By Richard Baldwin, WIRU HARU President - early 1883

## The International Amateur Radio Union

Throughout its lifespan IARU has been heavily influenced by two factors -- on the one hand by the support and direction provided by ARRL and on the other hand by the course of events at the International Telecommunication Union (ITU). This paper is a broad overview of those relationships and the effect that they have had on amateur radio internationally.

[In the paragraphs that follow, frequent reference is made to "ARRL" and to "IARU" -- in every case it is the <u>organization</u> that is referred to. That is, no action, no decision, by "ARRL" was made without the express support and approval of the ARRL Board of Directors. Occasional reference is made to individuals, and in every case those individuals were carrying out policies that had been known to and approved by the ARRL Board of Directors.]

### History

### Founding of ARRL

1914 Hiram Percy Maxim wanted to send a message In by amateur radio from his station in Hartford to a friend in Springfield, Mass. But in those days DX was only a few miles, and Springfield was too far away to contact directly. So Mr. Maxim relayed the message via another amateur station in Windsor Locks, halfway between Hartford and Springfield. Mr. Maxim was one of those unique people who could see beyond an isolated event and perceive a broader picture, and the picture that he saw was a nationwide network of amateur radio stations relaying messages. He convinced the Hartford Radio Club of the value of his vision, and the American Radio Relay League was born.

## Founding of IARU

In 1921 spark transmitters were being replaced by tube transmitters (c.w.) and radio amateurs discovered the short waves. DX became real, QSOs were being carried on across the Atlantic and across the Pacific, and amateur radio became international. There were no international radio regulations at that time, there were no international prefixes, and so amateurs themselves voluntarily adopted a system of prefixes that would indicate the continent and country of a transmitting amateur.

Once again, Mr. Maxim perceived that there needed to be some sort of an organization to tie radio amateurs together internationally, and under his leadership the International Amateur Radio Union was formally organized in April 1925.

# The Washington Conference of 1927

The changes in the technology -- tube transmitters, amplitude voice modulation, the use of the higher frequencies -all of these combined to create literally an explosion in the use of the radio-frequency spectrum. Although individual countries were beginning to control the use of the spectrum to some extent, there was no universal coordination, there were no international radio regulations.

There had been some early wireless conferences, in 1903 and 1906 and 1912, but these dealt almost exclusively with problems centered around the use of radio by ships and shore stations. The 15 years from 1912 to 1927 had produced so many changes both in technology and in use of the spectrum that an international telecommunication conference was called for Washington in 1927.

In retrospect, the Washington conference of 1927 a'n was remarkable effort. It created the framework of international radio regulation that exists even today. It had to recognize and provide for a multitude of radio services, including the Amateur Service. It was at this conference that amateur radio was for the first time internationally recognized and defined. Bands of harmonically related frequencies were allocated to the various radio services, including the Amateur Service.

Although IARU had been organized in 1925, and although one of its goals and objectives was the representation of the Amateur Service at international conferences, it was not really functioning in that role in 1927. And although there were various radio amateurs present at the 1927 conference, much of the credit for the success of amateur radio at that conference has to go to two representatives of ARRL -- Hiram Percy Maxim, president of ARRL; and Kenneth B. Warner, Secretary and General Manager of ARRL.

## The Regional Concept Adopted by ITU

of the basic assumptions of the Washington conference One was that each service (Amateur, Maritime, etc., etc.) would have its own exclusive world-wide allocations. However, the o£ use radio was growing at such a rapid pace, and the number of stations and services clamoring for space in the spectrum was great, that it simply was not possible to continue with that SO exclusive world-wide allocations. concept of Thus, at а subsequent telecommunications conference in Cairo in 1938, the world was divided up into three geographical regions. The division was based on politics as well as on technical grounds. Region I was essentially Europe and Africa, plus Asiatic Russia; Region II was the Americas; and Region III was the rest of the world. Using the regional concept, frequencies could be allocated to users in, for example, Region I and then reused without harmful interference by other stations in Region II.

Since Cairo, the allocations picture has become far more complicated, with different levels of harmful interference defined in the Radio Regulations, and with footnotes to the Radio Regulations further modifying and complicating the regional concept of frequency allocation. Dividing the world into three regions for purposes of frequency allocation was to have a far-reaching effect on IARU, as we shall now see.

# IARU and Atlantic City, 1947

World War II was responsible for another explosion of both technological advance and increasing use of the spectrum. This resulted in the Atlantic City conference of 1947. A number of comments need to be made about the preparation for this conference by radio amateurs, about participation in the conference by radio amateurs, and about the results of the conference.

Although IARU was a great idea, it had really been rather an ineffectual organization in the first 20 years or so of its life. IARU did not prepare for or participate in, as an organization, the telecommunication conferences of 1932, 1938, or 1947. There was a monthly IARU news column in QST, but it was largely devoted to news of DX and the formation of new societies. IARU issued the WAC certificate, which was the forerunner of DX awards. All of this was window dressing for what should be, and eventually was, the real purpose of IARU.

Amateur radio was represented at the Atlantic City conference by a number of radio amateurs from various countries, largely from North America and Europe, but they had no coordinated plan for what they wished to accomplish at the indeed, in 1947 and again in 1959, there was a conference and considerable amount of disagreement amongst the radio amateurs present at those conferences as to what they wished to accomplish and how to go about it.

Amateur radio was successful at Atlantic City 1947, due in large part to the leadership and direction again furnished by two representatives of ARRL --Kenneth B. Warner (who was still the Secretary and General Manager of ARRL) and Arthur L. Budlong, ARRL Assistant Secretary. Budlong had served in the Coast Guard during World War II and had become heavily involved in frequency allocations matters. It was largely his expertise in this area and his many government contacts that made possible the allocation of the new 21-MHz band to the Amateur Service.

### Region I, IARU

Now back to the regional concept that had been adopted internationally for the allocation of frequencies and the problem of the discord amongst radio amateurs at conferences. A number amateurs in Western Europe were dissatisfied with what of they lack of leadership provided by IARU Hq. saw as the in Connecticut. Further, they felt that because the seat of ITU was Geneva, Switzerland, amateurs in Europe should take the lead in IARU matters. Despite their unhappiness, they were not in prepared to challenge ARRL's position as the headquarters society of IARU, so in 1950 they formed the IARU Region I organization,

and began to hold regular IARU Region I conferences to deal with all sorts of matters relating to international amateur radio in general and Region I amateur radio in particular.

As an aside, in the beginning the IARU Region I organization was an European body. Throughout the history of the Region I organization, and even today, participation from Africa has been minimal, despite the fact that Africa provides something like 55 ITU votes.

## A New Direction for IARU

Now we come to another one of those individuals who had a major impact on IARU and the organization of international amateur radio -- Herbert Hoover, Jr., W6ZH. Mr. Hoover was the only ARRL president ever to be chosen from outside the ranks of the ARRL Board, and was elected by the ARRL Board in 1962. He had had extensive experience in various overseas business and government activities, including a stint as Under Secretary of State. He had many contacts in Washington, and he had maintained close contact with a group of concerned Washington amateurs who were influential in a number of areas of government.

Although there had been an ITU conference in Geneva in 1959, it soon became common knowledge amongst those concerned with various aspects of international radio regulation that, because of changes in the technology and the use of the spectrum, another conference was on the horizon, and it was being commonly predicted that this would have to take place by 1980. Mr. Hoover was determined that IARU must be in a better position to represent amateur radio at future ITU conferences, and so he set about to accomplish two goals.

## Region II IARU Formed

One was the formation of the IARU Region II organization, which was accomplished in 1964. The other was the education of IARU societies as to their responsibilities in representing amateur radio in their countries and preparing for ITU conferences.

As another aside, the early history of IARU Region II was not spectacular, neither in organization nor in accomplishment. It was not until Vic Clark, W4KFC, became the president and gave it a positive direction and leadership that the organization became a going concern, even as it is today.

#### Strengthening IARU Societies

Mr. Hoover's other goal, the education of IARU societies, was also begun in 1964, and continues even today. Please forgive me for being personal, but in 1964 I was chosen by Mr. Hoover and by John Huntoon, then the General Manager of ARRL, to organize and carry out this goal. Beginning in 1964, there was an extensive program of travel to member societies, principally in

Europe and Africa but in other areas of the world as well. Our message to the societies was simple -- the IARU Constitution outlined certain responsibilities of societies to represent amateur radio in their countries. Because there was another ITU in the offing, it was absolutely necessary for conference every IARU member-society to establish better relations with its regulatory authorities and to promote a positive recognition of the value of the Amateur Service.

Under Mr. Hoover's leadership, SRI International was commissioned to produce a study on amateur radio, a document which demonstrated the technological, sociological, and economic value of the Amateur Service. Hundreds of copies of that document printed and were either mailed or were (preferably) hand-carried to telecommunications officials all over the world. It was a high-powered promotional piece for amateur radio, and we made the most of it.

Not only did we travel extensively to IARU member-societies but we also visited foreign administrations in countries where there was no IARU society, and perhaps not even an amateur radio society of any description. This was particularly true in Africa and our goal was to point out the value of the Amateur Service to a developing country and to try and gain support for the Amateur Service.

#### ITU Meetings

In addition to the travel to member-societies, we embarked on a program of attending every possible ITU meeting. Almost every year there was some sort of an ITU conference. With rare exception, none of these had any direct impact on the Amateur Service, but our goal was to establish the Amateur Service as а responsible member of the community of spectrum users. Beginning in 1964 and up until 1979, I attended every ITU conference of any sort. addition, in alternate years at Geneva the ITU's In International Frequency Registration Board (IFRB) held Frequency Management Seminars, and we attended every one of these. None of these had any direct impact on the Amateur Service, but it was a way to become acquainted with individuals who were influential in administratiions, frequency allocation matters in their individuals who might later become the decision-makers at an ITU conference.

## <u>4U1ITU</u>

In another aside, we should mention 4U1ITU, the station at Headquarters in Geneva. In 1962 the ITU Secretary-General ITU was Gerry Gross, W3GG, an enthusiastic and supportive radio amateur if there ever was one. At the same time, a member of the IFRB was a John Gayer. Mr. Gayer had political connections in Colorado, and had served in some civilian post in the U.S. military in post-war Germany. While in that post he had become very much interested in the communication aspects of amateur radio but had not been sufficiently motivated to learn Morse. He

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used his political influence to be issued a DL4 license, and then when he went to ITU he used the DL4 license to obtain an HB9 call.

Gross and Gayer were both enthusiastic radio amateurs who wanted to promote amateur radio among the developing countries -i.e., their motives were first-rate. With the support of Herb Hoover and John Huntoon (who persuaded the ARRL Awards Committee establish separate country status for 4U1ITU), and with to the support of Bill Halligan of Hallicrafters (who donated guite a collection of amateur equipment) 4U1ITU was set up in a room on 3rd floor of the original ITU building in Geneva. It was a the pristine, well-maintained station, and its only function was to be a show-piece of amateur radio for visiting telecommunications delegates. Every time, for example, that some influential delegate from Africa would show up, either Gerry Gross or John Gayer would whisk him off to 4U1ITU for a demonstration of amateur radio.

The only problem was that other members of the ITU staff were outraged by what they considered to be favored treatment of a single service, and there was developed a certain amount of resentment of the Amateur Service amongst the ITU staff.

Similarly, when IARU first began appearing regularly at ITU conferences and meetings, the general negative attitude was, "What business do radio amateurs have attending these meetings?" Gradually, however, through a positive and planned program of non-confrontational and making of meetings friends, the perception of the Amateur Service was turned around, and nowadays IARU does not show up for a meeting, surprise is expressed. if Likewise, we now have many friends and supporters on the ITU staff.

Going back to 4U1ITU for a moment, although originally it was established for the purpose of showing off amateur radio to ITU visitors, over the years that concept changed, principally because there was no longer any amateur radio enthusiast on the ITU staff who was high enough in seniority that he could leave his desk at any time in order to demonstrate 4U1ITU. The station now is used primarily by visiting radio amateurs who want an opportunity to operate from a "rare" country.

#### IARU Region III Formed

The Region III IARU Association was formed on Easter Sunday, 1968, and by that time the ARRL/IARU program for educating the member societies was progressing well. There continued to be extensive travel by IARU officers and various members of the ARRL/IARU staff.

## The Preparation for WARC-79

This brings us to the next stage of the history of IARU, and that is WARC-79. In 1972 the spectrum committee of the

Interdepartment Radio Advisory Committee (IRAC), the governmentside equivalent of the FCC, formed a number of sub-committees to study the spectrum needs of various services. One of those committees, a four-man group consisting of three FCC staff and ARRL staff (W30KN, W4BW, N4FK, W1RU), addressed the one future needs of the Amateur Service and the Amateur-Satellite Service, mostly based on data gleaned from the annual IARU member-society This group developed a rationale for three questionnaires. new amateur 10-, 18-, and 24-MHz. bands at This rationale was adopted as a part of the eventual U.S. position for WARC-79 and also became a corner stone of the IARU position. Thanks to the work and dedication of many people in many IARU societies, hard who went out and sold the IARU position, the Amateur Service was very successful at WARC-79.

## The Restructuring of IARU

But aside from the gains in spectrum that we made at WARCthat conference had another result. No one in 79, the whole world denied that most if not all of the decisions made in and participation in WARC-79 were the preparation for correct problem that was perceived by many decisions. The people was that these working decisions had been made by a comparatively group -- by the officers and staff at ARRL/IARU and small by а very small and select group in Regions I and III. There was а ground swell of sentiment that in the future more people should involved in the decision-making process of IARU. Perhaps it be was simply that more people wanted to be part of a winning team! Starting with a couple of preparatory meetings participated in by amateurs at WARC-79, this led to a restructuring of IARU. The first step was to set up an IARU Administrative Council (mimicking the ITU structure) and then a 1982 meeting in Tokyo where a brand-new IARU Constitution was produced.

# Present Structure

## <u>Regional</u> Basis

As indicated earlier, IARU is organized on a regional basis. member society is a member not only of IARU as a whole Each but also of the appropriate regional organization. Conferences of the IARU are held on a regional and triennial basis. In 1993 Region I will hold its conference in Belgium. In 1994 Region III hold its conference in Singapore. In 1995 the Region II will conference will be held in Niagara. Then the cycle of meetings repeats but with different locales.

At the regional conferences the member societies address the various problems common to the region, including such topics as band planning, the scheduling of contests, preparation for ITU conferences, the promotion of amateur radio in the region, and so on. At each conference there are present not only members of the IARU Administrative Council but also observers from the other two regions, and so there is a considerable amount of interregional coordination and cross-pollination.

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Each region has an Executive Committee (in Region III they call it the Board of Directors) which guides the work of the region in between conferences in accordance with decisions taken at the conference.

Each executive committee designates two of its number to serve on the IARU Administrative Council.

#### IARU Administrative Council

The IARU Administrative Council is responsible for carrying out the policy and management of the IARU. The IARU AC consists of nine members -- the three officers (president, vice-president, and secretary) and two representatives from each region. Ιt regularly meets in person once each year, generally immediately following (and at the same location as) the current regional conference. In between the in-person meetings, the members of the AC carry on extensive correspondence amongst themselves, generally by electronic mail.

#### Member Societies

It is important to note here the status of member societies. They are the basis for the strength of the IARU. Decisions concerning the future of amateur radio not only domestically but also internationally rest with the member societies through their participation in the regional conferences. With these privileges responsibilities, carefully spelled out in the IARU come The success of amateur radio on the international Constitution. scene, particularly as relates to international telecommunication conferences, is directly influenced by the diligence of member societies carrying out those responsibilities.

#### Funding

The activities of each regional organization are funded through dues paid by the member societies of that region, with each region establishing its own budget and its own schedule of payment from the societies.

The activities of the Administrative Council are funded in part by the regions, who pay for the expenses of their representatives on the AC, and in larger part by ARRL, who pays the administrative and travel expenses of the three officers, who provides the staff support for the International Secretariat, and who provides funding for a number of IARU projects.

WARC-79 and WARC-92 were examples of exceptional additional funding carried out by a number of major societies in support of the conferences. ARRL, in particular, provided very substantial funding for those conferences, funding efforts which were strongly supported and participated in by the membership.

There is another item of funding which is worthy of mention, and that is the extent of the financial support for the increasing number of activities authorized by the Administrative Council necessary to further the objectives of IARU. At a recent meeting the Administrative Council resolved that each of the regions shall contribute a sum equivalent to 10% of their gross annual membership subscription income for such purposes. In its resolution the AC acknowledged the unstinting contribution the International Secretariat, but believed that the burden of should be shared.

## Objectives of the IARU

Let's pause here for a few moments and look at the goals and objectives of the IARU, quoting directly from the IARU Constitution, and listing one or two examples in each case:

"2. Its objectives shall be the protection, promotion, and advancement of the Amateur and Amateur-Satellite Services within the framework of regulations established by the International Telecommunication Union, and to provide support to Member-Societies in the pursuit of these objectives at the national level, with special reference to the following:

a) representation of the interests of amateur radio at and between conferences and meetings of international telecommunications organizations;

[World Radio Conferences, CCIR meetings, international standards groups, Amateur Radio Administration course, telecoms]

b) encouragement of agreements between national amateur radio societies on matters of common interest;

[Band plans, contest scheduling, emergency networks, beacons, monitoring system]

 c) enhancement of amateur radio as a means of technical self-training for young people;

[Selling point in developing countries, PADC, ARAC]

d) promotion of technical and scientific investigations in the field of radiocommunication;

[QST, QEX, other amateur journals, beacons, satellites]

e) promotion of amateur radio as a means of providing relief in the event of natural disasters;

[Resolution 640, national networks, Amateur Radio Administration course] f) encouragement of international goodwill and friendship;

[a basic tenet of our international fraternity]

g) support of Member-Societies in developing amateur radio as a valuable national resource, particularly in developing countries; and

[education of our member-societies on how to promote the Amateur Service]

 h) development of amateur radio in those countries not represented by Member-Societies.

[on-going program, particularly in Region I, of Promoting Amateur Radio in Developing Countries (PADC)]

## What of the Future

In recent years the ITU has come to realize that it may not have been adequately structured to cope with fast-changing events in the field of telecommunications, and so it has undergone a substantial restructuring.

a consequence, to ensure that IARU would be adequately As equipped to cope with this restructuring, I appointed an IARU restructuring committee consisting of Vice-President Owen. Secretary Price, and Region III Chairman Rankin. The report o£ committee, not recommending any drastic changes that in the present structure of IARU, has been accepted the by Administrative Council. We are, however, working on ways to make our administrative operation more responsive and effective.

One consequence of the restructuring of ITU is that there will be a steady series of World Radio Conferences, perhaps one every two years, rather than the less frequent but more extensive World Administrative Radio Conferences of the past. In addition, there will be a host of other international meetings, and I have appointed a committee consisting of Mr. Owen, Pedro Seidemann of Region II, and Mr. Rankin to review this panorama of meetings and to help us decide the extent of IARU's participation.

One area about which we have been concerned for many years is the gaining of support for the Amateur Service in the developing countries. Indeed, as already mentioned, Region I IARU has a committee especially devoted to the problem. Part of the recent restructuring of ITU has created the BDT -- the Telecommunications Development Bureau. It is just possible that participation in the work of the BDT may be useful IARU's to generate support for the Amateur Service in areas such as Africa, and to investigate this possibility I have appointed a committee consisting of Mr. Price, Mr. Wojciech Nietykzsa (SP5FM), and Mr. Fred Johnson, ZL2AMJ. This is a subject which will be thoroughly discussed at the next meeting of the Administrative Council in Belgium in September.

## In Conclusion

This has been a fairly quick look at the history of IARU, at how it is currently organized, and what it is trying to accomplish. Many changes are taking place on the international scene of radio regulation, and it may well be that IARU has to make some further adjustments in its structure. However, any proposed changes will be thoroughly discussed at all levels of the IARU administrative organization, and can be made only with the approval of the member-societies.

Let me conclude by saying that from the moment of its inception until the present time the support of IARU by the ARRL Board has been thoroughly recognized by all of those involved. Your support has engendered a great deal of international goodwill, and has made the success of IARU possible.