	9
20 metre band [14000 - 14350 kHz]	
17 metre band [18068 - 18168 kHz]	
15 metre band [21000 - 21450 kHz]	
12 metre band [24890 - 24990 kHz]	
10 metre band [28000 - 29700 kHz]	14
Definitions & Notes	
Sideband Usage	16
Contests	
Unmanned transmitting stations:	
Beacons	

History	
6 metre Band [50 - 54 MHz]	22
4 metre Band [70.0 - 70.3 MHz]	
4 Metre Band 70.0 - 70.3 MHz IMPORTANT NOTES	25
2 metre Band [144 - 146 MHz]	
70 Centimetre Band [430-440 MHz]	
23 centimetre Band [1240 - 1300 MHz] IARU region 1 & South Africa	

2200 metre band [135.7 - 137.8 kHz]

Frequency	Max Bandwidth	Preferred Mode
(kHz)	(Hz)	and Usage
135.7 - 137.8	200	CW, QRSS and narrow band digital modes

630 metre band [472 - 479 kHz]

Frequency
(kHz)Max Bandwidth
(Hz)Preferred Mode
and Usage472 - 475 **200CW See NOTES475 - 479 **(#)CW, digimodes See NOTES(**) If a frequency is to be selected, particular attention must be paid to still existing Non-Directional

Beacons (NDB) of the radio navigation service!

(#) maximum bandwidth not specified, 500 Hz suggested.

160 metre band [1810 - 2000 kHz]

Frequency	Max Bandwidth	Preferred Mode
(kHz)	(Hz)	and Usage
1810 - 1838	200	CW, 1836 kHz – QRP Centre of Activity
1838 - 1840	500	Narrow band modes
1840 - 1843	2700	All modes – digimodes, (*)
1843 - 2000	2700	All modes, (*)

Radio Amateurs in countries that have a SSB allocation ONLY below 1840 kHz, may continue to use it, but the National Societies in those countries are requested to take all necessary steps with their licence administrations to adjust the phone allocations in accordance with the Region 1 Band plan. (Davos 2005)

80 metre band [3500 - 3800 kHz]

Frequency (kHz)	Max Bandwidth (Hz)	Preferred Mode and Usage
3500 - 3510	200	CW, priority for intercontinental operation
3510 - 3560	200	CW, contest preferred, 3555 kHz – QRS Centre of Activity
3560 - 3570	200	CW, 3560 kHz – QRP Centre of Activity
3570 - 3580	200	Narrow band modes – digimodes
3580 - 3590	500	Narrow band modes – digimodes
3590 - 3600	500	Narrow band modes – digimodes, automatically controlled data stations (unattended)
3600 - 3620	2700	All modes - digimodes, automatically controlled data station (unattended), (*)
3600 - 3650	2700	All modes, SSB contest preferred, 3630 kHz – Digital Voice Centre of Activity, (*)
3650 - 3700	2700	All modes, 3690 kHz – SSB QRP Centre of Activity
3700 - 3775	2700	All modes, SSB contest preferred
		3735 kHz – Image Centre of Activity
		3760 kHz – Reg 1 Emergency Centre of Activity
3775 - 3800	2700	All modes, SSB contest preferred, priority for intercontinental operation

Music transmissions are allowed on this band (ICASA Annexure - 2015 Radio Frequency Spectrum Regulations)

60 metre band [5351.5 - 5366.5 kHz]

Frequency	Max Bandwidth	Preferred Mode
(kHz)	(Hz)	and Usage
5351.5 - 5354.0	500	CW, Narrow band modes – digimodes See NOTES
5354.0 - 5366.0	2700	All modes, USB recommended for voice operation (##) See NOTES
5366.0 - 5366.5	20 (!)	Weak signal narrow band modes See NOTES

It is strongly recommended that frequencies within the WRC-15 allocation only be used if there are no other frequencies available at 5 MHz under domestic (ITU-R article 4.4) permissions.

Local nets and long rag chew QSOs should not use the WRC-15 allocation at 5 MHz but should instead make use of the 3,5 MHz, 5 MHz domestic or 7 MHz bands where there is more spectrum available.

40 metre band [7000 - 7200 kHz]

Frequency (kHz)	Max Bandwidth (Hz)	Preferred Mode and Usage
7000 - 7040	200	CW, 7030 kHz – QRP Centre of Activity
7040 - 7047	500	Narrow band modes – digimodes
7047 – 7050	500	Narrow band modes – digimodes, automatically controlled data stations (unattended)
7050 - 7053	2700	All modes – digimodes, automatically controlled data stations (unattended)
7053 - 7060	2700	All modes – digimodes
7060 - 7100	2700	All modes, SSB contest preferred (*) 7070 kHz – Digital Voice Centre of Activity 7090 kHz – SSB QRP Centre of Activity
7100 - 7130	2700	All modes, 7110 kHz – Reg 1 Emergency Centre of Activity
7130 - 7175	2700	All modes, SSB contest preferred, 7165 kHz – Image Centre of Activity
7175 – 7200	2700	All modes, SSB contest preferred, priority for intercontinental operation

30 metre band [10100 - 10150 kHz]

Frequency
(kHz)Max Bandwidth
(Hz)Preferred Mode
and Usage10100 - 10130200CW, 10116 kHz - QRP Centre of Activity10130 - 10150500Narrow band modes - digimodes

SSB may be used during emergencies involving the immediate safety of life and property and only by stations involved in the handling of emergency traffic.

The band segment 10120 kHz to 10140 kHz may be used for SSB transmissions in the area of Africa south of the equator during local daylight hours. News bulletins on any mode should not be transmitted on the 10 MHz band

20 metre band [14000 - 14350 kHz]

Frequency (kHz)	Max Bandwidth (Hz)	Preferred Mode and Usage
14000 - 14060	200	CW, contest preferred, 14055 kHz – QRS Centre of Activity
14060 - 14070	200	CW, 14060 kHz – QRP Centre of Activity
14070 - 14089	500	Narrow band modes – digimodes
14089 - 14099	500	Narrow band modes - digimodes automatically controlled data stations (unattended)
14099 - 14101		IBP, exclusively for beacons
14101 - 14112	2700	All modes – digimodes, automatically controlled data stations (unattended)
14112 - 14125	2700	All modes
14125 - 14300	2700	All modes, SSB contest preferred 14130 kHz – Digital Voice Centre of Activity 14195 kHz ± 5 kHz - Priority for DXpeditions 14 230 kHz – Image Centre of Activity 14 285 kHz – SSB QRP Centre of Activity
14300 - 14350	2700	All modes, 14300 kHz – Global Emergency centre of Activity

17 metre band [18068 - 18168 kHz]

Frequency (kHz)	Max Bandwidth (Hz)	Preferred Mode and Usage
18068 - 18095	200	CW, 18086 kHz – QRP Centre of Activity
18095 - 18105	500	Narrow band modes – digimodes
18105 - 18109	500	Narrow band modes – digimodes, automatically controlled data stations (unattended)
18109 - 18111		IBP, exclusively for beacons
18111 - 18120	2700	All modes – digimodes, automatically controlled data stations (unattended)
18120 - 18168	2700	All modes, 18130 kHz – SSB QRP Centre of Activity 18150 kHz – Digital Voice Centre of Activity 18160 kHz – Global Emergency Centre of Activity

15 metre band [21000 - 21450 kHz]

Frequency (kHz)	Max Bandwidth (Hz)	Preferred Mode and Usage
21000 - 21070	200	CW, 21055 kHz – QRS Centre of Activity
		21060 kHz – QRP Centre of Activity
21070 - 21090	500	Narrow band modes, digimodes
21090 - 21110	500	Narrow band modes, digimodes, automatically controlled data stations (unattended)
21110 - 21120	2700	All modes (excluding SSB), digimodes, automatically controlled data stations (unattended)
21120 - 21149	500	Narrow band modes
21149 - 21151		IBP, exclusively for beacons
21151 – 21450	2700	All modes, 21180 kHz – Digital Voice Centre of Activity 21285 kHz – SSB QRP Centre of Activity 21340 kHz – Image Centre of Activity 21360 kHz – Global Emergency Centre of Activity 21125 to 21450 – Amateur satellites on a non-exclusive basis NS20_C4_Rec_08

12 metre band [24890 - 24990 kHz]

Frequency (kHz)	Max Bandwidth (Hz)	Preferred Mode and Usage
24890 - 24915	200	CW, 24906 kHz – QRP centre of activity
24915 - 24925	500	Narrow band modes – digimodes
24925 - 24929	500	Narrow band modes – digimodes, automatically controlled data stations (unattended)
24929 - 24931		IBP, exclusively for beacons
24931 - 24940	2700	All modes – digimodes, automatically controlled data stations (unattended)
24940 - 24990	2700	All modes, 24950 kHz – SSB QRP Centre of Activity 24960 kHz – Digital Voice Centre of Activity

10 metre band [28000 - 29700 kHz]

Frequency	Max Bandwidth	Preferred Mode
(kHz)	(Hz)	and Usage
28000 - 28070	200	CW 28055 kHz – QRS Centre of Activity
		28060 kHz – QRP Centre of Activity
28070 - 28120	500	Narrow band modes – digimodes
28120 - 28150	500	Narrow band modes - digimodes, automatically controlled data
		stations (unattended)
28150 - 28190	500	Narrow band modes
28190 - 28199		IBP, regional time-shared beacons
28199 - 28201		IBP, worldwide time-shared beacons
28201 - 28225		IBP, continuous duty beacons
28225 - 28300	2700	All modes – beacons
28300 - 28320	2700	All modes – digimodes, automatically controlled data stations
		(unattended)
28320 - 29000	2700	All modes, 28330 kHz – Digital Voice Centre of Activity
		28360 kHz – SSB QRP Centre of Activity
		28680 kHz – Image Centre of Activity
29000 - 29100		All modes (Bandwidth removed 29000 to 29510
		Recommendation NS20_C4_Rec_04)
29100 - 29200		All modes – FM simplex – 10 kHz channels
29200 - 29300		All modes – digimodes, automatically controlled data stations
		(unattended)
29300 - 29510		Satellite Links
29510 - 29520		Guard channel
29520 - 29590	6000	All modes – FM repeater input (RH1 – RH8)
29600	6000	All modes – FM calling channel
29610	6000	All modes – FM simplex repeater (parrot - input and output)
29620 - 29700	6000	All modes – FM repeater outputs (RH1 – RH8)

Definitions & Notes

All modes - CW, SSB and those modes listed as Centres of Activity, plus AM (Consideration should be given to adjacent channel users)

Image modes - Any analogue or digital image modes within the appropriate bandwidth, for example SSTV and FAX

Narrow band modes - All modes using up to 500 Hz bandwidth, including CW, RTTY, PSK, etc.

Digimodes - Any digital mode used within the appropriate bandwidth, for example RTTY, PSK, MT63, etc.

- **AFSK** <u>https://en.wikipedia.org/wiki/Frequency-shift_keying#Audio_FSK</u>
- **APRS** <u>https://en.wikipedia.org/wiki/Automatic Packet Reporting System</u>
- ATV <u>https://en.wikipedia.org/wiki/Amateur_television</u>
- **DV** Digital Voice mode <u>https://www.hamradioschool.com/post/intro-to-dv</u>
- **EME** <u>https://en.wikipedia.org/wiki/Earth%E2%80%93Moon%E2%80%93Earth_communication</u>
- JT6M, FSK441 <u>https://en.wikipedia.org/wiki/WSJT (amateur radio software)</u>
- **MGM** "In amateur radio, "MGM" stands for "Machine Generated Mode," referring to digital modes of communication where transmissions are fully computer-processed, such as FT8, FSK441, JT65B, WSPR, or PSK31.
- **PSK31** <u>https://en.wikipedia.org/wiki/PSK31</u>

Notes

The frequencies in the band plan are understood as "transmitted frequencies" (not those of the suppressed carrier!)

To prevent any out of band transmission the maximum dial setting for USB Voice mode should be 3 kHz below upper band edge on bands 20 m to 10 m.

(*) - Lowest dial setting for LSB Voice mode: 1843, 3603 and 7063 kHz

(##) - Highest dial setting for USB Voice mode on the 60-metre band 5363 kHz

CW QSOs are accepted across all bands, except within beacon segments. (Recommendation DV05_C4_Rec_13)

Amplitude modulation (AM) may be used in the telephony sub-bands providing consideration is given to adjacent channel users. (NRRL Davos 2005).

Sideband Usage

Below 10 MHz lower sideband (LSB) is recommended and above 10 MHz use upper sideband (USB). The exception to this is on the 5 MHz band where USB is recommended.

630 metre band

Details shown in the band plan above should be understood as "proposed usage." (VA14_C4_Rec_02)

60 metre band Details shown in the band plan above should be understood as "proposed usage." (VIE14_C4_Rec_02)

Contests

Where no DX traffic is involved, the contest segments should not include 3500 - 3510 kHz or 3775 - 3800 kHz.

Non-contesting radio amateurs are recommended to use the contest-free HF bands (30, 17 and 12 metre) during the largest international contests. (DV05_C4_Rec_07)

Contests should be restricted to 160, 80, 40, 20, 15 and 10 metres. That is 60, 30, 17, and 12 metre bands **shall not** be used for contests. (**VIE16_C4_Rec_06** *) (* to be ratified at General Conference 2017)

For more recommendations about contest segments see the <u>IARU Region 1 HF Manager Handbook</u>.

Unmanned transmitting stations:

The term "automatically controlled data stations" includes Store and Forward stations.

IARU member societies are requested to limit this activity on the HF bands.

It is recommended that any unmanned transmitting stations on HF shall only be activated under operator control except for beacons agreed with the IARU Region 1 beacon coordinator, or specially licensed experimental stations.

Member Societies are reminded of the recommendation in the IARU Region 1 HF Band Plan 'that any unmanned transmitting stations on HF shall only be activated under operator control, except for beacons agreed with the IARU Region 1 Beacon Coordinator'.

Unmanned transmitting stations, and operation involving unmanned transmitting stations, must adhere to the frequency and bandwidth limits of the band plan.

The operator connecting to an automatically controlled unmanned transmitting station is responsible for not causing interference. This is particularly important in the 30 metre band where the amateur service only has secondary status.

Amateur radio operators may transmit messages via unmanned transmitting stations during coordinated emergency, and disaster preparedness exercises, limited to the duration of such exercises, using a bandwidth not exceeding 2700 Hz.

Such communication should be announced regularly on the frequency, and radio amateurs not participating in the communication should cooperate by not transmitting on the frequency. (VA14_C4_Rec_06).

Beacons

For information about IARU Region 1 beacon policy see the IARU Region 1 HF Manager Handbook.

Remote controlled operation on HF

Remote controlled operation is defined to mean operation where a licensed operator controls an amateur radio station from a remote-control terminal.

Where a station is operated remotely, the following conditions shall apply:

Remote operation must be permitted, or not objected to, by the Regulatory Authority of the country where the station is located.

1. The call sign to be used should be the call sign issued by the Regulatory Authority of the country in which the station is located. This applies irrespective of the location of the operator.

2. It should be noted that the CEPT T/R 61-01 agreement only applies to people using their own call sign, with the appropriate country prefix, when the operator is actually visiting that country, not for remote operation.

3. Any further requirements regarding the participation of remotely controlled stations in contests or award programs are a matter for the various contest or award program organisers. (SC11_C4_REC_07), (VA14_C4_REC_04)

History

2005 Davos Introduction of band plan by bandwidth Effective 1 January 2006 **2008 Cavtat** Several modifications Effective 29March 2009

- CW segment extended from 7000 7035 kHz to 7000 -7040 kHz
- Narrow band modes, digimodes segment moved and extended from 7035 7038 kHz to 7040
 7047 kHz.
- Narrow band modes, digimodes, segment for automatically controlled stations (unattended) moved and extended from 7038 – 7040 kHz to 7047 – 7050 kHz
- All modes, digimodes, segment for automatically controlled stations (unattended) moved from 7040 – 7043 kHz to 7050 – 7053 kHz
- Introduction of SSB preferred contest segments 7060 7100 kHz and 7130 7200 kHz
- Introduction of Digital Voice Activity Centres

2011 Sun City Several modifications Effective 17 August 2011

- CW contest preferred segment 7000 7025 kHz withdrawn
- Segment 29100 29200 kHz changed from maximum bandwidth of 2700 Hz to
- maximum 6000 Hz.
- Introduction of new segment 29100 29200 kHz for FM simplex operation (10 kHz channels)
- Removal of FM simplex channels 29520 29550 kHz and 29610 29650 kHz
- Number of FM Repeater channels increased to eight, former FM simplex
- channels became new repeater input, respectively repeater output channels
- FM repeater channels renumbered, RH1 = 29520 / 29620 kHz, RH8 = 29590 / 29690 kHz
- Introduction of FM Simplex Repeater 29610 kHz (parrot, input + output)

2014 Varna Several modifications Effective 26 September 2014

- Segment 29000 29100 kHz: Change from maximum bandwidth of 2700 Hz to maximum 6000 Hz
- Satellite segment 29300 29510 kHz: Removal of downlink restriction

2016 Vienna Several modifications * Effective 01 June 2016

(* to be ratified by General Conference 2017)

- Introduction of narrow bandwidth segment with maximum bandwidth of 200 Hz from 3570 kHz to 3580 kHz
- Narrow bandwidth mode segment with maximum bandwidth of 500 Hz
- extended by 10 kHz now from 10130 kHz to 10150 kHz

2020 VGC

a. Recommendation NS20_C4_Rec_04. Document NS20_C4_12. That the 6 kHz maximum bandwidth restriction in the IARU Region 1 10 metre band plan be removed in the segment from 29000 – 29510 kHz, noting that any experimental wide bandwidth operation must be on a non-interference basis to other stations, including the amateur satellite service segment at 29300 – 29510 kHz.

b. Recommendation NS20_C4_Rec_08. Ratification of VIE19_C4_REC_03. To support global frequency harmonisation and given the outcome of the IARU Region 3 General Conference, it is proposed that the 21.125 - 21.450 MHz frequency band be designated for use by amateur satellites on a non-exclusive basis, noting that frequencies above 21.4 MHz are clearly preferred.

6 metre Band [50 - 54 MHz]

Frequency (MHz)	Segment	Preferred Mode
50.000	50.000 - 50.100	CW & Beacons
50.005		Beacon ZS2SIX
50.040		Beacon SV1SIX
50.044		Beacon ZS6TXB
50.050		Beacon ZS6DN
50.050		International CW Calling (except Beacon Project)
50.090		Intercontinental CW Calling
	50.100 - 50.200	CW / SSB
	50.100 - 50.130	SSB Intercontinental Calling
50.110		Intercontinental CW Calling
	50.130 - 50.200	General DX activity
50.150		International Centre of Activity
	50.200 - 50.300	SSB & Digital modes
50.200		SSB ZS Calling
	50.235 - 50.275	Digital modes MGM
50.235		JT6M
50.245		FSK441
	50.300 - 50.400	MGM
50.305		PSK Center of Activity
	50.310 - 50.320	Earth Moon Earth [EME] & Narrowband CW / MGM
	50.320 - 50.380	Meteor Scatter - Narrowband CW / MGM
	50.400 - 50.500	MGM / CW / Beacons exclusive
50.401		+/- 500 Hz WSPR Beacons

Frequency (MHz)	Segment (MHz)	Preferred Mode and Usage
	50.500 - 52.000	MGM / RTTY / DV
50.510		Slow Scan Television [SSTV]
	50.540 - 50.580	FM Internet Voice Gateways - Simplex
50.550		Image frequency
50.600		Radio TellyType [RTTY]
	50.620 - 50.750	Digital modes
50.630		DV Calling
	51.200 - 51.400	Repeaters
	50.210 - 50.390	FM / DV Repeater Inputs (20 kHz spacing)
	51.400 - 51.600	Simplex
	51.410 - 51.590	FM / DV Simplex
51.510		FM Calling
	51.800 - 52.000	Repeaters
	50.810 - 50.990	FM / DV Repeater Outputs (20 kHz spacing)
	52.000 - 54.000	All Modes - ZS Shared secondary usage

4 metre Band [70.0 - 70.3 MHz]

FrequencySegmentPreferred Mode(MHz)(MHz)and Usage

70.000

70.000 - 70.028 CW / Beacons - Telegraphy / MGM (Note 1&5) 70.030 Personal WSPR beacons 70.030 - 70.150 Simplex - CW & SSB (Note 1&2 70.150 MS Calling 70.150 - 70.200 Digital Modes - MGM / SSB / FM / APRS (Note 1&3) 70.200 CW & SSB Calling 70.200 - 70.300 Simplex - All modes 12.5 kHz channels (Note 1&4) 70.260 AM / FM Calling 70.300 RTTY / FAX **Band Edge**

70.300

NOTES - next page.

4 Metre Band [70.0 - 70.3 MHz] IMPORTANT NOTES

The 70 MHz spectrum is under discussion with ICASA with regards our level of access to this band. The only restriction is that of antenna polarisation, must be horizontal to prevent interference with other users outside our borders who still retain 70 to 70,300 MHz for commercial operation. The normal regulations regarding the requirement that amateur station does not cause unnecessary interference will be enforced. In other words:

LISTEN FIRST before transmitting.

Notes:

1. It is available for use but users must ensure that no interference is caused to other users, we at present only have SECONDARY STATUS, i.e. the band is shared with commercial users who have priority and we have to accept interference from primary users.

2. Operation within this part of the band shall only use CW or SSB with horizontal polarisation. The power limit is 400W pep. Amateurs should use increments of 5 kHz to allow the maximum number of users to co-exist.

3. The allocation of APRS service to this portion shall be shared with other MGM modes. Channel spacing shall be 12.5 kHz. APRS service providers shall ensure that no undue interference occurs with other amateur users.

4. Within this portion the use of 12.5 kHz channel spacing is recommended only to allow more communicatio activity. Equipment with 25 kHz deviation and programmed steps are permitted to further the flexibility of operations.

5. Beacons shall be limited to an EIRP of 25 W with an Omni-directional antenna horizontally polarised. Beacons shall be operated in accordance with the IARU Region 1 recommendations with regard to keying speed, shift and identification details. Applications for permanent 70 MHz beacons shall be forwarded to the SARL VHF band planner for consideration. The channel spacing for adjacent beacons shall be 2 kHz.

2 metre Band [144 - 146 MHz]

Frequency	Segment	Preferred Mode
144.000	144 000-144 035	EME Moon bounce only (SSB/CW)
	144.050	CW Calling frequency
	144.100	CW reference frequency
	144.140-144.150	CW FAI working
144.150	144.150-144.160	SSB FAI working
	144.175	Microwave talk-back
	144.195-144.205	SSB random MS
	144.250	Slow morse transmissions
	144.260	Emergency Comms. priority
	144.300	SSB calling frequency
	144.390-144.400	SSB random MS
	144.400-144.490	Beacons
144.490		Guard band [Do not use] SAREX uplink
144.500	144.500	SSTV calling frequency
ALL Modes	144.525	ATV talk-back
Non-channelised	144.525-144.575	Unattended data (BBS's)
	144.600	RTTY calling frequency
	144.625-144.675	Packet Radio
	144.700-144.800	Wefax & DX cluster transmissions
	144.775-144.800	Emergency Comms. priority
		Digital modes (including unattended)
144.990	144.800-144.990	Guard band

Frequency (MHz)	Segment (MHz)	Preferred Mode and Usage
145.000		FM Repeater inputs FM – 3kHz deviation maximum
	145.0000	RV48
	145.0125	RV49
	145.0250	RV50
	145.0375	RV51
	145.0500	RV52
	145.0625	RV53
	145.0750	RV54
	145.0875	RV55
	145.1000	RV56
	145.1125	RV57
	145.1250	RV58
	145.1375	RV59
	145.1500	RV60
	145.1625	RV61
	145.1750	RV62
	145.1875	RV63
145.200		FM Simplex
	145.200 (S8)	Paired with 145.800 - Manned space Comms.
	145.200-145.300	Hamnet priority use
	145.225 (S9)	Emergency Comms- Priority
	145.250 (S10)	slow morse transmissions
	145.275 (S11)	General use
	145.300 (S12)	RTTY AFSK
	145.300-145.550	FM Simplex
	145.550-145.5875	APRS (12.5kHz channels)

Frequency	Segment	Preferred Mode
(MITZ)	(мпz)	
145.600	Repeater outputs	FM – 3kHz deviation maximum
	145.6000	RV48
	145.6125	RV49
	145.6250	RV50
	145.6375	RV51
	145.6500	RV52
	145.6625	RV53
	145.6750	RV54
	145.6875	RV55
	145.7000	RV56
	145.7125	RV57
	145.7250	RV58
	145.7375	RV59
	145.7500	RV60
	145.7625	RV61
	145.7750	RV62
	145.7875	RV63
145.800	145.800-145.990	Satellite working
145.990		Guard band
146.000		Band end

70 Centimetre Band [430-440 MHz]

Frequency	Segment	Preferred Mode
(MHz)	(MHz)	and Usage
430.000		FM repeater output-channel frequencies 12,5kHz
All modes	430.025 - 430.375	spacing, 1.6 MHz split
	430.400 - 430.575	Digital communication link channels
	430.600 - 430.925	Digital repeater channels
431.025	430.925 - 431.025	Multi mode channels
431.050	431.050 - 431.825	Repeater input channels 25 kHz spacing,
431.825		7.6 MHz split
431.625	431.625 - 431.975	FM repeater input -channel frequencies 12,5 kHz
431.975		spacing, 1.6 MHz split
432.000	432.000 - 432.025	EME - Earth Moon Earth
432.025		
	432.050	CW centre of activity
	432.088	PSK31 center of activity
432.100	432.200	SSB center of activity
	432.350	Microwave talkback center of activity
	432.370	FSK441 random calling
432.400	432.400 - 432.490	CW, MGM, Beacons
432.490		Beacons exclusive
432.500		All Modes
	432.500	APRS IARU preferred
	432.500 - 432.600	Linear transponder Input
	432.600	RTTY (ASK/PSK)
	432.700	FAX (ASK)
	432.600 - 432.800	Linear transponder Output

Frequency (MHz)	Segment (MHz)	Preferred Mode and Usage
433.000	433.000 - 433.375	Repeater input channels 25 kHz spacing, 1.6 MHz
433 400	433 400	SPILLIN EM/AESK/MCM_SSTV/(EM/AESK)
	433,500	EM - NREM Calling
	433,000 - 433,575	Simpley channels 25 kHz spacing
133 600	433 600	
455.000	433.000	NITT (ASK/PSK) MOM/PM/AFSK
	433.025 - 433.775	
	433.700	RAX (ASK/FM/AFSK)
	434.000	All Modes - Center frequency of digital experiments
		use minimum power, norizontal polarised
	434.450 - 434.575	MGM/FM/AFSK/PSK/etc.
424 600		Digital communication channels
434.600	434.600 - 434.975	Repeater output channels 25 kHz spacing, 1.6 MHz split
	434.800	Preferred APRS 1k2 AFSK general channel national
434.975		_
435.000	435.000 - 438.000	All modes - Satellite service
438.000	438.000-438.175	Digital channel communications - FM/DV
	438.050	Alternative APRS channel 9k6 Gaussian Filtered DFSK modulation (GF DFSKM)
	438.200 - 438.525	DV - Digtal repeater channels
	438.550 - 438.625	All Modes - Multi mode channels
	438.650 - 439.425	Repeater output channels 25 kHz steps Spacing 7.6 MHz split
	439.800 - 439.975	Digital commications link channels

Frequency (MHz)	Segment (MHz)	Preferred Mode and Usage
	439.850	Main APRS channel 9k6 Gaussian Filtered DFSK modulation (GF DFSKM)
	439.900 439.9875	Alternative APRS 1k2 AFSK national POCSAG centre

440.000

Band Edge

23 centimetre Band [1240 - 1300 MHz] IARU region 1 & South Africa

Frequency (MHz)	Segment (MHz)	Preferred Mode and Usage
1240.0000	1240-1240.9995	All mode, digital
1241.0000	1241-1241.9995	All mode
1242.0000	1242-1242.2875	NB FM output RS1-RS10
1242.2880	1242.288-1242.7495	NB FM outut RS11-RS28
1242.7500	1242.75-1243.2625	Duplex Packet radio RS29-RS50
1243.2630	1243.263-1459.9995	ATV
1260.0000 1270.0000	1260-1269.995 1270-1270.7125	Satelite service NB FM input RS1-RS28
1270.7130	1270.713-1271.2625	Duplex Packet radio RS29-RS50
1271.2630	1271.263-1271.9995	
1272.0000	1272-1290.995	ATV, digital ATV
1291.0000	1291-1291.487	NB DV input RM1-RM19
1291.4875	1291.4875-1295.9995	All mode

continued on next page.

Frequency (MHz)	Segment (MHz)	Preferred Mode and Usage
1240.0000	1240-1240.9995	All mode, digital
1241.0000	1241-1241.9995	All mode
1242.0000	1242-1242.2875	NB FM output RS1-RS10
1242.2880	1242.288-1242.7495	NB FM outut RS11-RS28
1242.7500	1242.75-1243.2625	Duplex Packet radio RS29-RS50
1243.2630	1243.263-1459.9995	ATV
1260.0000	1260-1269.995	Satelite service
1270.0000	1270-1270.7125	NB FM input RS1-RS28
1270.7130	1270.713-1271.2625	Duplex Packet radio RS29-RS50
1271.2630	1271.263-1271.9995	
1272.0000	1272-1290.995	ATV, digital ATV
1291.0000	1291-1291.487	NB DV input RM1-RM19
1291.4875	1291.4875-1295.9995	All mode

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Frequency (MHz)	Segment (MHz)	Preferred Mode and Usage
1296.0000	1296-1296.1495	Telegraphy
1296.0000	1296-1296.025	Moonbounce
1296.1500	1296.15-1296.7995	Telegraphy/SSB
1296.2000	1296.2	Center of activity
1296.4000	1296.4-1296.5995	Linear transponder input
1296.5000	1296.5	SSTV
1296.6000	1296.6	RTTY
1296.7000	1296.7	FAX
1296.6000	1296.6-1296.7995	Linear transponder input
1296.8000	1296.8-1296.9995	Beacons exclusive
1297.0000	1297-1297.487	NB DV OUTPUT RM1-RM19
1297.4875	1297.4875-1297.9875	5
1297.5000	1297.5	NBFM activity centre
1297.7250	1297.725	NB DV call
1298.0000	1298-1298.9995	All mode
1299.0000	1299-1299.7495	5x150kHz channels
1299.7500	1299.75-1299.9995	8x25kHz channels