U.S. Preparation for ITU Conferences: WARC '79, A Case Study

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INTRODUCTION

In September 1979, 142 member nations of the International Telecommunication Union (ITU) sent more than 1,600 delegates, advisors, and support staff, to Geneva, Switzerland, to convene the World Administrative Radio Conference (WARC '79).¹ For the United States delegation ² the conference represented the culmination of over five years of preparation.³ Most of the departments and agencies within the Executive Branch were involved in the United States preparatory effort for WARC '79. The Department of State, which had the responsibility of overseeing United States preparation, coordinated recommendations submitted by the executive branch and the private sector. In particular, the State Department had to weigh the private and public sector recommendations in formulating a concise negotiating strategy. While this may appear to be an effective way of organizing the preparatory effort, it in fact led to much confusion as the roles of the various departments were ill defined.

This article traces United States preparation for international telecommunications conferences, focusing on WARC '79. First, a brief background of the ITU is presented, including the events leading to the decision to convene WARC '79. Secondly, with the aid of a recent Office of Technology Assessment (OTA) Survey, ⁴ the article analyzes American preparation for the Conference. The third part considers the impact of U.S. preparation on the reservations taken at WARC '79. Finally, recent U.S. legislative actions aimed at improving U.S. preparation for international telecommunications conferences are examined.

¹ David B. Fenkell is a member of the class of 1984, University of Michigan Law School.
THE INTERNATIONAL TELECOMMUNICATION UNION

The International Telecommunication Union, formally organized in 1932, has become the center of international coordination and agreement for international radio regulation. The International Telecommunication Convention underscores the rights and obligations of the member states. The most recent draft of the Convention is the product of the ITU Plenipotentiary Conference of 1973 held in Malaga-Torremolinos, Spain. The purpose of the Union is:

(a) To maintain and extend international cooperation for the improvement and national use of telecommunications of all kinds;
(b) To promote the development of technical facilities and their most efficient operations with a view to improving the efficiency of telecommunications service, increasing their usefulness and making them, so far as possible, generally available to the public;
(c) To harmonize the actions of nations in the attainment of these ends.

To accomplish these goals, the ITU is authorized to convene administrative conferences in the forms of World Administrative Conferences and Regional Administrative Conferences. Regional Administrative Conferences consider only specific telecommunication matters and are limited in discussion by their prearranged agenda. The agenda of a World Administrative Conference, on the other hand, may include the drafting or revision of Administrative Radio Regulations.

WARC '79

The initial impetus for WARC '79 can be found in Resolution 28 of the ITU Plenipotentiary Conference held in 1973. Members of that Conference decided it was necessary to harmonize and update the Radio Regulations because of recent technological advances in the field of telecommunications and because the Radio Regulations had been amended and revised on numerous occasions since the last WARC, held in 1959.

The ITU members approved the agenda of the 1979 World Administrative Radio Conference in 1977 at the 32nd Session of the Administrative Council. The ten-week Conference was held in Geneva, Switzerland, beginning September 24, 1979. Its main objectives were to review and revise "the provisions of the radio regulations relating to terminology, the allocation of frequency bands, and directly-associated regulations." Furthermore, all regulations relating to "the coordination, notification, and
recording of frequency assignments" were to be revised if they pertained to more than one service.¹⁵

**U.S. PREPARATION FOR WARC '79**

United States preparation for WARC '79 pursued several broad objectives, including maintaining flexibility to meet the needs of future telecommunications users, changing the radio regulations only when absolutely necessary, and developing sound technical arguments to back U.S. proposals.¹⁶ U.S. preparation was a highly integrated and complex event.¹⁷ On the domestic side, the preparatory effort was initiated in both government and private sectors. In January 1974, the National Telecommunications and Information Administration (NTIA),¹⁸ manager of the federal government sector of telecommunications, had its Interdepartment Radio Advisory Committee establish Ad Hoc Committee 144. This Committee included representatives from all federal agencies with a major interest in telecommunications and spectrum use. Its purposes were to recommend the proposals of other organizations to the U.S. delegation to the conference and to plan for and aid in the eventual domestic implementation of the Radio Regulations (Geneva, 1979).¹⁹

The Federal Communications Commission (FCC) is the Federal government agency responsible for regulating the private sector use of telecommunications in the U.S.²⁰ In January 1975, the FCC sought private sector input into the planning of WARC '79 through public proceedings and Notices of Inquiry.²¹ Several of the nine notices of inquiry dealt with frequency allocations.²²/²³ Though often faced with competing recommendations, in December 1978 the FCC released to the State Department its report containing proposals for commercial, private, and non-federal government use of the spectrum.²⁴ This report and the NTIA recommendations were synthesized and used by the State Department to formulate the United States' final proposals to WARC '79.²⁵

These reports, however, were by no means the only sources used by the State Department. As early as 1977 the State Department, through its U.S. embassies abroad, tried to determine the views and likely positions to be taken at WARC '79 by other governments. This method of information gathering proved inadequate because embassy personnel did not possess the necessary expertise to fully discuss these highly technical matters. Also many of the less developed countries did not formulate their proposals until shortly before the conference convened.²⁶ To combat these inadequacies, later in 1977 the U.S. began extensive bilateral discussions with forty-eight foreign governments.²⁷ The purpose of these consulta-
tions was to explain U.S. positions with respect to WARC '79 as well as to obtain information on foreign positions.\textsuperscript{28}

Domestically, in 1978 the State Department established a Public Advisory Committee to allow private sector input into the final proposals for WARC '79. The purpose of the Advisory Committee was to afford the State Department and the head of the WARC '79 delegation a means of obtaining private sector input into U.S. positions to be taken at WARC '79, as well as to develop U.S. negotiating strategy.\textsuperscript{29} Both members and non-members of the WARC delegation criticized the role of the private sector.\textsuperscript{30}

In addition to the consultations described above, the United States also participated in several multilateral discussions. The U.S. attended three preparatory seminars held by the ITU.\textsuperscript{31} With respect to proposals affecting the military, the U.S. coordinated all decisions through NATO's Allied Radio Frequency Agency.

In January 1978, Glenn O. Robinson was named head of the U.S. delegation to WARC '79\textsuperscript{32} and was given the position of Ambassador for the duration of the conference, reporting directly to the Deputy Secretary of State. In April 1978, an initial delegation of twenty was chosen from federal agencies active in the preparatory effort of WARC '79. Subsequently, a full delegation of sixty-seven members\textsuperscript{33} and approximately forty support staff members was chosen.\textsuperscript{34}

Of the sixty-seven delegates chosen, nine represented particular private corporations.\textsuperscript{35} There has been an ongoing debate, both before and after WARC '79, concerning the use of the private sector in ITU activities, with some critics arguing that ITU delegates chosen from the private sector receive unfair advantages from their appointment.\textsuperscript{36} To counter these criticisms, the State Department adopted new guidelines limiting the use of private sector delegates to international conferences;\textsuperscript{37} although late in the preparation effort it was decided to exempt WARC '79.\textsuperscript{38} This exemption, however, had little impact because most of the preparation was already complete and most of the delegates had already been chosen. The belatedness of the exemption presumably accounts for the low percentage of private sector delegates to WARC '79.

Because the OTA sent a questionnaire to members of the WARC '79 delegation and to government and private industry personnel involved in the preparatory effort requesting their evaluation,\textsuperscript{39} the Office of Technology Assessment’s Survey on WARC '79 Preparations and Impacts\textsuperscript{40} offers an excellent device by which to evaluate the U.S. preparation. A total of 104 (62 percent) of the questionnaires were completed and returned.\textsuperscript{41} The most striking conclusion to be drawn from the survey is the failure of the United States to capitalize on the expertise acquired by the federal government delegates to ITU conferences. This failure is manifested both
in the assessments of past conferences and in the United States' method of preparing and selecting delegates to future conferences.

Analysis of the survey results indicates that both the delegates chosen to ITU conferences and the non-delegates active in the preparation effort have failed to remain active in later ITU activities. Only 9 percent of the responding delegates participated in the 1973 ITU Plenipotentiary and only 32 percent of the responding delegation were involved in WARC '77. Similar results are found in the data concerning non-delegates. Because of the demanding schedule of future ITU conferences, this finding may be significant. The survey indicates that an immense amount of time and money went into WARC '79 preparation. If there was a permanent group of delegates or a delegate pool, the time necessary for the preparation of these conferences could be greatly decreased. The result would be better U.S. preparation and organization at future ITU conferences, as well as a consistency in U.S. negotiating positions from one conference to the next.

A second conclusion apparent from the survey is that the respondents used certain sources to prepare for WARC '79 and other sources to evaluate its results. Respondents relied heavily on FCC Notices of Inquiry, materials published by the NTIA, meetings of government sponsored advisory groups, and State Department materials in their preparation for WARC '79. In contrast, respondents relied little or not at all on FCC reports, NTIA reports, and State Department reports for learning about the results of the conference. ITU materials were the only source respondents used both to prepare for and to evaluate the results. Part of the preference for ITU materials may be explained by the fact that the Final Acts of WARC '79 were included in the survey under ITU materials. The inconsistency may, however, indicate that the State Department fails adequately to create a mechanism with which to analyze its international regulatory conferences. This finding would be consistent with the conclusion that the State Department fails to utilize past conference delegates and support staff in assessing ITU conferences.

Over 70 percent of the delegates chosen to WARC '79 were from within the Federal government. These delegates provide an accessible, inexpensive source for evaluating U.S. performance at ITU conferences. Yet the OTA Survey indicates that the State Department, in assessing ITU conferences, places little reliance on reports by the FCC, NTIA or itself and instead relies predominantly on ITU materials. As the need for extensive preparation and uniformity of position increases, especially in light of the rigorous ITU conference schedule, this conclusion may prove significant.

The respondents stated that the U.S. preparatory effort had two important goals: first, selecting the most effective delegation, and second, selecting a negotiating strategy that would facilitate acceptance of U.S.
positions. Approximately half of all respondents felt the U.S. preparatory effort was only moderately effective in obtaining these goals. In contrast, approximately one third of the respondents felt U.S. preparation for WARC '79 was low or ineffective. The only area where respondents found preparations highly effective was in allowing for an equal hearing of all knowledgeable viewpoints.

As the OTA Survey indicates, there is a direct relationship between U.S. preparation for and effectiveness at ITU conferences. U.S. preparatory action, such as the bilateral meetings with ITU members scheduled prior to ITU conferences, provide a valuable tool for developing a realistic negotiating strategy. However, as the results of the OTA Survey indicate, the U.S. preparatory effort for ITU conferences can be strengthened in several areas. First, the State Department, as coordinating body, must better utilize the experience gained by U.S. delegates selected to ITU conferences. This could take the form of having these delegates draft reports evaluating past conferences or assessing our position at future conferences. Second, in the past little reliance has been placed on Executive Branch reports for assessing ITU conferences, despite the fact that these reports provide a valuable means of gaining the viewpoint of all areas within the Executive Branch. This input is essential in formulating a coordinated negotiating strategy for future conferences. The growing importance to the United States of such a coordinated negotiating strategy can be appreciated by surveying the results of WARC '79.

RESULTS OF WARC '79

Not only was WARC '79 the largest conference ever held under the auspices of the ITU, but it was also the largest intergovernmental conference ever to concentrate on telecommunications. The Final Acts of WARC '79 incorporate the Radio Regulations (Geneva, 1979) and Final Protocol. The consensus is that the results of WARC '79 will cause "no immediate change in operations using the radio spectrum or geostationary satellite orbit." However, there was a loss of U.S. flexibility in certain spectrum areas. National defense is one such area. As was stated by a spokesman for the NTIA during the Senate Foreign Relations Committee Public Hearings on the Radio Regulations (Geneva, 1979) and Final Protocol, "U.S. proposals concerning radio services with a military or defense connotation . . . were the least popular and the hardest for which to obtain wide support." This loss of flexibility may in part explain the greater use by the United States of reservations, recommendations, and resolutions at WARC '79 than at previous ITU conferences. To evaluate properly the
effectiveness of preparation for WARC '79 it is necessary to understand the specific reservations taken to the Final Acts.

U.S. RESERVATIONS TAKEN AT WARC ’79

The ITU Convention clearly grants a member nation the power to make a reservation with respect to any revision of the Radio Regulations. By using a reservation, a member state of the ITU can accept the majority of the regulations concluded at a WARC without being bound by a specific regulation.

In past ITU conferences, the U.S. has taken a position of compromise rather than conflict. In fact, this reluctance to take a reservation to a particular regulation has impaired U.S. negotiating strength. However, at WARC ’79, this strategy appeared to change with the U.S. taking six reservations to the Final Acts.

Three of the six reservations can be classified as political rebuttal statements. Although the ITU may not be the best forum to settle these political issues, with the growing discussion of political issues within primarily non-political organizations, the discussion of these issues within the ITU seems inevitable. Since these political issues will be discussed and negotiated in various forums, a concise uniform position is necessary for a strong U.S. negotiating position. This strength can only be gained through positive interaction among all the departments of the executive Branch. The logical starting point for the formulation of a negotiating strategy on these issues is in the U.S. preparatory effort to ITU activities.

The first such rebuttal statement used by the United States was in response to a Cuban complaint that the U.S. Naval Base in Guantanamo was interfering with Cuba’s communication service and encroaching upon Cuban sovereignty. The U.S. position was that it would continue to meet its communication requirements in the area, regardless of any impact on Cuba.

The second reservation dealt with the issue of sovereignty over the geostationary orbit. Prior to the conclusion of WARC ’79, Colombia, along with seven other equatorial countries and Indonesia, submitted protocol statements reasserting sovereign claims over the geostationary orbit above their respective territories. The U.S. and twenty-two other nations submitted Protocol Statement No. 75, which denied these claims of sovereignty over the geostationary orbit and further stated that the claims of equatorial countries to sovereignty over segments of the geostationary orbit cannot be recognized by the Conference. This issue will resurface in 1984 when the first session of the World Administration Radio
Conference on the Geostationary Orbit and the Planning of Space Service convenes. Thus ongoing U.S. preparation in this area is critical.

The third reservation taken by the U.S. at WARC '79, while not a political rebuttal statement by definition, was political in nature. The conference members were silent on the issue of the intentional jamming of radio frequencies, except for Israel in a statement attached to the Final Acts. Thus to put the jamming issue on record and in an attempt to raise the problem of intentional jamming of U.S. broadcasts in Eastern Europe, the U.S. submitted Protocol Statement No. 39. Through the use of this protocol statement, the U.S. made clear that "it reserves the right with respect to such interference to take necessary and appropriate action to protect its broadcasting interests." None of the Communist bloc countries responded to the U.S. statement.

The second group of reservations taken by the U.S. at WARC '79 dealt with highly technical spectrum matters. Analysis of the effects these reservations will have on the U.S. has been sparse. One factor which may explain this silence is that the issues raised by these reservations, in many instances, directly affect U.S. national security. Also, since any effect these reservations will have on the U.S. will not occur immediately and since discussion of these issues is certain to resurface at future ITU conferences, perhaps serious analysis of these reservations is premature.

Regardless of the reason for the lack of discussion concerning them, the importance these reservations play with respect to U.S. preparation for ITU activities must not be ignored. In fact, the various factors leading to their lack of discussion, as enumerated above, only highlight the necessity of U.S. preparation in this area. For the U.S. to be perceived as having a strong negotiating position, it is imperative that it not vacillate between positions on spectrum issues. As with political rebuttal statements, this can only be accomplished through coordinated interaction among all departments of the Executive Branch. These issues are sure to be discussed at future ITU conferences as well as in bilateral telecommunication negotiations. Greater preparation for ITU functions can only lead to a greater understanding of these technical issues which can be used to strengthen the U.S. negotiating position regardless of the forum of discussion.

Because preparation for telecommunication conferences is coordinated by the State Department, and because of the extensive schedule of future ITU conferences, preparation in this area could act as a focal point for U.S. strategy development. All departments of the executive branch can benefit from the bilateral negotiations such as those used in preparing for WARC '79. These negotiations should become a mainstay of U.S. preparation for ITU activities.

A discussion of each of three reservations which dealt with technical spectrum matters follows. While the effect these reservations will have on
the U.S. cannot be fully known, it is possible to gain an understanding of why they were taken. This is the first step in developing a strong negotiating position.

The first reservation to deal directly with spectrum matters and to affect U.S. national security was Protocol Statement No. 32. One U.S. objective at WARC '79 was to maintain the current status of the Mobil Satellite Service (MSS) located in the band used for U.S. Naval Fleet satellite communications. The regulations adopted at WARC '79 added coordination provisions to the MSS's operating within this band. These provisions included a condition that stations in the MSS not cause harmful interference to these or other services operating, or planned to be operated, in accordance with the table of allocations. The U.S. and other NATO members expressed concern that this condition could lead other nations planning satellite systems which might be subject to interference by a MSS already operating in this band to use this possibility to make spurious requests that the MSS's cease operations. Through Protocol Statement No. 32, the NATO countries stated that "such a condition is unacceptable."

Through the use of HF (shortwave) broadcasting, nations have been able to send news, entertainment, and propaganda to audiences throughout the world. These broadcasts have been hampered by the increased use of the allocated spectrums as well as by the intentional blocking of broadcast signals. The U.S. delegation to WARC '79 intended to expand the frequency allocations for international broadcasting, maritime, and amateur services. There was concern that this expansion would result in a loss of HF spectrum availability for Department of Defense purposes.

As a result of the conference, there was a 14 percent net reduction in HF spectrum availability for Department of Defense purposes. Because the Department depends largely on satellites, it did not assess this reduction as critical. However, the U.S., along with seven other nations, did make a reservation pertaining to the allocation of the HF band. It was the consensus of these nations that the failure adequately to allocate the HF bands for broadcasting would hamper the HF Broadcasting Conference scheduled for 1984 and 1986. Thus, these nations, through Protocol Statement No. 36, reserved their right to take the necessary steps to meet the needs of their HF broadcasting services.

Protocol statement No. 38 incorporates all the major reservations taken at WARC '79 by the United States. The thrust of this reservation dealt with radiolocation and appears in effect to state that the U.S. will not compromise national security regardless of the outcome of WARC '79. The United States stated that it could not guarantee protection to or coordination with other services that were subject to interference from "the operation of stations in the radiolocation service on a primary basis."

The United States also expressed the view that it would not be bound to
the coordination procedures for the operation of fixed, mobile and radiolocation services in certain bands. The United States did agree that it would "coordinate its usage of such services with neighboring administrations which are affected." 81

The last paragraph of this reservation manifested the American perception that the conference failed to provide adequate allocations for the HF maritime mobile service, particularly below 12 MHZ. 82 The United States indicated that it would satisfy its maritime mobile needs in the HF bands below 10 MHZ through the use of allocations to the mobile service on a primary basis.

The reservations made at WARC '79 have clearly played a part in determining the Senate's reluctance to give its advice and consent to the ratification of the Radio Regulations (Geneva, 1979). However, an additional factor considered by the Senate was U.S. preparation for international telecommunication conferences, particularly the policy coordination with the executive branch.

EFFECT OF U.S. PREPARATION ON RATIFICATION OF THE RADIO REGULATIONS (GENEVA, 1979)

The major source of opposition to prompt ratification of the Radio Regulations was from former Senator Harrison Schmitt of New Mexico. Senator Schmitt took the position that the uniformity and certainty in the table of allocations necessary to carry out effective planning of telecommunication needs was not accomplished by WARC '79. 83 Senator Schmitt also felt that ongoing weaknesses within the executive branch have kept the United States from developing a strong negotiating strategy. Three of the fundamental weaknesses he saw are:

1. Top decision-making levels of the Federal government and private industry fail to appreciate the vital role of telecommunications;
2. Centralized policy coordination and guidance for international telecommunications negotiations are not undertaken at a high enough level in federal government to be effective; and
3. The State Department's Office of International Communications Policy is neither staffed nor organized to carry out its function effectively. 84

Senator Schmitt concluded that while there has been an attempt to improve coordination with the State Department, the executive branch still lacked a focal point for policy coordination. 85 To remedy the lack of coordinated policy development within the executive branch, the Senate
has provided for a study of the long-range telecommunications and information goals of the United States. 86

Senator Schmitt successfully proposed that a Senate declaration be included in the Senate's advice and consent to ratification of the Radio Regulations. 87 This declaration calls for a "coordination mechanism that will ensure the systematic development of international telecommunications policy" 88 within the executive branch and for the revision and clarification of Executive Order 12046 which created the NTIA. In the Senate's view, the language of this Executive Order has led to a confusion of roles between the NTIA, the FCC and the Department of State. 89

CONCLUSION

It appears that with the Senate's consideration of the Radio Regulations (Geneva, 1979) the importance of preparation for international telecommunications conferences has been recognized. Specifically, the Senate has made its advice and consent to ratification contingent upon the reorganization within the Executive Branch of the preparatory mechanism for international telecommunication conferences. The United States can no longer be content with the confusion which exists within the executive branch in formulating American negotiating strategy. Fortunately, the first step toward a strong and effective negotiating strategy has been taken.

NOTES


2 The U.S. delegation was comprised of 67 members, two Congressional advisors and a support group of 40 persons. DELEGATE REPORT, supra note 1, at 7.

3 See infra text accompanying notes 16-49.

4 M. STOL, OTA SURVEY ON WARC '79 PREPARATIONS AND IMPACTS (1981) [hereinafter cited as OTA SURVEY]. As a "contractor report," the SURVEY was provided for review and comment only, and does not necessarily represent the opinions of the OTA. The author is grateful to the OTA for letting him consult this invaluable document.


7 Malaga-Torremolinos Convention, supra note 6, at Chapter I art. 7.
8 Id. at Chapter I art. 4.
9 Id. at Chapter XIII art. 82.
10 Id.
11 Id. The Resolution states in relevant part the following: considering

a) That, since 1959, various world administrative radio conferences have amended the Radio Regulations and Additional Radio Regulations on specific points without having been able to harmonize the decisions taken because of the limited nature of their agenda;
b) That, as a result of technical advances, some of the provisions in these Regulations should be reconsidered, particularly with regard to certain services which are developing rapidly;
c) That, for these reasons, a general revision of the Radio Regulations and of the Additional Radio Regulations should be undertaken.

12 For the complete conference agenda, see Delegate Report, supra note 1, at 4.
13 The conference in fact lasted 11 weeks, from September 24, 1979, until December 6, 1979.
14 Delegate Report, supra note 1, at 4.
15 Id. WARC '79 did not have the power to deal with maritime regulations or to devise detailed plans for specific radio services. See Shrum, A Nontechnical Overview of the 1979 WARC, I.E.E.E. Transactions on Electromagnetic Compatibility, EMC -23, No. 3 (1981), reprinted in WARC '79 Hearings, supra note 1, at 249-55.
16 See OTA Survey, supra note 4, at 56-57, which lists as additional objectives the accommodation of world needs, that is, resisting only those regulations that might impede national flexibility to an unacceptable degree, and the development of final fall-back positions to be used if proposed U.S. changes to the radio regulations met opposition.
17 Nineteen federal agencies worked together on the conference preparation, under the organizational guidance of the National Telecommunications and Information Administration (NTIA). See infra note 20 and accompanying text. Twenty Radio Service working groups advised the FCC. About 500 people were involved in the preparatory effort, and there were more than 100 meetings conducted before agreement was reached on a final set of U.S. proposals. The final document that was sent to Geneva had 913 specific proposals, and it consisted of a volume containing 11 subdocuments and 394 pages. WARC '79 Hearings, supra note 1, at 5 (statement of Donald M. Jansky, Associate Administrator for Federal Systems and Spectrum Management, N.T.I.A., Department of Commerce).
19 Delegate Report, supra note 1, at 5-6.
21 TABLE 1. THE F.C.C.'s USE OF NOTICE OF INQUIRY (N.O.I.)
<table>
<thead>
<tr>
<th>F.C.C. N.O.I.</th>
<th>TOPIC</th>
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<tr>
<td>F.C.C. 76-1099, 41 Fed. Reg. 54309</td>
<td>Solicited comments on a proposal for a revised International Table of Frequencies Allocations.</td>
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<tr>
<td>F.C.C. 77-285, 42 Fed. Reg. 26923</td>
<td>Solicited comments regarding allocations and technical characteristics.</td>
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<td>F.C.C. 77-349, 42 Fed. Reg. 27756</td>
<td>Contained initial comments regarding the proposal for a revised allocations table for review and comment.</td>
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<tr>
<td>F.C.C. 78-264, 43 Fed. Reg. 18761</td>
<td>Contained the procedural provisions of the Radio Regulations relating to the advance publication, coordination and notification of frequency assignments and solicited comment on technical matters.</td>
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<tr>
<td>F.C.C. 78-581, 43 Fed. Reg. 36139</td>
<td>Discussed the matter of the rearrangement of the International Radio Regulations into a more appropriate format.</td>
</tr>
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</table>


22/23 Id.

24 FCC Inquiry, supra note 21.


26 For a different view of the value of the embassies as an information gathering source, see DELEGATE REPORT, supra note 1, at 6: "In early 1977, the Department initiated a worldwide effort through its overseas posts to obtain foreign views and other details regarding prepara-
tion for the 1979 WARC. Replies from Embassies provided an invaluable source of information on foreign positions." 

27 These bilateral discussions were usually conducted in the following manner: small teams of U.S. experts would visit foreign capitals and carry on "face-to-face, one-on-one" consultations with the appropriate foreign officials. Id. at 7. The countries visited were: Algeria, Argentina, Australia, Brazil, Cameroon, Canada, Chile, People's Republic of China, Colombia, the Federal Republic of Germany, Japan, Kenya, Liberia, Morocco, Mexico, Nigeria, Norway, New Zealand, Pakistan, Panama, the Netherlands, Republic of Korea, Ivory Coast, Denmark, Egypt, Spain, France, China, Greece, India, Indonesia, Iran, Israel, Italy, Peru, Philippines, United Kingdom, Saudi Arabia, Senegal, Singapore, Sudan, Switzerland, Turkey, the U.S.S.R., Uruguay, Venezuela, Yugoslavia, and Zaire. Id. at 7-8.

28 For a treatment of the use of these bilateral discussions in preparation for future ITU Conferences, see WARC '79 Hearings, supra note 1, at 48-49 (State Department's responses to additional questions submitted for the record).

29 OTA Survey, supra note 4, at 88.

30 For a discussion of the effectiveness of the private sector in preparing for and participating in WARC '79, see WARC '79 Hearings, supra note 1, at 45-46 (State Department's responses to additional questions submitted for the record). The State Department concluded:

In summary, there is clearly a role for public interest group representation on delegations to conferences such as WARC-79; however, their effectiveness depends primarily on their individual interest and qualification with respect to the issues. Earlier participation in the preparatory process, particularly the FCC activities which are directed to all non-governmental interests would enhance their usefulness. The inclusion of public representatives on U.S. delegations will be considered for upcoming conferences whenever their participation would be appropriate.

Id. at 46. For a different view of public interest group representation, see OTA Survey, supra note 4, at 62 ("Adding representatives to the delegation with no apparent role other than to fulfill some nonspecific requirement to include special interest, racial or sexual representation proved to be frustrating for all concerned with no apparent benefits.").

31 These seminars were held in Nairobi, Panama, and Sydney. The U.S. intended to use the seminars to establish bilateral contacts with as many participants as possible, and in particular, with persons from countries not visited. Delegate Report, supra note 1, at 8.

32 Mr. Robinson is a former F.C.C. Commissioner and is currently a professor of law at the University of Virginia.

33 Table 2. U.S. Delegates to WARC '79 by Organization

<table>
<thead>
<tr>
<th>Organizational affiliation</th>
<th>No. of delegates</th>
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<td>Federal Government</td>
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<tr>
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<td>NASA*</td>
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<tr>
<td>International Communications</td>
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<td>Agency**</td>
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<td>3</td>
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<td>Dept. of Transportation</td>
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<td>3</td>
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### Organizational affiliation

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<th>Organizational Affiliation</th>
<th>No. of delegates</th>
<th>% of delegates</th>
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<td>TOTAL</td>
<td>48</td>
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<tr>
<td><strong>Private Corporations</strong></td>
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<tr>
<td>Western Union</td>
<td>1</td>
<td>1.5</td>
</tr>
<tr>
<td>TOTAL</td>
<td>9</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Industry associations</strong></td>
<td>3</td>
<td>4.5%</td>
</tr>
<tr>
<td><strong>All other</strong></td>
<td>7</td>
<td>10.5</td>
</tr>
<tr>
<td><strong>Error due to computational averaging</strong></td>
<td>-</td>
<td>1.5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>67</td>
<td>100%</td>
</tr>
</tbody>
</table>

* Includes Systematics General Corp. representatives
** Includes Board of International Broadcasting

OTA Survey, supra note 4, at 60. For a discussion of the possible conflict of interest of industry experts acting as U.S. delegates, see id. at 60-63 and infra text accompanying notes 36-37.

34 For a complete list of U.S. delegates and support staff to WARC '79, see Delegate Report, supra note 1, at B1-14.

35 See Table, supra note 33.

36 Critics in the private sector were concerned that companies with private representatives named to the delegation would be in a better position to advocate their own proposals to the FCC as their delegates would have access to special information which unrepresented companies taking conflicting positions might not have. OTA Survey, supra note 4, at 61.

37 Id. at 60.


39 One hundred and sixty-eight respondents were selected for the OTA survey from various lists of individuals involved in international spectrum management. For a complete list of respondents, see OTA Survey, supra note 4, at 464.

40 See id.

41 Id. at 1.
42 Id. at 3.

43 Only 15 percent of the respondents who had not been delegates participated in the 1973
I.T.U. Plenipotentiary Meeting and only 28 percent were involved with WARC '77. Id. at 3.

44 Of the delegates who responded to the survey, 20-1/2 percent stated that they devoted
between six months and one year to WARC '79 preparation while 54-1/2 percent stated that
they spent more than one year preparing for WARC '79. However, only 36 percent of
non-delegate government personnel spent more than six months preparing for WARC '79,
with only 12 percent of the non-delegate private industry personnel spending more than one
year on WARC '79 preparation. Id. at 4.

45 Id. at 6 & 18.

46 See Table, supra note 33.

47 For the first time, a WARC agenda called for the setting of a schedule for convening
future administrative radio conferences. See ITU, World Administrative Radio Conference
(1979), reprinted in President's Message to Congress Transmitting the Radio Regulations (Gene-
[hereinafter cited as Final Acts].

To some of the conference participants, this was seen as a necessity since under the
WARC '79 agenda the conference did not have the authority to carry out planning and review
of the general mobile service provisions or to deal with other aspects of the radio regulations.
To the majority, this provision was seen to be too great a burden on the ITU and its members.
As stated in the public hearings, it is the position of the U.S. Department of State that
with regard to failures of the conference, probably the most significant one relates to
the future conferences program recommended by WARC '79. Each conference by itself
responded to the needs and desires of a large segment of the ITU, but together, they
resulted in an extremely heavy burden on the limited resources of the Union and
individual administrations.

WARC '79 Hearings, supra note 1, at 49.

The Schedule is summarized in Recommendation No. 12. See id. at 859.

48 OTA Survey, supra note 4, at 15.

49 Id. at 14. To fully comprehend the results of the OTA Survey, interviews as opposed
to questionnaires would have to be conducted with certain respondents. Such interviews were
conducted but at the date of this writing were unavailable for review.


51 Final Acts, supra note 47. On November 24, 1981, the President of the United States
transmitted the Radio Regulations (Geneva 1979) and Final Protocol to the United States
Senate for advice and consent to ratification. It was the President's hope that the Senate would
give its advice and consent before January 1, 1982, the date on which the regulations went
into force for approving governments. Id. at iii. Ratification by the U.S. prior to that date
would have been a sign of goodwill and determination by the U.S. to abide by ITU agree-
ments.

Early consent to ratification did not occur. In fact, public hearings before the Committee
on Foreign Relations of the U.S. Senate did not take place until May 18, 1982, five and a half
months after the regulations entered into force for approving governments. As evidenced in
the record of the hearing, there did not appear to be opposition to prompt ratification of the
regulations by the Department of Defense, the NTIA, the FCC, or the private sector. WARC
'79 Hearings, supra note 1, at 2, 3, 7, 33, and 38. The statement of the Department of Defense
representative was only fifteen lines of text. Id. at 26-27. This seems unusual considering the
great impact the Radio Regulations are likely to have on national defense programs.

On September 21, 1982, the Senate Committee on Foreign Relations recommended that
the Senate give its advice and consent to ratification of the Radio Regulations with the
proviso, "that in the implementation of this treaty for the United States, the introduction of
a Direct Broadcasting Satellite Service into the 12.2-12.7 GHz band shall be carried out in a manner which minimizes unreasonable disruptions to existing uses in that band.‘’ S. Rep. No. 61, 97th Cong., 2d Sess. 7 (1982). This proviso responded to the concern of private industry representatives that new direct broadcast satellite services would interrupt terrestrial fixed microwave communications in the 12.2-12.7 GHz.

52 OTA Survey, supra note 4, at 11.

53 WARC ’79 Hearings, supra note 1, at 6. (Statement of Donald M. Jansky, Associate Administrator for Federal Systems and Spectrum Management, NTIA, Department of Commerce).

54 Malaga-Torremolinos Convention, supra note 6, at Chapter XI art. 77(17). One of the goals of a World Administrative Radio Conference is to draft radio regulations in a way which is most satisfactory to the participating nations. A means to this end is the use of reservations, footnotes, and recommendations. Thus, at WARC ’79, some countries in effect stated that they would interpret parts of the regulations as they chose and might not be bound by specific regulations at all.

55 The use of reservations at WARC ’79 has been discussed by Mr. Robinson, head of the U.S. delegation, whose view is that the use of a reservation “leaves the country free to pursue its own use of the spectrum independent of other countries, but it does not give it the international recognition or protection which may be necessary for effective utilization of the frequencies.” Robinson, supra note 50, at 35.

56 A nation may also avoid being bound by a majority decision of a WARC by using a footnote. A nation may not use a footnote unless other members approve it by vote. The use of footnotes at WARC ’79 allowed member nations to state for the record that it intended to extend frequency use beyond that agreed to or that it is specifying a particular use as primary or secondary. OTA Survey, supra note 4, at 52.

57 Before WARC ’79, the most recent major U.S. reservation dealing with radio communications was at the 1974 Maritime WARC. In early ITU conferences, however, the U.S. failed to reach compromises. For example, in 1950 the U.S. refused to sign the Final Acts of the WARC held in Mexico City.

58 “[I]n my experience as a U.S. delegate to numerous ITU conferences during the past several years, I can recall that there was a time when the United States was very reluctant and, as a matter of fact, would not take a reservation. I also noted that knowledge of this tendency worked to our disadvantage because other administrations, knowing that, would keep pushing for agreement.” WARC ’79 Hearings, supra note 1, at 39 (Statement of E. Merle Glunt, Consultant, American Radio Relay League).

59 Political rebuttal statements are those made to counteract political rhetoric aired at the Conference. See OTA Survey, supra note 4, at 100.

60 This conclusion is drawn from primarily two factors. First, as stated supra text accompanying note 46, over 70 percent of the delegates to WARC ’79 came from within the federal government. Thus, in light of the future schedule of ITU conferences, see infra note 68, preparation for these conferences will force interaction within the executive branch. Absent the scheduled ITU conferences this result is not ensured.

61 The United States countered the Cuban allegations with the following statement: “With reference to statement No. 9 by the Government of the Republic of Cuba, the Government of the United States of America notes that the United States presence in Guantanamo is by virtue of a treaty in force; the United States reserves the right to meet its radiocommunication requirements there as heretofore.” Protocol Statement No. 72, Final Acts, supra note 47, at 737.

62 The geostationary satellite orbit is the orbit in which a satellite must be placed to be a geosynchronous satellite whose circular and direct orbit lies in the plane of the Earth’s equator and which thus remains fixed relative to the Earth.

64 Future conferences planned by WARC '79 are summarized in Recommendation XM, Final Acts, supra note 47, at 859. The conferences, and the resolutions recommending them, include: WARC for the Mobil Service (Resolution DH); WARC for Planning of the HF Broadcasting Bands (Resolution DI); WARC on the Use of the Geostationary Satellite Orbit and the planning of Space Services Utilizing It—two sessions (Resolution BF); Region 2 Broadcasting Satellite Planning Conference (Resolution CH); Planning Conference for Sound Broadcasting in the Band 87.5—108 MHz for Region 1 and certain countries in Region 3 (Resolution BM); Regions 1 and 3 Conference for Planning Feeder Links to Broadcasting Satellites in the 12 GHz Band (Resolution BQ); Region 3 Conference to Establish Sharing Criteria for the Use of VHF and UHF Bands (Resolution DK); Conference to Revise the Plan of the Copenhagen Convention (1948) for the European Maritime Area (Recommendation YD); Conference Concerning the Provisions of the African VHG/UHF Broadcasting Conference, Geneva, 1963 (Resolution CQ); Region 2 Planning Conference for Broadcasting in the Band 1605-1705 kHz (Recommendation YC); and WARC Concerning the Frequency Allotment Plan of the Aeronautical Mobil (OR) Service (Recommendation YF).


66 The U.S. Delegation, upon instructions from the Department of State, submitted a statement for the record regarding intentional jamming of international broadcasts in the high frequency bands. The text of the reservation is as follows:

The administration of the United States of America, calling attention to the fact that some of its broadcasting in the high frequency bands allocated to the broadcasting service are subject to willful harmful interference by administrations that are signatory to these Final Acts, and that such interference is incompatible with the rational and equitable use of these bands, declares that for as long as this interference exists, it reserves the right with respect to such interference to take necessary and appropriate actions to protect its broadcasting interests. In so doing, however, it intends to respect the rights, to the extent practicable, of administrations operating in accordance with these Final Acts.

Protocol Statement No. 39, at 731.

67 Id.

68 71.5 percent of the delegates to WARC '79 came from the executive branch. See Table, supra note 33.

69 See supra text accompanying notes 26-28.

70 The joint statement by NATO countries regarding the operation of mobile satellite systems in the band 235-399.9 MHz is as follows:

The above-mentioned administrations (Federal Republic of Germany, Belgium, Denmark, the United States, Greece, Iceland, Italy, Luxembourg, Norway, the Netherlands, Portugal, the United Kingdom, and Turkey) reserve their right to operate systems in the mobile satellite service in the frequency range 235-399.9 MHz under the provisions of the relevant footnote to the Table of Frequency Allocations, subject only to coordination as prescribed in Article N13A. The additional provision of this footnote imposes a condition of non-interference which could lead to a request to cease operation of a previously coordinated satellite system in the case where an administration, despite having agreed to such a satellite system, puts into service or merely plants a system that might receive harmful interference. Such a condition is unacceptable to the above administration.


72 OTA Survey, supra note 6, at 98.

73 See supra note 77 for text of statement.
In the view of the above-mentioned administrations (Saudi Arabia, Cyprus, Spain, the United States, Greece, the United Kingdom, Sri Lanka, and Zambia) this conference has failed to make adequate provision for the needs of the HF broadcasting service in the revised allocations, particularly at 6 and 7 MHz. Unless authority is given to the proposed HF Broadcasting Conference, by its agenda, for it to make use of some parts of the spectrum allocated to the fixed service, that Conference will not be able to plan all frequency bands to enable countries to sustain their broadcasting services in the face of varying propagation conditions throughout the solar cycle. In the absence of an adequate plan, the above-mentioned administrations reserve their right to take the necessary steps to meet the needs of their HF broadcasting services.


The delegation of the United States of America formally declares that the United States of America does not, by signature of these Final Acts on its behalf, accept certain decisions taken by this Conference in regard to the Table of Frequency Allocations and the associated footnotes, and therefore, the United States of America:

1. In view of the fact that this Conference has failed to provide adequate allocations for the HF broadcasting service, particularly at 6 and 7 MHz, reserves on this matter as indicated in a separate statement made jointly with the delegations of Saudi Arabia, Cyprus, Spain, Greece, the United Kingdom, Sri Lanka, and Zambia;

2. Reserves the right to operate stations in the mobile satellite service in the frequency range 235 to 399.9 MHz as indicated in a separate statement made jointly with the delegations of the Federal Republic of Germany, Belgium, Denmark, Greece, Iceland, Italy, Luxembourg, Norway, the Netherlands, Portugal, the United Kingdom, and Turkey;

3. In the operation of stations in the radiolocation service on a primary basis in the bands of 430-440 MHz, 5 650-5 850 MHz, 8 500-8 750 MHz, 8 850-9 000 MHz, 9 200-9 300 MHz, 9 500-9 800 MHz, 10 000-10 500 MHz, 13.4-14 GHz, 15.7-17.3 GHz, and 33.4-36 GHz, cannot guarantee protection to or coordination with other services;

4. Reserves the right to operate stations of the fixed, mobil, and radiolocation services on a primary basis in bands as specified in the footnotes pertinent to frequency bands 470 - 806 MHz and 890 - 960 MHz, without the condition specified in these footnotes that make such operations subject to agreement under Article N13A. The United States will coordinate its usage of such services with neighbouring administrations which are affected;

5. In view of the fact that the Conference failed to provide adequate allocations for the HF maritime mobil service, particularly below 12 MHz, states its intention to satisfy maritime mobile requirements in the several HF bands below 10 MHz allocated to the mobile service on a primary basis.

*Final Acts*, supra note 50, at 731.

The first two parts of Protocol Statement No. 38 restated statement nos. 36 and 32 respectively. *Id.*

Radiolocation, commonly known as radar, is very difficult to operate with other systems without causing harmful interference with those systems. However, non-industrialized nations do not use radar extensively. Therefore, those nations proposed to share or operate radiolocations along with other radio services, like mobile radio systems and fixed
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radio systems. The U.S. objected on national security grounds because the effectiveness of Department of Defense radar units would have been undermined. See WARC '79 Hearings, supra note 1, at 27 (statement of William Cook, Department of Defense).

Protocol Statement No. 38 para. 3, supra note 77.

Id. at para. 4.

Id. at para. 5.

See WARC '79 Hearings, supra note 1, at 32 (statement of Sen. Harrison Schmitt, New Mexico). Senator Schmitt was also troubled that planning for the future use of the spectrum and geostationary satellite orbits was postponed until later ITU conferences. Id. at 33.

Speech by Senator Schmitt to the Georgetown Center for Strategic and International Studies, at 3-4 (undated). The manuscript was supplied to the author by Senator Schmitt's office.

Id. at 4.

S. 2181, 97th Cong., 2d Sess., 128 Cong. Rec. 6477 (1982). The amendments also called for a review of the structures, procedures and mechanisms used by the U.S. in developing telecommunications and information policy.

The text of Senator Schmitt's proposal is as follows:

Resolved (two-thirds of the Senators present concurring therein),

That the Senate advise and consent to the ratification of The Radio Regulations (Geneva, 1979) and a Final Protocol signed on behalf of the United States at Geneva, December 6, 1979, with several reservations, subject to the following proviso:

(a) that in the implementation of this treaty for the United States, the introduction of a Direct Broadcasting Satellite Service into the 12.2-12.7 GHz band shall be carried out in a manner which minimizes unreasonable disruptions to existing uses in that band;

(b) that the United States undertake, expeditiously, a reorganization within the Executive Branch (including revision of Executive Order No. 12046) to ensure the effective coordination of United States international telecommunications policy, particularly the development of long-range goals and specific strategies to meet those goals.

Id.

S. 2181, supra note 86.

Id.