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Union Activities

The Aeronautical Radio Conference has adopted a new frequency allotment plan

The World Administrative Radio Conference for the aeronautical mobile (R) service convoked by the ITU to revise, on the basis of the single sideband technique, the Frequency Allotment Plan for the aeronautical mobile (R) service, finished its work on Sunday morning 5 March 1978.

The Conference began on 6 February 1978 in Geneva under the chairmanship of Mr. T. V. Srirangan (India), assisted by six Vice-Chairmen: Messrs. N. Bouhired (Algeria), P. R. Hermano Balduino (Brazil), Wang Nai-Tien (China), A. Petti (Italy), A. L. Badalov (USSR) and Mrs. Betty C. Dillon (United States).

Some 93 countries took part in the Conference, represented by about 350 delegates. The five following international organizations also took part as observers:

- International Civil Aviation Organization (ICAO)
- Inter-Governmental Maritime Consultative Organization (IMCO)
- International Air Transport Association (IATA)
- Agency for the Safety of Air Navigation in Africa and Madagascar (ASECNA)
- International Amateur Radio Union (IARU).

The Conference set up seven Committees:

Committee 1—Steering Committee

Terms of reference:

to co-ordinate the work of the Committees, fix the timetable of meetings, etc.

Chairman: Chairman of the Conference
Vice-Chairmen: Vice-Chairmen of the Conference

Committee 2—Credentials Committee

Terms of reference:

to verify the credentials of delegations and to report on its conclusions to the Plenary Meeting within the time specified by the latter

Chairman: Mr. C. J. Martinez (Venezuela)
Vice-Chairman: Mr. L. Grimstveit (Norway)

Committee 3—Budget Control Committee

Terms of reference:

to determine the organization and the facilities available to the delegates and to examine and approve the accounts for expenditure incurred throughout the duration of the Conference

Chairman: Mr. A. M. Dione (Senegal)

Vice-Chairman: Mr. A. Hakimian (Iran)

Committee 4—Technical Committee

Terms of reference:

to establish the basic technical criteria for revision of the Frequency Allotment Plan in Appendix 27, taking into account the Report of the CCIR dated March 1976, including its Addendum, January 1978, and to consider and revise, where necessary, the technical principles of that Appendix, as well as to make any consequential changes to other technical provisions of the Radio Regulations, including Appendix 3

Chairman: Dr. G. Kovács (Hungarian People's Republic)

Vice-Chairman: Mr. R. E. N. Inoma (Nigeria)

Committee 5—Planning Committee

Terms of reference:

to establish the frequency requirements and the boundaries of the various Aeronautical Areas, and to revise the Frequency Allotment Plan on the basis of single sideband operation which satisfies the frequency requirements within the minimum amount of spectrum necessary; to consider and revise related provisions of Appendix 27, and to make any consequential changes to the Radio Regulations on planning matters

Chairman: Mr. M. Chef (France)

Vice-Chairman: Mr. E. D. Ducharme (Canada)

Committee 6—Regulatory Procedures Committee

Terms of reference:

to revise the other provisions of Appendix 27 and to consider and make any consequential changes to the Radio Regulations on procedural matters; and

to establish the basic timetable and the principles to be observed in the procedure for transition from the present Frequency Allotment Plan to the revised Frequency Allotment Plan

Chairman: Mr. R. J. Bundle (New Zealand)

Vice-Chairman: Mr. Z. Kupczyk (People's Republic of Poland)

Committee 7—Editorial Committee

Terms of reference:

to perfect the form of the texts of the Final Acts without altering the sense

Chairman: Mr. C. J. Dhenin (France)

Vice-Chairmen: Mr. D. E. Baptiste (United Kingdom)

Mr. M. Valbuena Granados (Spain)

At the opening session the Chairman, after thanking the Conference for his election, said: "I believe that this is the first time in the annals of ITU that a representative of the developing world has been asked to chair a conference of this magnitude. I would like to view this as an index of the growing recognition within the ITU of the increasingly important role which developing countries have begun to play in furthering the objectives of the Union".

Speaking of ITU's long tradition of international understanding and co-operation the Chairman said: "the Union has set up exemplary standards in these realms. It is today a shining example of what international goodwill can accomplish. I have no doubt at all that the same spirit of goodwill and co-operation will emanate from the deliberations at this World Administrative Radio Conference which will be sitting for the next four weeks, and the highest traditions of the Union will be further embellished and enriched".

Mr. M. Mili, Secretary-General of the ITU, after welcoming the delegates, surveyed the changes which had taken place since the last Aeronautical Conference in 1966. He cited statistics which showed that the world passenger-kilometre figure rose from 270 thousand million in 1967 to 632 thousand million in 1976, i.e. an increase of over 234% in nine years. Over the same period, air freight rose from 6 to 19 thousand million tonnes, representing an increase of over 300%.

"Part of this increase is of course accounted for by the use of planes of much

greater capacity," said Mr. Mili. "However, the traffic itself has grown considerably, and this growth has produced a concomitant increase in the volume of aeronautical telecommunication traffic.

"However, other changes have taken place, leading to greater telecommunication requirements. I am referring to the radical change in the very nature of the commercial air fleets, in that the jet engine is more and more taking over from the piston engine.

"In 1976, for example, over 65% of commercial aircraft were powered by jet engines, against only 36% in 1967. This change in the character of the air fleet has been accompanied by a very appreciable increase in both flying speeds and in the number of flights made at these speeds of around Mach 1.

"Clearly, these two changes have called for an enhanced reliability of communications and a greater speed in their establishment.

"In this general context, we are glad to be able to claim that the 1966 Plan has fully met all the requirements that have emerged over the past 12 years and that the planning exercise accomplished by the last Aeronautical Conference has proved completely successful.

"There is no doubt that the credit for this goes to all those who took part in the various stages of the work, starting with the technical preparation of the 1966 Conference and ending, after the completion of the actual planning task itself, with the day-to-day operation of aeronautical mobile stations.

"Our sincere thanks are due to all those who contributed to this success, whether they be individuals, organizations or countries.

"This outstanding achievement is a good omen for the continuance of the admirable spirit of co-operation existing between the telecommunication administrations and the administrations of the aeronautical services, and between the two specialized agencies, ICAO and ITU, through which the member countries formulate their transport and communication policies.

"However, the 1966 Plan is now at full stretch, while air traffic continues to expand and we are on the threshold of the supersonic age. It is to meet these demands that this Conference is being held."

Referring to the concept of *long-range operational control*, the Secretary-General said:

"So far as the aeronautical mobile service is concerned, the term *long-range* is of definite importance for your deliberations. However, it is the concept of *operational control* which continues to be decisive in the context of the mobile services as a whole.



The Chairman's table: from left to right, Messrs. L. Burtz, Director of the CCITT, R. E. Butler, Deputy-Secretary-General of the ITU, M. Mili, Secretary-General of the ITU, T. V. Srirangan, Chairman of the Conference, C. W. Sowton, Chairman of the IFRB, S. Fujiki, Member of the IFRB, and R. C. Kirby, Director of the CCIR

"All will clearly depend on the manner in which you will introduce this concept into the text which you adopt and, what is even more important, the manner in which the administrations will authorize or organize the operation of this new class of service."

With regard to future developments, Mr. Mili stated:

"Over the past 15 years, air transport has become the most common means of medium—and long-distance transport for millions of people, as evidenced by the figures which I quoted at the outset. In some regions—often the developing regions—aircraft were in fact the only practical means available.

"This growth in air traffic has been made possible by a refinement of the means required to fix accurately the position of aircraft in space and time. It is a development which would have been impossible without telecommunications, in the widest meaning of the word, namely, covering both radionavigation and the public service land network.

"All branches and disciplines of telecommunications have met the challenge, even though some of the techniques involved may not yet have taken sufficiently firm root on the world-wide level or may be in the experimental or even laboratory stage.

"The age which lies immediately ahead will be marked, in my opinion, by a substantial change in the manner in which telecommunications contribute to the smooth operation of air transport. Throughout the entire period which has just elapsed, the contribution of telecommunications was *qualitative* in character. With the arrival of the 1980s, we are embarking upon an age in which this contribution will be largely *quantitative*, and reflected in a wider dissemination of the telecommunication installations required.

"It is this radical shift in emphasis which is likely to influence the major policy decisions taken in aeronautical telecommunications over the next decade."

The Conference fixed new borders of the MWARAs (major world air route areas), RDARAs (regional and domestic air route areas) and the VOLMET areas (meteorological message transmission) taking into account the development of aviation and the changes which have taken place since the last Conference in 1966.

The Conference also created a new type of area called a "world-wide allotment area" defined as "one in which frequencies are allotted to provide long-distance communications between an aeronautical station within that allotment area and aircraft operating anywhere in the world".

Five world-wide allotment areas have been defined. These areas will permit aircraft operators to establish communications with their aircraft wherever they may be in order to exercise control over regularity of flight and for safety of aircraft. This type of communication may be regulated by countries' telecommunication administrations.

Use of the single sideband technique has permitted a substantial increase in the number of channels available in the frequency bands allocated on an exclusive basis to the aeronautical mobile (R) service. The number of these channels has been increased from 171 to 411. Fifty-four of these channels have been reserved for allotments to "world-wide areas". The other channels have been allotted to the MWARAs, RDARAs and VOLMET areas. The Conference was able to establish a plan for the optimal use of these channels after countries had voluntarily reduced their initial requirements.

The Conference also adopted a number of resolutions and recommendations dealing notably with:

- procedures for putting into operation the decisions of the Conference and in

particular the Frequency Allotment Plan;

- the improvement of aeronautical communications by the use of higher frequency bands than those presently in use in the aeronautical mobile service (decametric waves or HF) so as to reduce traffic in these bands;
- the development of techniques which could contribute towards reducing the congestion in the HF bands.

The Conference finally made a number of recommendations which will be transmitted to the forthcoming World Administrative Radio Conference (Geneva, 1979) responsible for making a complete revision of the Radio Regulations. These recommendations concern:

- the inclusion of a new HF band in the Frequency Allotment Plan for the aeronautical mobile (R) service which would provide 25 new channels;
- the possibility of opening a public correspondence service with aircraft.

The revised arrangements of the Radio Regulations will enter into force on 1 September 1979. The Frequency Allotment Plan (Appendix 27) will come into force on 1 February 1983.
