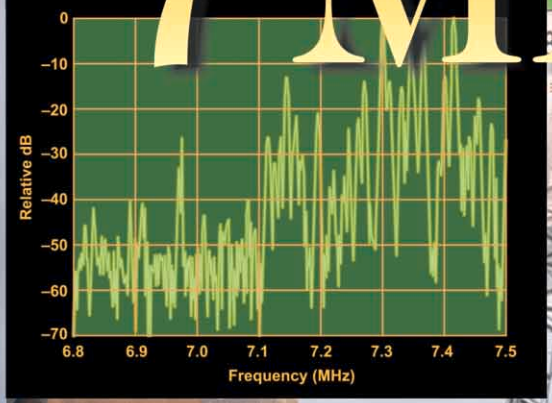
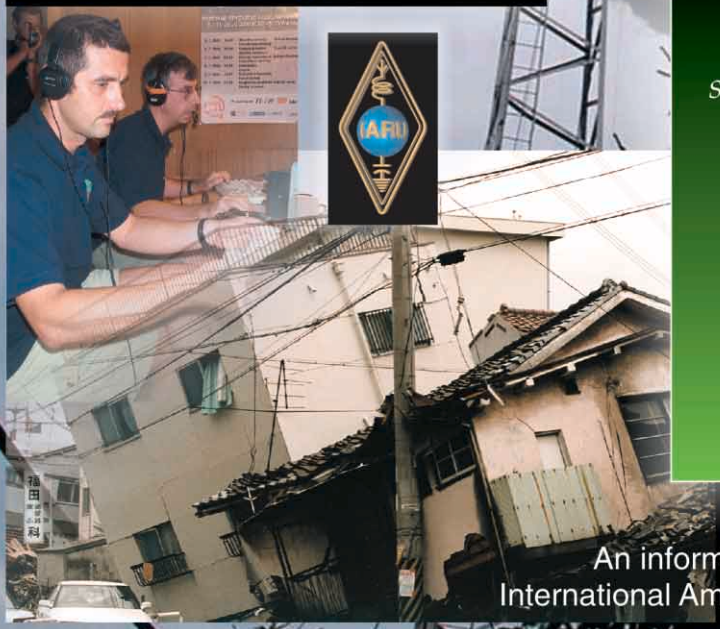
Amateur Service Spectrum Requirements at 7 MHz





The amateur service seeks the return to an exclusive, worldwide allocation of no less than 300 kHz in the vicinity of 7 Mhz.

An information paper by the International Amateur Radio Union

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7 MHz

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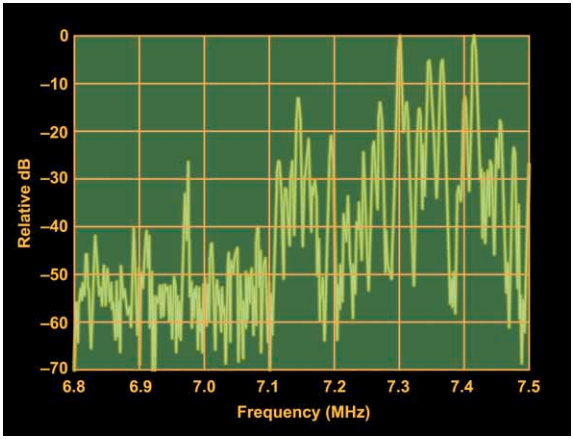
Effective Communications Support

As the only primary allocation to the amateur service between 4 and 14 MHz, the 7-MHz band is in heavy use 24 hours each day. During daylight hours the band carries the bulk of amateur sky wave communication over distances of less than 1300 km. During winter and during periods of low solar activity, and at other times when the MUF falls below 10 MHz, it supports the bulk of amateur intercontinental communication during hours of darkness. As such, the amateur service is heavily dependent upon the 7-MHz band during disasters, when communications provided by radio amateurs may be the only means of maintaining critical communications links. A 300-kHz exclusive worldwide amateur allocation is the minimum requirement that would ensure effective communications support particularly in the event of natural disasters.

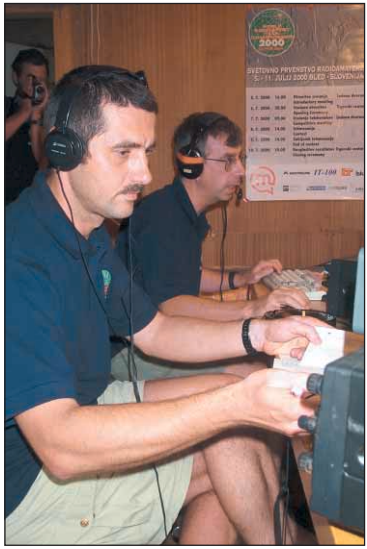


This spectrum analyzer screen shows typical signal levels on frequencies between 6 800 and 7 500 kHz in the eastern United States during the early evening. There are many amateur signals between 7 000 and 7 300 kHz, but the band between 7 100 and 7 300 kHz is dominated by European broadcasting signals.

Before the 1938 Cairo Conference, this 300-kHz band was a worldwide, exclusive amateur allocation. At Cairo, rising tensions and political interests in Europe and the Far East and the resulting interest in propaganda broadcasting in the period leading up to the Second World War caused the top portion of the band to be made available for broadcasting outside the Americas.

The amateur service requirement continues to be for at least a 300-kHz allocation. This requirement is even greater today than in the past, owing to the increasing number of amateur stations and the expanding diversity of modes of emission used in the amateur service. However, the requirement is being met only in Region 2, and then only at those times (mostly during daylight hours) when broadcasting interference does not preclude full use of the band by amateur stations. In most countries in Regions 1 and 3, amateurs are limited to the portion of the band that is exclusively amateur, worldwide: 7 000-7 100 kHz.

Should administrations determine that they would be better served by shifting the exclusive 300-kHz worldwide amateur allocation downward in frequency, the amateur service would be willing to accept the implications and costs of such a decision in order to maintain its communications capabilities in such an important band. Transition procedures to protect the interests of the amateur service would be required.

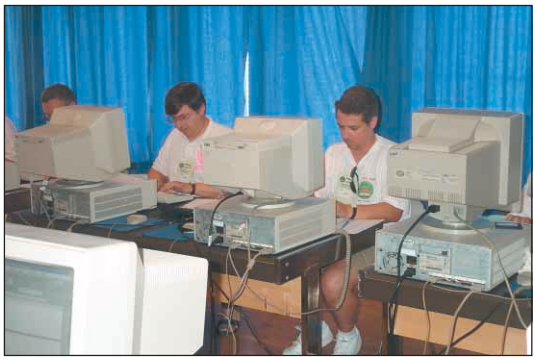


1. Who are radio amateurs, and what do they do?

Before there was either commercial or government radio, there was amateur radio. Guglielmo Marconi is often quoted as saying that he considered himself to be an amateur.

At the root of the word “amateur” is the Latin verb “to love.” Radio amateurs love radio. It is an avocation pursued without pecuniary interest, although their enthusiasm often leads to employment in the field of technology or communications. To an amateur, radio is not simply a substitute for wires; it is a natural phenomenon with infinite dimensions to be explored. That was true a century ago and is still true today.

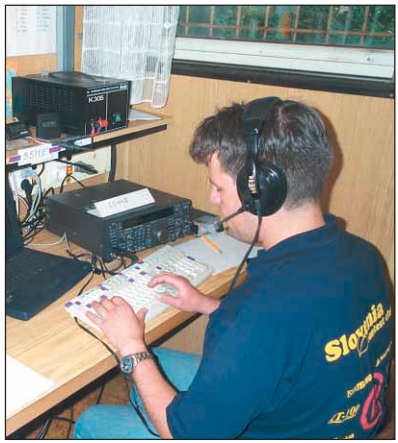
The earliest radio amateurs were students and amateur scientists. This tradition of scientific investigation and experimentation has continued to the present day. Also, radio amateurs now provide communications in the wake of natural disasters. In addition, they provide other noncommercial public-service communications and engage in activities that offer technical education, develop operating skills, and enhance international good will.



Today there are almost three million licensed radio amateurs on all continents and in nearly all countries of the world. To obtain a license, one must demonstrate technical and operational qualifications by passing a written examination administered by or on behalf of one's telecommunications administration. Most licensed amateurs are adults of all ages, both male and female, but many are students. The country with the most amateurs is Japan, with approximately 1.3 million stations currently licensed. Second is the United States with approximately 680,000. The European country with the largest number of radio amateurs is Germany, with 84,000 licensees.

The typical radio amateur became interested in electronic technology as a student. For many, amateur radio provided an opportunity to develop practical skills that influenced their career.

For example, in the mid-1950s, high school student Joseph H. Taylor, Jr. of New Jersey, USA, conducted experiments in very high frequency ionospheric propagation. In 1958 at age 17 he wrote a paper describing the results of his research that was published in the leading amateur radio periodical. He went on to become a professor of physics and in 1974, while conducting radioastronomy research, discovered ultra-dense stars called binary pulsars. For this achievement, in 1993 he was awarded the Nobel Prize in Physics. Tens of thousands of radio amateurs have made similar, if less dramatic, contributions in a wide range of scientific and technical fields. (Today, Dr. Taylor is an active radio amateur with the call sign K1JT.)



Amateur radio stations are used for two-way communication. The typical station is installed in a residence or automobile. The basic unit of equipment is a transceiver that can transmit and receive one or more modes of emission on a range of frequencies in one or more radio frequency bands. Voice emissions are the most popular, although Morse code telegraphy remains in wide use for long-distance international communication because it is effective at low power levels and with simple antennas and because it helps to overcome language barriers. Amateurs also use a wide array of digital data and image modes.

While administrations typically permit amateur stations to operate at power levels of from 400 to 2000 watts, the typical amateur station operates at 100 watts or less. Building and operating equipment that operates at very low power levels, five watts or less, is a popular and challenging activity. Antennas range from short whips for mobile and portable operation to Yagis and other high-gain, highly directive arrays, the most common being simple verticals and wire dipoles.

2. Disaster communications by radio amateurs

The earliest recorded instance of radio amateurs providing communications during a natural disaster occurred in March 1913, when a severe wind storm disrupted communications in the Great Lakes area of the United States. This record of service extends to the present day and is widely recognized throughout the world. Recent examples include the earthquakes in Colombia in January 1999, Turkey in August 1999, El Salvador in January 2001, and India in February 2001, the December 1999 flood in Venezuela, and frequent tornadoes, floods, and fires in the United States and Canada. The photographs on this page were taken following the Hanshin-Awaji Great Earthquake in Japan, January 1995.

The United Nations Office for the Coordination of Humanitarian Affairs (OCHA) has entered into an Operational Agreement on emergency telecommunications with the International Secretariat of the International Amateur Radio Union (IARU). Each agrees to cooperate and to keep the other informed about activities in the field of emergency telecommunications, to evaluate and share information about new technologies and their appropriateness for emergency telecommunications, and to work closely together in the event of a sudden disaster.

The most recent revision and renewal of the agreement was signed in Geneva in August 1999.

In September 2000 Study Group 2 of the ITU Development Sector adopted Recommendation ITU-D 13 on the effective utilization of the amateur services in disaster mitigation and relief operations. The recommendation was approved by ITU-D in April 2001. Specifically, it recommends:

1 that administrations include the amateur services in their national disaster plans and telecommunication assistance information inventories;

2 that administrations are invited to reduce and, where possible, remove, barriers to the effective utilization of the amateur services for disaster communications;

3 that amateur and disaster relief organizations are invited to develop memoranda of understanding (MoU) between themselves and with administrations as well as to cooperate, together with other concerned parties, in developing and making available model agreements and best practices in disaster telecommunications.

ITU-D has approved the publication of a Disaster Communications Handbook for Developing Countries.

ITU-D has approved the publication of a Disaster Communications Handbook for Developing Countries. The IARU is the principal contributor to the Handbook, which consists of three parts: one for policy makers, one dealing with operational matters, and the third a technical annex. The role of the amateur service in disaster communications is one of the main focal points of the Handbook, which is being published in English, French, and Spanish.

3. WRC-2003 agenda item 1.23

The 2000 World Radiocommunication Conference (Istanbul) adopted agenda item 1.23 for the 2003 World Radiocommunication Conference, which reads:

> to consider realignment of the allocations to the amateur, amateur-satellite and broadcasting services around 7 MHz on a worldwide basis, taking into account Recommendation **718 (WARC-92)**.

Recommendation **718 (WARC-92)**, *Alignment of allocations in the 7 MHz band allocated to the amateur service*, states:

> The World Administrative Radio Conference for Dealing with Frequency Allocations in Certain Parts of the Spectrum (Malaga-Torremolinos, 1992),
>
> *considering*
>
> *a)* that it is desirable to have exclusive worldwide allocations to the amateur and broadcasting services in the bands around 7 MHz;
>
> *b)* that the sharing of frequency bands by these services is undesirable and should therefore be avoided;
>
> *c)* that a number of administrations have made proposals to this Conference for the alignment of the allocations to the amateur service around 7 MHz;
>
> *d)* that this Conference was able to give only limited consideration to these proposals,
>
> *recommends* that a future competent world radiocommunication conference should consider the possibility of aligning the allocations to the amateur service around 7 MHz, with due regard to the requirements of other services,
>
> *invites the Council*
>
> to place this Recommendation on the agenda of the next competent world radiocommunication conference.

Recommendation ITU-R SM.1131, *Factors to consider in allocating spectrum on a worldwide basis*, recommends:

that, when evaluating, for a specific frequency range, whether to allocate on a worldwide versus a regional basis, administrations should consider the factors in Annex 1.

ANNEX 1

Factors to consider for allocating spectrum on a worldwide basis

2 Technical factors

Technical factors, predominantly frequency/propagation, and space location must be considered when allocating spectrum. Signals communicating over very long distances due to the propagation characteristics (primarily HF) cannot be localized as a border coordination issue.

3 Operational factors

Certain radio services or types of radio services require allocation on a worldwide basis because the functions that they serve require international mobility of operation and/or interoperability. Some unique operational functions, such as maritime and aeronautical mobile services often require worldwide allotment and/or channelling plans. Examples of services or types of services generally requiring worldwide allocations include:
– space services,
– services below 30 MHz.

5 Other factors

The RR and the Table of Frequency Allocations therein permit administrations to deviate from a particular allocation by use of footnotes. Such deviation takes the form of additional or alternative allocations. Although such allocations can be a disruptive influence, they remain an issue of national sovereignty and flexibility. The elimination of regional differences in allocations will not eliminate the existence of such deviations.

4. History of the 7-MHz Allocation

The story begins with the Washington International Radiotelegraph Conference of 1927, the first such conference after the opening of the short waves. A 300-kHz allocation, 7 000-7 300 kHz, was won for amateurs worldwide and was successfully defended at the Madrid Conference in 1932.

The problems began at the Cairo Conference in 1938. Reflecting the rising tensions in Europe and an increasing desire to disseminate propaganda, the Fascist government of Italy proposed reallocating parts of the amateur bands at 7 and 14 MHz for broadcasting.

While amateurs in North and South America have managed to retain those 300 kilohertz ever since, they have not been as fortunate in the rest of the world. This has also reduced the utility of the band in the Americas. The problems began at the Cairo Conference in 1938. Reflecting the rising tensions in Europe and an increasing desire to disseminate propaganda, the Fascist government of Italy proposed reallocating parts of the amateur bands at 7 and 14 MHz for broadcasting. There was enough support for the Italian proposals that the best the defenders of the amateur service could do was shared use of 7 200-7 300 kHz by amateurs and broadcasting, with broadcasting permitted only outside the Americas.

There were hopes that after World War II the band would be put back into rightful order, but they were dashed by the Cold War. Indeed, the situation became worse at a series of Atlantic City Conferences in 1947. There, the broadcasting band outside the Americas was extended down to 7 100 kHz, with 7 150-7 300 kHz exclusively for broadcasting and 7 100-7 150 kHz shared between amateurs and broadcasting (in a few countries the arrangement for amateurs was more generous).

At Geneva in 1959, the present allocations table for 7 100-7 300 kHz – broadcasting in Regions 1 and 3, amateur in Region 2 – was adopted. Twenty years later at WARC-79, despite proposals for a worldwide amateur allocation of 6 950-7 250 kHz, amateurs in Region 2 almost lost access to 7 100-7 300 kHz; it took the unanimous support of the countries in the region just to maintain the *status quo*.

The next international conference to deal with the band was held in Torremolinos, Spain, in 1992. There, the United States proposed a worldwide amateur allocation of 6 900-7 200 kHz as one of a package of proposals for expanded broadcasting bands. In the end, there was insufficient support for broadcasting expansion below 10 MHz to free up the spectrum required for such a realignment. The best that could be accomplished at Torremolinos was the adoption of a recommendation that the alignment of the amateur allocations around 7 MHz be placed on the agenda of a future conference.

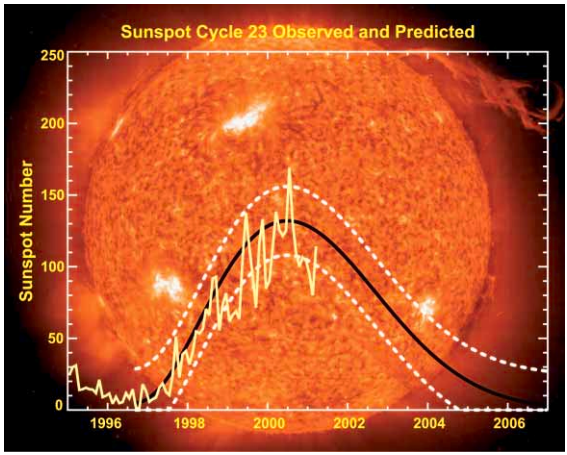
To restore the condition that existed prior to 1938, the amateur service seeks an exclusive, worldwide allocation in the vicinity of 7 MHz of no less than 300 kHz.

WRC-2000 in Istanbul recommended that 7-MHz realignment – "harmonization" was a term often used – be placed on the agenda of WRC-2003. The ITU Council accepted this recommendation.

To restore the condition that existed prior to 1938, the amateur service seeks an exclusive, worldwide allocation in the vicinity of 7 MHz of no less than 300 kHz. When the allocation was first made in 1927, amateur stations worldwide numbered just 15,000. Now they number almost three million. Broadcasters speak of their unfulfilled requirements for spectrum between 4 and 10 MHz, but in this frequency range the amateur service has access **only** to the 7-MHz band. The band is essential for disaster communications in the daytime over paths of 300 to 1 000 km and frequently is the only band available for intercontinental communication at night. Fitting the wide and growing variety of amateur uses into the 100 kHz that is clear of broadcasting interference defies rational band planning.

5. Propagation properties and uses of 4-10 MHz

Operating frequencies vary according to sunspot numbers, which modifies when, and over what path distances, particular bands will be used. Observed 12-month smoothed sunspot numbers and those predicted for the rest of Cycle 23 are as shown below.



To maintain reliable radiocommunication, HF services need access to a family of frequencies. Optimum operating frequencies vary not only according to sunspot numbers but also the specific path, time of day, month, manmade noise levels and other factors. Ideally, they should be logarithmically spaced and appropriate for the path distances. As amateur stations use relatively low power and paths between stations can be any distance, bands are needed at frequency intervals of 1.4 to 1 or less.

Nighttime F-layer propagation supports radiocommunication over much of the world. Generally, the portion of the Earth's surface in darkness or twilight can be reached at any given time with enhanced propagation along the terminator (the boundary between daylight and darkness). Because the evening is a peak period for amateur service activity, use of the 7 MHz band is particularly heavy at that time. Traffic is especially heavy when the maximum usable frequency (MUF) falls below 10 MHz and the 7 MHz band becomes the only one capable of supporting reliable intercontinental radiocommunication with typical amateur antennas and power levels.

7 MHz is the only amateur allocation between 4 and 10 MHz. It is essential for:

- intraregional (short-distance) paths during the daytime
- interregional (long-distance) paths during the night,

as shown in the following map:

7 MHz short-distance path (day) and long-distance path (night)

Generally, the portion of the Earth's surface in darkness or twilight can be reached at any given time with enhanced propagation along the terminator (the boundary between daylight and darkness).

Amateur Service Spectrum Requirements at 7 MHz

The chart below on the left shows the maximum usable frequency (MUF) and lowest usable frequency (LUF) for a typical short 197-km HF path, in this case, Madras to Bangalore, India, January, SSN=40, 100 W, dipole antennas. The chart on the right are LUFs and MUFs for the Geneva-Connecticut USA 6062-km path, January, SSN=150. Both of these examples show the utility of the 7 MHz band on short and long paths and different sunspot numbers. Bold indicates when 7 MHz may be the most reliable band of those allocated to the amateur service.

Time (UT)	*LUF (MHz)*	*MUF (MHz)*
02	5.2	6.6
04	**7.3**	**8.1**
06	**6.9**	**8.1**
08	**7.1**	**8.4**
10	7.6	9.1
12	**6.7**	**9.2**
14	**4.9**	**8.2**
16	**4.5**	**7.3**
18	2.4	6.7
20	3.9	5.6
22	2.7	4.4
24	2.0	3.1

Time (UT)	*LUF (MHz)*	*MUF (MHz)*
02	**4.1**	**9.8**
04	**4.2**	**10.3**
06	**3.6**	**7.6**
08	**5.2**	**9.3**
10	-	13.3
12	11.3	20.8
14	13.5	28.4
16	13.1	31.4
18	9.1	23.9
20	**6.7**	**15.2**
22	**4.6**	**11.8**
24	**4.2**	**10.2**

From the charts on the left, it is apparent that the 7 MHz band is the best band for all paths at least some of the time.

Because of its propagation characteristics, the 7 MHz band sees heavy 24-hour use each day.

6. Growth in variety of radiocommunication modes used by amateurs

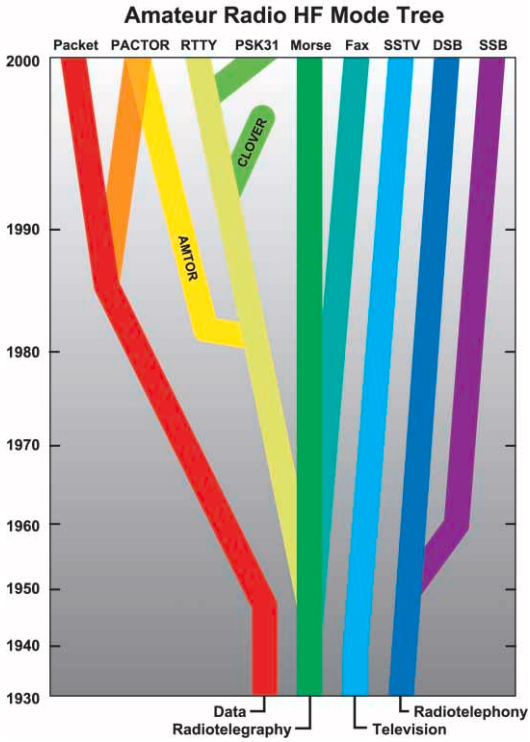
Whereas on-off-keyed (CW) Morse code telegraphy and double-sideband amplitude-modulated (DSB-AM) radiotelephony were dominant in the 1930s, today a wide variety of radiocommunication methods (modes) are in use in the high-frequency (HF) bands in the amateur service.

In the late 1970s and early 1980s with the advent of the personal computer (PC), it became possible for amateurs to experiment with electronic radiotelegraphy and data communications using error correction.

Narrow-band, direct-printing radiotelegraphy (RTTY) became practical for amateurs in the 1950s owing to the availability of teleprinter machines retired from commercial service. Also in the 1950s, suppressed-carrier single-sideband (SSB) radiotelephony became popular and in the 1960s largely supplanted DSB-AM, which is now the province of just a handful of devoted operators. Experiments with slow-scan television in a voice bandwidth, begun in the 1930s and accelerated in the 1950s, led to the mode becoming popular in the late 1960s. In the late 1970s and early 1980s with the advent of the personal computer (PC), it became possible for amateurs to experiment with electronic radiotelegraphy and data communications using error correction.

That brought forth AMTOR – a variation of SITOR based on CCIR Recommendation 476 – and permitted development of AX.25 packet radio used not only in the amateur services but also in other radio services throughout the world. PACTOR has emerged as a mode combining some of the features of AMTOR and packet radio. These developments have benefited other services; for example, the United Nations is using PACTOR for reliable high-frequency radiocommunication between Geneva and Africa and Asia as an extension of the Internet.

In recent years, dedicated hardware modulator-demodulator (modems) controllers have been emulated by software-based systems running on PCs including "sound boards." This has given rise to a number of "designer modes" such as the narrow-band chat mode PSK31, a robust selective-fade-resistant MFSK-16, and others, as well as to enhancements to slow-scan television. Amateurs are now experimenting to determine the best digital voice implementations for the difficult HF environment.



These modes are on the air daily in the 7 MHz band. Beginning at 7 000 kHz and moving upward in frequency, CW operations occupy the lower portion of the band. There is a small amount of spectrum available for RTTY, slow-scan television (SSTV), facsimile and data modes, and the remainder is occupied by radiotelephony, mostly SSB. While 300 kHz of bandwidth is available in Region 2, Australia and New Zealand, all of these modes are squeezed into 100 kHz of spectrum in Regions 1 and 3. The inter-regional propagation at 7 MHz – particularly at night – and the global misalignment of the allocations makes it difficult to have a practical band plan.

Amateur stations cope with this problem in real time by dynamic frequency self assignment to reduce interference. It is also common practice for amateur stations to use reduced bandwidths through narrow-band filtering to accommodate as many stations as possible within the available spectrum.

7. Population growth of the amateur service

At the time of the Washington International Radiotelegraph Conference in 1927, when the width of the amateur 7-MHz band was set at 300 kHz worldwide, there were approximately 15,000 amateur stations. This number grew to one million at the time of WARC-79 and to two million by 1990. Today the number of amateur stations worldwide is approaching three million.

Hundreds of thousands of presently licensed amateurs who are now restricted to frequencies above 30 MHz will be able to use the HF bands. In addition, a large influx of new licensees will enter the amateur service once the Morse code is no longer required for HF operation.

Several administrations are planning to propose at WRC-2003 the deletion of the existing international regulatory requirement that amateur operators must demonstrate Morse code proficiency before being licensed to operate below 30 MHz. It is anticipated that this proposal will be adopted. This will have an immediate and dramatic effect upon the occupancy of the HF amateur bands, including the 7-MHz band. Hundreds of thousands of presently licensed amateurs who are now restricted to frequencies above 30 MHz will be able to use the HF bands. In addition, a large influx of new licensees will enter the amateur service once the Morse code is no longer required for HF operation. These effects could easily double the occupancy of the 7-MHz band by 2005.

8. Comparison of BC and amateur allocations in the band 5 900-12 100 kHz

Allocation to services		
Region 1	**Region 2**	**Region 3**
5 900-5 950	**BROADCASTING***	
5 950-6 200	**BROADCASTING**	
6 200-6 525	MARITIME MOBILE	
6 525-6 685	AERONAUTICAL MOBILE (R)	
6 685-6 765	AERONAUTICAL MOBILE (OR)	
6 765-7 000	FIXED Land mobile	
7 000-7 100	AMATEUR AMATEUR-SATELLITE	
7 100-7 300	**7 100-7 300**	**7 100-7 300**
BROADCASTING	AMATEUR	BROADCASTING
7 300-7 350	**BROADCASTING***	
7 350-8 100	FIXED Land mobile	
8 100-8 195	FIXED MARITIME MOBILE	
8 195-8 815	MARITIME MOBILE	
8 815-8 965	AERONAUTICAL MOBILE (R)	
8 965-9 040	AERONAUTICAL MOBILE (OR)	
9 040-9 400	FIXED	
9 400-9 500	**BROADCASTING***	
9 500-9 900	**BROADCASTING**	
9 900-9 995	FIXED	
9 995-10 003	STANDARD FREQUENCY AND TIME SIGNAL (10 000 kHz)	
10 003-10 005	STANDARD FREQUENCY AND TIME SIGNAL Space research	
10 005-10 100	AERONAUTICAL MOBILE (R)	
10 100-10 150	FIXED **Amateur**	
10 150-11 175	FIXED Mobile except aeronautical mobile (R)	
11 175-11 275	AERONAUTICAL MOBILE (OR)	
11 275-11 400	AERONAUTICAL MOBILE (R)	
11 400-11 600	FIXED	
11 600-11 650	**BROADCASTING***	
11 650-12 050	**BROADCASTING**	
12 050-12 100	**BROADCASTING***	

*Access subject to S5.134.

In the band 5 900-12 100 kHz, the broadcasting service has a total of 1 350 kHz worldwide and 200 kHz additional in Regions 1 and 3. The amateur service has 150 kHz worldwide (including 50 kHz on a secondary basis) and 200 kHz additional in Region 2.

9. Benefits of harmonization

Worldwide harmonized allocations will benefit both the broadcasting and amateur services. Broadcasters and their listeners will benefit from the removal of geographic limitations.

In the late afternoon, nighttime, and early morning hours, strong signals from broadcast stations in Regions 1 and 3 drown out the lower-powered amateur stations operating in the upper two-thirds of the band.

Amateurs in Regions 1 and 3 have had to cope with a grossly inadequate allocation of just 100 kHz and must have access to the 300 kHz allocated to amateurs in Region 2 to accommodate their minimum requirements. If this can be achieved, amateurs in Europe, Africa, Asia, and Oceania will be able to make full use of the 7-MHz band for the first time in 65 years.

Amateurs in Region 2 have full access to 300 kHz only during some daylight hours. In the late afternoon, nighttime, and early morning hours, strong signals from broadcast stations in Regions 1 and 3 drown out the lower-powered amateur stations operating in the upper two-thirds of the band. The use of this portion of the band by amateur stations in Regions 1 and 3 will be much more compatible with amateurs in Region 2 and will permit interregional communication.

10. Costs and risks of failing to find a solution

If an acceptable worldwide allocation arrangement cannot be agreed, the consequences will be severe for both the broadcasting and amateur services.

The existing geographic constraints on broadcasters will have to be continued. Broadcasters in Regions 1 and 3 will be unable to beam to listeners in Region 2 and broadcasters in Region 2 will be unable to operate at all in the 7 100-7 300 kHz band.

Crowding in the amateur service allocation will become even more severe as the variety of emission modes continues to expand and as new stations are licensed. It is anticipated that after WRC-2003 there will no longer be an international regulatory requirement for amateur operators to demonstrate Morse code proficiency before being licensed to operate below 30 MHz. This will cause an immediate and dramatic increase in band occupancy.

To maintain communications in the face of increased interference, amateurs will be required to increase transmitter power levels and antenna gain. Those who are unable to do so will be unable to communicate. This will be particularly disruptive of disaster communications because stations operating from areas affected by natural disasters typically use equipment powered by batteries and temporary antennas.

Amateurs who find the 7-MHz band too crowded will be forced to operate in the next lower amateur band at 3.5 MHz, a 2 to 1 frequency interval (1.4 to 1 is the maximum desirable interval between HF amateur bands). Communication often is not possible at the lower frequency owing to reduced signal-to-noise ratios. Even if communication is possible at 3.5 MHz over the paths for which 7 MHz is the optimum frequency, significantly higher transmitter power is required – which consumes batteries and generator fuel at a faster rate.

11. Steps to WRC-2003

The following are among the important ITU events leading to consideration of the 7 MHz realignment at WRC-2003:

2001	
▪ 19-28 September	ITU-R Working Party 6E (terrestrial emission), Geneva
▪ 1-2 October	ITU-R SG 6 (broadcasting), Geneva
▪ 22-30 October	ITU-R Working Party 8A (land mobile and amateur), Geneva
▪ 5-7 November	ITU-R Study Group 8 (mobile, amateur), Geneva
2002	
▪ 8-14 May	ITU-R Working Party 8A (land mobile and amateur), Geneva
▪ 31 May	Deadline for contributions to the CPM draft report
▪ 3-7 June	Drafting of the CPM Report, Geneva
▪ 2-6 December	CPM-02-2, Geneva
2003	
▪ Early	Proposals from administrations
▪ 9 June-4 July	2003 World Radiocommunication Conference

12. What is the IARU?

The International Amateur Radio Union was founded in Paris in 1925 to represent the interests of radio amateurs worldwide. It is a federation of national associations of licensed radio amateurs representing 152 countries and separate territories, including 136 Member States of the ITU. There are three regional organizations of the IARU, corresponding to the Regions that are defined in the ITU Radio Regulations for frequency allocation purposes. Each of the regional organizations holds a plenipotentiary conference every three years, on a rotating basis. The policy and management of the IARU are the responsibility of its Administrative Council, composed of the three IARU officers and two representatives from each of the three regional organizations.

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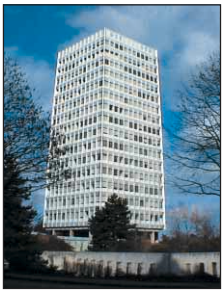

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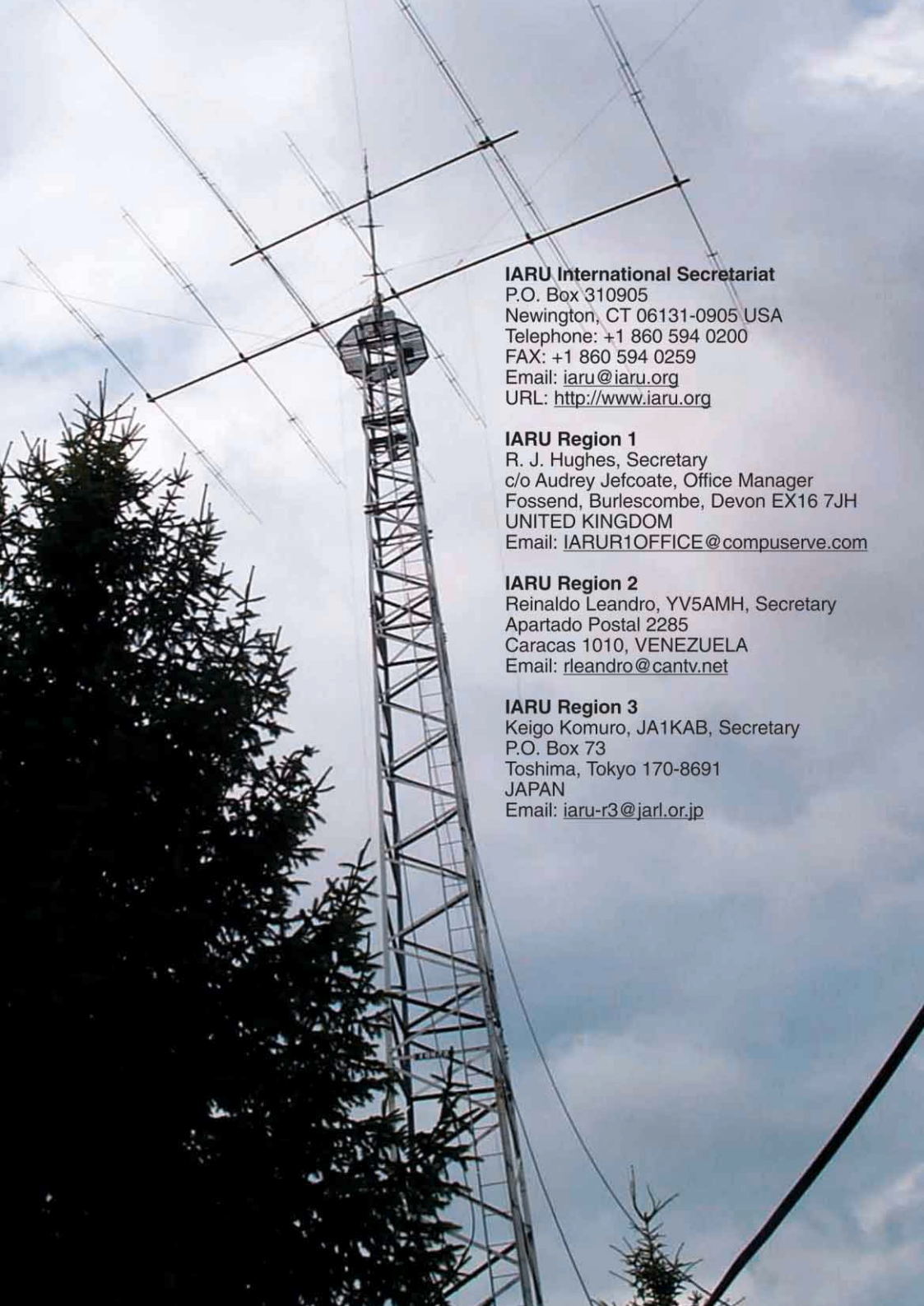

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