

WORLD METEOROLOGICAL ORGANIZATION

**REGIONAL ASSOCIATION III
(SOUTH AMERICA)**

**ABRIDGED FINAL REPORT
OF THE
THIRD SESSION**

Geneva, 20 April 1963

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1964**

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LIST OF PARTICIPANTS IN THE SESSION

1. Officer of the session
 President L. de Azcárraga

 2. Members of the Association
 Argentina F.L. Fernández
 R.J. Broqua
 Chile F. Contreras
 C. Franz
 Colombia V. González
 Ecuador A. García
 France A. Viaut
 Peru F. Solarí Swayne
 Uruguay P. Bosch
 Venezuela A.W. Goldbrunner
 V. Figuera-Pérez

 3. Other Members of WMO
 Netherlands Antilles C.J. Warners
 A. Bruinenberg
 United States of America F.W. Reichelderfer
 A.H. Nagle

 4. International organizations
 International Civil Aviation
 Organization G.J.W. Oddie

 5. WMO Secretariat
 Secretary-General (for part of the
 session) D.A. Davies
 Representative of the Secretary-
 General N.L. Veranneman
 Chief, Conferences and Publications
 Division J.M. Rubiato
 Chief, Special Fund programmes K. Parthasarathy
 Telecommunications officer G.K. Weiss
-

A G E N D A

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GENERAL SUMMARY OF THE WORK OF THE SESSION

The third session of Regional Association III was held in the Palais des Nations, Geneva, Switzerland on 20 April 1963.

1. OPENING OF THE SESSION (Agenda item 1)

The third session of Regional Association III convened on 20 April 1963 at 9.30 a.m. In the absence, due to illness, of the acting president of the Association, Mr. T. Farina Sánchez, Mr. L. de Azcárraga, First Vice-President of the Organization, took the chair.

Mr. D.A. Davies, Secretary-General of the Organization, attended the opening of the session.

2. ORGANIZATION OF THE SESSION (Agenda item 2)

2.1 Examination of credentials (Agenda item 2.1)

2.1.1 A list of participants, prepared in accordance with Regulation 20 of the General Regulations, was presented by the Secretary-General. This list was unanimously accepted as the report on credentials by the Association.

2.1.2 The session was attended by 17 delegates and observers from the following countries and organizations :

Members of the Association

Argentina

France

Chile

Peru

Colombia

Uruguay

Ecuador

Venezuela

Other Members of WMO

Netherlands Antilles

United States of America

International organizations

International Civil Aviation Organization

2.2 Rules of procedure (Agenda item 2.2)

The Association decided that no rules of procedure additional to those contained in the General Regulations were necessary for the session.

2.3 Adoption of the agenda (Agenda item 2.3)

The Association unanimously adopted the provisional agenda, which is given at the beginning of this report.

2.4 Establishment of committees (Agenda item 2.4)

It was agreed that there was no need for the establishment of committees.

3. REPORTS (Agenda item 3)

3.1 Report by the president of the Association (Agenda item 3.1)

The Association noted with regret that the illness of Mr. T. Fariña Sánchez, acting president of the Association, prevented him from submitting a report to the session.

3.2 Reports by the chairmen of the working groups (Agenda item 3.2)(1) Working Group on Problems Relating to Meteorological Reporting by Ships and to Forecasting for Shipping Purposes

The Association noted with appreciation the report submitted by the chairman of the working group.

(11) Working Group for the Preparation of a Climatic Atlas for South America

The Association noted with appreciation the report submitted by the chairman of the working group and decided that the plan for the preparation of a climatic atlas for South America mentioned in paragraph 1.2 of this report should be included in the abridged final report of the session for information purposes.*

In addition to the information regarding the preparation of the atlas of the extra-tropical subregion by Argentina, contained in the report of the group, the Association was informed that measures are being taken by the Meteorological Service of Venezuela for the preparation and publication of a subregional atlas for the northern part of Region III.

Finally, the Association requested the Secretary-General to send a circular letter to the Members of RA III asking for their closest collaboration with the working group in order to avoid unnecessary delays and costs for the countries which are financing the climatic atlas project of the Region.

3.3 Report on the survey of telecommunication arrangements for the exchange of basic meteorological information in South America (Agenda item 3.3)

The session was presented with the report of Mr. García Navarro, Technical Assistance expert, on his survey of telecommunication arrangements for the exchange of basic meteorological information in South America. The Association agreed that this report called for thorough study by the Working Group on Meteorological Telecommunications. In view of the fact, however, that the ITU Plan Committee for South America will hold a meeting in the near future and of the fact that there were indications that the Fourth Congress of WMO would take special measures for the development of a world-wide network of observing stations and the supporting telecommunication systems, the Association decided, as a general basis, to agree to some of the fundamental issues contained in the report (see Resolution 1 (III-RA III)).

In this connexion the Association also agreed to request the Executive Committee to arrange for the inclusion of a technical conference on meteorological telecommunications in Region III in the regional EPTA programme of WMO, for the programme period 1965-1966, on the understanding however, that if EPTA funds can be made available earlier the meeting should be convened in 1964.

* See Annex I.

Noting that there will be, in the near future, direct commercial flights between western Europe and South America, the Association requested its president to study as soon as possible ways and means by which the AMERSUD broadcasts could be received regularly in western Europe, as well as to include in this broadcast a selection of surface observations and upper-air observations (TEMP-VENT) up to 200 mb.

3.4 Report on regional code matters (Agenda item 3.4)

In view of the introduction, as from 1 January 1964, of the revised international codes, the Association agreed that urgent steps had to be taken towards the development of the corresponding revised regional coding procedures in RA III, for introduction on that same date. The final text of these codes should be available at the latest by August 1963. As the time thus available will not permit these new codes to be developed and adopted by correspondence in due time, the Association decided to adopt provisionally the necessary amendments to these coding practices. The president of RA III was requested to take appropriate measures within the Region for the establishment of the general coding practices (see Resolution 2 (III-RA III)), if appropriate in consultation with the Working Group on Codes, which the Association decided to establish.

4. ESTABLISHMENT OF WORKING GROUPS (Agenda item 4)

The Association decided to maintain all the working groups which were established during the second session of RA III. These groups are as follows :

Working Group on Meteorological Telecommunications - (Resolution 14 (II-RA III))

Working Group on Problems Relating to Meteorological Reporting by Ships and to Forecasting for Shipping Purposes - (Resolution 19 (II-RA III))

Working Group for the Preparation of a Climatic Atlas for South America - (Resolution 24 (II-RA III))

Working Group on Hydrometeorological Questions - (Resolution 25 (II-RA III))

Working Group on Agricultural Meteorology - (Resolution 27 (II-RA III))

It was also decided to establish a Working Group on Codes (see Resolution 3 (III-RA III)).

5. REVISION OF RESOLUTIONS AND RECOMMENDATIONS ADOPTED BEFORE THE THIRD SESSION (Agenda item 5)

The Association considered that it would not be appropriate at the present stage to proceed with a detailed review of the resolutions adopted prior to the third session. Therefore, it adopted Resolution 4 (III-RA III). It agreed, however, that the recommendations could be considered as obsolete. All resolutions are therefore kept in force until the fourth session of the Association with the exception of the resolution referring to codes which made the subject of a new resolution by the present session. In addition, as the seminar on tropical agrometeorology requested in Resolution 28 (II-RA III) was held in Venezuela in September 1960, it was also decided to cancel this resolution. The president of the Association will reconsider the resolutions kept in force with a view to determining if further action is necessary, taking into account the relevant decisions of other constituent bodies. This applies in particular to Resolution 12 (II-RA III).

6. ELECTION OF OFFICERS (Agenda item 6)

6.1 Election of the president (Agenda item 6.1)

The Association unanimously elected Mr. F.L. Fernández (Argentina) by acclamation president of Regional Association III.

6.2 Election of the vice-president (Agenda item 6.2)

The Association unanimously elected Mr. A. García (Ecuador) by acclamation vice-president of Regional Association III.

7. DATE AND PLACE OF THE FOURTH SESSION (Agenda item 7)

The delegate of Ecuador, Mr. A. García, informed the Association that his country would be glad to act as host to the fourth session of Regional Association III in 1966. This invitation was noted with appreciation by the Association which accepted it in principle and expressed its sincere thanks to the Ecuadorian delegation. The exact date of the session will be determined by the president of the Association, in consultation with the Secretary-General.

8. CLOSURE OF THE SESSION (Agenda item 8)

The president of the session thanked the participants for their collaboration and expressed his best wishes for the success of the work of the Association. The delegate from Argentina, on behalf of the participants, expressed his appreciation to Mr. de Azcárraga for the manner in which the meeting had been conducted and associated himself with the wishes expressed by the president of the session. The session was closed at 11.40 a.m.

RESOLUTIONS ADOPTED BY THE SESSION

Res. 1 (III-RA III) - REGIONAL PLAN FOR THE EXCHANGE OF BASIC METEOROLOGICAL INFORMATION

THE REGIONAL ASSOCIATION FOR SOUTH AMERICA,

NOTING the expert's report on the survey of telecommunication arrangements for the exchange of basic meteorological information in South America and the draft regional telecommunication plan included therein;

CONSIDERING :

- (1) The urgency of revised and comprehensive regional telecommunications in South America;
- (2) The need for disseminating meteorological information obtained by artificial satellites;
- (3) The existing difficulties encountered by the meteorological services of the Region for obtaining the necessary funds for the establishment of meteorological telecommunications facilities;
- (4) That the present general telecommunications network is not in all cases appropriate to cater for the requirements of the meteorological services;
- (5) That plans exist for the development of the general telecommunications network in South America;

REQUESTS its Working Group on Meteorological Telecommunications to study, as a matter of urgency, the report of the expert : "Plan of telecommunications for the exchange of basic meteorological information in Region III of WMO - possible date of implementation of the plan (1971-1973)" and to report its findings to the president of the Association and the Secretary-General not later than 31 December 1963;

ADOPTS as general basis :

- (i) The principles of the future detailed planning of the Regional Association III (South America) telecommunications network (Appendix I);*
- (ii) The 10-year plan for the organization of regional collection, exchange and diffusion of coded basic meteorological information (international teleprinter network in South America) (Appendix II);*
- (iii) The 5-year plan for the organization of regional collection, exchange and diffusion of basic meteorological information (Appendix III);*
- (iv) The regional facsimile exchange and diffusion plan as contained in the annex to this resolution, subject to further review of the Working Group on Meteorological Telecommunications (Appendix IV);*

* See Annex II.

REQUESTS the Secretary-General to draw the attention of the competent authorities to these decisions.

Res. 2 (III-RA III) - REGIONAL CODES FOR SOUTH AMERICA

THE REGIONAL ASSOCIATION FOR SOUTH AMERICA,

NOTING :

- (1) Resolution 34 (EC-XIV);
- (2) Resolution 9 (II-RA III);
- (3) Resolution 10 (II-RA III);

CONSIDERING :

- (1) That the revised international codes which will come into force on 1 January 1964 demand an urgent revision of the RA III regional coding practices;
- (2) That time does not permit the development and adoption of the revised regional codes by correspondence before 1 January 1964;

DECIDES :

- (1) To approve provisionally Chapter II, Section III of Volume B of WMO Publication No. 9, kept up to date by Supplement No. 21, subject to the additions and amendments indicated in the annex to this resolution;*
- (2) That the changes will come into force on 1 January 1964;

REQUESTS the president of the Association to take the appropriate steps by means of inquiries carried out among Members of RA III in order to develop the final regional coding practices before 30 June 1964, in order that they come into force as from 1 January 1965.

Res. 3 (III-RA III) - WORKING GROUP ON CODES

THE REGIONAL ASSOCIATION FOR SOUTH AMERICA,

NOTING Resolution 2 (III-RA III);

CONSIDERING :

- (1) That there is a need for the study of regional meteorological codes and related questions in Regional Association III;
- (2) That it is desirable to reach the greatest uniformity possible in coding practices within the Region;

* See Annex III.

DECIDES :

(1) To establish a Working Group on Codes to maintain a continuing study of regional coding problems;

(2) To invite the permanent representatives of Members of RA III to appoint an expert to serve on the group;

REQUESTS the president of the Association to take early steps, with the assistance if required of the Secretariat, to establish and activate the working group.

Res. 4 (III-RA III) - REVISION OF PREVIOUS RESOLUTIONS AND RECOMMENDATIONS OF REGIONAL ASSOCIATION III

THE REGIONAL ASSOCIATION FOR SOUTH AMERICA,

NOTING Regulation 138 of the General Regulations;

CONSIDERING :

(1) That the detailed re-examination of the resolutions adopted by the Association before its third session should be postponed until the fourth session of the Association;

(2) That the substance of Resolutions 9 and 10 (II-RA III) on regional coding practices has been incorporated in WMO Publication No. 9, Volume B, but that parts of this material are superseded by the decision of the present session;

(3) That the seminar on tropical agrometeorology requested by Resolution 28 (II-RA III) was held in Venezuela in September 1960;

(4) That action has been taken by the competent bodies of the Organization on recommendations adopted by the Association before its third session;

DECIDES :

(1) To keep in force all resolutions contained in the abridged final report of the second session of the Association with the exception of Resolutions 9, 10 and 28 (II-RA III);

(2) To note the action taken by the competent bodies of the Organization on Recommendations 1 to 4 (II-RA III) which have now become redundant.

A N N E X I

Annex to paragraph 3.2 (ii) of the General Summary
(Distributed to the permanent representatives of the
Members of the Region by the president of RA III on
1 September 1962)

2. Plan for the preparation of the climatic atlas of RA III
- 2.1 Subdivision of RA III : two subregions :
1. Tropical : 15°N - 25°S.
 2. Extra-tropical : 20°N - 60°S.
- 2.2 Period :
1. 1931-1960 and 1951-1960.
 2. Already existing national atlases are used for reference.
 3. The paragraph of Resolution 24 (II-RA III) referring to the period should be amended at the next session of RA III.
- 2.3 Projection : Lambert (conical).
- 2.4 Scale :
1. Subregional atlas : 1:10,000,000.
 2. Regional atlas : 1:20,000,000.
- 2.5 Dimensions : 70 cm x 50 cm (loose leaves).
- 2.6 Contents : 77 maps, in conformity with Resolution 30 (EC-IX) (see Appendix I).
- 2.7 Financing : Argentina (atlas of the extra-tropical subregion)
Venezuela (atlas of the tropical subregion)
Brazil (regional atlas).
- 2.8 Subregional centres :
1. Tropical : Caracas (Venezuela).
 2. Extra-tropical : Buenos-Aires (Argentina).
- 2.9* Regional centre : Rio de Janeiro (Brazil).

* Note by the president of the RA III Working Group for the Preparation of a Climatic Atlas for South America :
Due to the change of WMO authority in RA III, items 2.9 and 2.10 of the plan will be re-considered by the working group. Given that the president of RA III and the president of the working group live in Buenos Aires, the headquarters of the regional centre of the Climatic Atlas ought to be in Buenos Aires so as to facilitate the group's current work and to arrange for the subsequent agreements required for the printing and publication of the atlas.

2.10* Tasks of the centres :

1. The subregional centres will prepare the subregional atlases.
2. The regional centre will compile and edit the regional atlas.

2.11 Approval of the plan : This plan has been approved by Brazil (Letter GO/100 of 24 May 1960), by Venezuela (Letter O90-60 of 8 August 1960), by Argentina and by the president of RA III (Letter RA III/7 of 9 November 1961).

2.12 Request for amendment of Resolution 24 (II-RA III) concerning the period :

The president of the RA III Working Group for the Preparation of a Climatic Atlas for South America requested the president of RA III, by a note of 1 March 1961, kindly to arrange, at the next meeting of RA III, for the amendment of Resolution 24 (II-RA III) which specifies that the subregional atlases and the regional atlas should be prepared on the basis of a uniform period.

2.13 Amendment of Resolution 24 (II-RA III) proposed by the president of the RA III Working Group for the Preparation of a Climatic Atlas for South America :

"With reference to the period to be used for the preparation of the atlas, RA III shall use the standard period 1931-60. In regions where the density of the network of meteorological stations which were operating during this period proves to be insufficient, the period 1951-60 shall also be used by means of reduction to the standard period 1931-60, if this is possible. If the minimum requirements concerning the number of stations for the analysis of the climatological fields cannot be met in this way, auxiliary stations of other periods shall be used by means of reduction to the standard period 1931-60, if this is possible. The working group shall be responsible for requesting the necessary information from the corresponding national meteorological services of RA III, and, on the basis of this information, it shall select the auxiliary stations."

3. Initiation of work

So as to be able to initiate the respective tasks (determination of the regional network, preparation of working maps, etc.) I would request you to arrange for the meteorological service of your country to prepare, and transmit with the urgency that the matter deserves, the following information to the Buenos Aires and Caracas subregional centres .

3.1 Meteorological stations.

- 3.1.1 Draw up a list conforming to the model list in Appendix II, of all the stations in your country which were operating during the periods 1931-1960 and 1951-1960.
- 3.1.2 Mark on a map the meteorological stations that figure in Appendix II, and examine the possibility of completing the network by means of auxiliary stations operating during other periods \geq 10 years. Note these auxiliary stations, too, in Appendix II, after those which were in operation during the 1931-1960 and 1951-1960 periods, respectively.
- 3.1.3 Send copies of 3.1.1 and 3.1.2 to the Buenos Aires and Caracas subregional centres.

3.2 Rainfall stations (including meteorological stations).

- 3.2.1 Draw up a list conforming to the model list in Appendix III, of all the rainfall stations in your country that were operating during the periods 1931-1960 and 1951-1960.

* See Note on page 8.

- 3.2.2 Mark on a map the rainfall stations which figure in Appendix III, and examine the possibility of :
- (a) Not taking into consideration, in the preparation of the atlas, stations in regions where the density of the rainfall network is great, taking into account the representativity of the station in function of orographic and climatic conditions, and
 - (b) Complete the network with auxiliary stations functioning during other periods ≥ 20 years (periods ≥ 10 years only, in case of extreme need), in Regions where this is necessary.

3.2.3 Send copies of 3.2.1 and 3.2.2 to the Buenos Aires and Caracas subregional centres.

3.3 Material already prepared, and estimate of time required.

Inform the subregional centres :

- (a) What part of the material required for the preparation of the maps, in conformity with Appendix I, has already wholly or partly been prepared by your service;
- (b) When the subregional centres will be able to have all or part of the necessary material, as per Appendix I;
- (c) Indicate formulas used for calculation of the data;
- (d) Request the president of the working group (Buenos Aires subregional centre) to advise on any doubtful points that may arise.

4. Formalities

4.1 In order that both the subregional centres may have available all the climatological material of RA III, and may be kept informed of the progress of the work, you are requested to send copies of the information prepared by the meteorological service of your country to both subregional centres, even if such information is asked for by only one of them.

4.2 Moreover, the president of the working group intends to compile and publish all the statistics that are to be used in the preparation of the atlas, given that there exists no "source of South American climatological data", except the already out-of-date work by Köppen and Geiger, Volume II, South America, prepared by K. Knoch in 1930.

4.3 With the aim of facilitating the procedure, I think that it is advisable, in the future, for the subregional centres to send their requests for information directly to the respective meteorological services.

5. Postal address

5.1 Extra-tropical centre :

Dr. José A.J. Hoffmann
 Jefe Departamento de Climatología
 Paseo de Colón, 317, 2º piso,
 Buenos Aires, Argentina

5.2 Tropical centre :

Dr. Antonio W. Goldbrunner
 Asesor Técnico del Servicio de Meteorología
 Edificio "El Prado", Avenida Bolívar Este 75,
 Maracay, Venezuela

A p p e n d i x I

MINIMUM CONTENT OF THE CLIMATIC ATLAS OF RA III

(In conformity with Resolution 30 (EC-IX) Annex I
adopted for world preparation in the near future)

	<u>No. of maps</u>
1. Total cloud amount	13
2. Minimum daily temperature	13
3. Mean daily maximum temperature (for each month)	12
4. Difference between normal mean daily temperature of the hottest and of the coldest months	1
5. Mean total precipitation	13
6. Dew point (for 12 months and one year)	13
7. Sea-level pressure, with wind roses	12
	<hr/>
	Total 77

Observations (in conformity with Resolution 30 (EC-IX) Annex I) and comments

1. Total cloud amount
"Isolines indicating the tenths of covered sky"
2. Mean daily temperature : No comment
3. Mean daily maximum temperature : No comment
4. Difference between the normal mean daily temperature of the warmest and coldest month : No comment
5. Total precipitation
"Histograms of monthly precipitation for characteristic stations should be included"
It is thought advisable to leave the choice of characteristic stations to the individual countries
6. Dew point : No comment
7. Sea-level pressure, with wind roses
Pressure in mb : Only use stations with an elevation of 600 m
"Wind roses for representative stations"
It is thought advisable to leave the choice of characteristic stations to the individual countries. It is thought advisable to prepare the frequencies using a scale of 1000, without calculating the average directional velocities.

A p p e n d i x II

METEOROLOGICAL STATIONS OF (COUNTRY) WHICH WERE
OPERATING DURING THE PERIODS 1931-1960 AND 1951-1960

Station No.	Latitude	Longitude	Elevation (m)	Category*	Observation hours	Beginning of the record	Inter- rptions	Remarks
----------------	----------	-----------	------------------	-----------	----------------------	-------------------------------	-------------------	---------

* Symbols

For example : S = Synoptic - 1 CS; C = Climatic - 2 CS;

1 = First - 1 C; 2 = Second - 2 C

A p p e n d i x III

RAINFALL STATIONS OF (COUNTRY) WHICH WERE
OPERATING DURING THE PERIODS 1931-1960 AND 1951-1960

Station No.	Latitude	Longitude	Elevation (m)	Category*	Observation hours	Beginning of the record	Inter- rptions	Remarks
----------------	----------	-----------	------------------	-----------	----------------------	-------------------------------	-------------------	---------

* Symbols : M = Meteorological station; P = Rainfall station

A N N E X II

Annex to Resolution 1 (III-RA III)

A p p e n d i x I

PLANNING PRINCIPLES

Principle 1

The regular exchange of routine basic meteorological information as specified by the Regional Association* shall be accomplished through the medium of a special meteorological telecommunications network. The exchange of routine basic meteorological information should be arranged to permit handling of non-routine basic meteorological information (e.g. warnings), where this can be accomplished within the limits of the acceptable transit time criteria.

Principle 2

The telecommunications network shall be engineered and arranged to satisfy the transit time criteria established by CSM and Regional Association III in respect of various categories of basic meteorological data.

Principle 3

The telecommunications network shall be arranged to provide speedy collection of basic meteorological information at the designated collecting centres (combined territorial, subregional, regional, hemispherical) and for prompt subsequent dissemination of such information to Members concerned by radio broadcasts or preferably by point-to-point transmissions. For the purpose of the collection of the basic meteorological information, the Region will be divided in three areas, each of which will be served by a principal collecting centre assisted by an adequate number of sub-collecting centres.

Principle 4

The telecommunications network shall be planned to provide maximum flexibility to cope with future changes in meteorological requirements.

Note : Flexibility is essential for accommodating future changes in meteorological requirements such as :

- (a) Changes in content of transmission
- (b) Changes in codes
- (c) Changes in transit time criteria
- (d) Changes in presentation of processed data

Principle 5

The technical development of the regional telecommunications network should have as its ultimate objective a fully integrated telecommunication system employing best suited techniques (preferably automatic selection and transmission equipment) to meet the needs of Members in the most economical manner. Whenever feasible point-to-point links should be

* Stated regional requirements for the exchange of basic meteorological information.

used for the collection and exchange of basic meteorological information between centres concerned. The dissemination of processed meteorological information such as analyses, forecasts and NEPHANALYSES should preferably be by facsimile.

Principle 6

When point-to-point circuits are employed, the network shall consist of an appropriate number of individual circuits to form an integrated network by means of relay facilities between circuits. Radio broadcasts for the dissemination of basic meteorological information should be continued, if necessary.

Principle 7

The regional telecommunications network should be arranged and engineered so as to provide optimum operational and technical reliability.

Principle 8

A standard transmission procedure shall be followed throughout the entire telecommunications network.

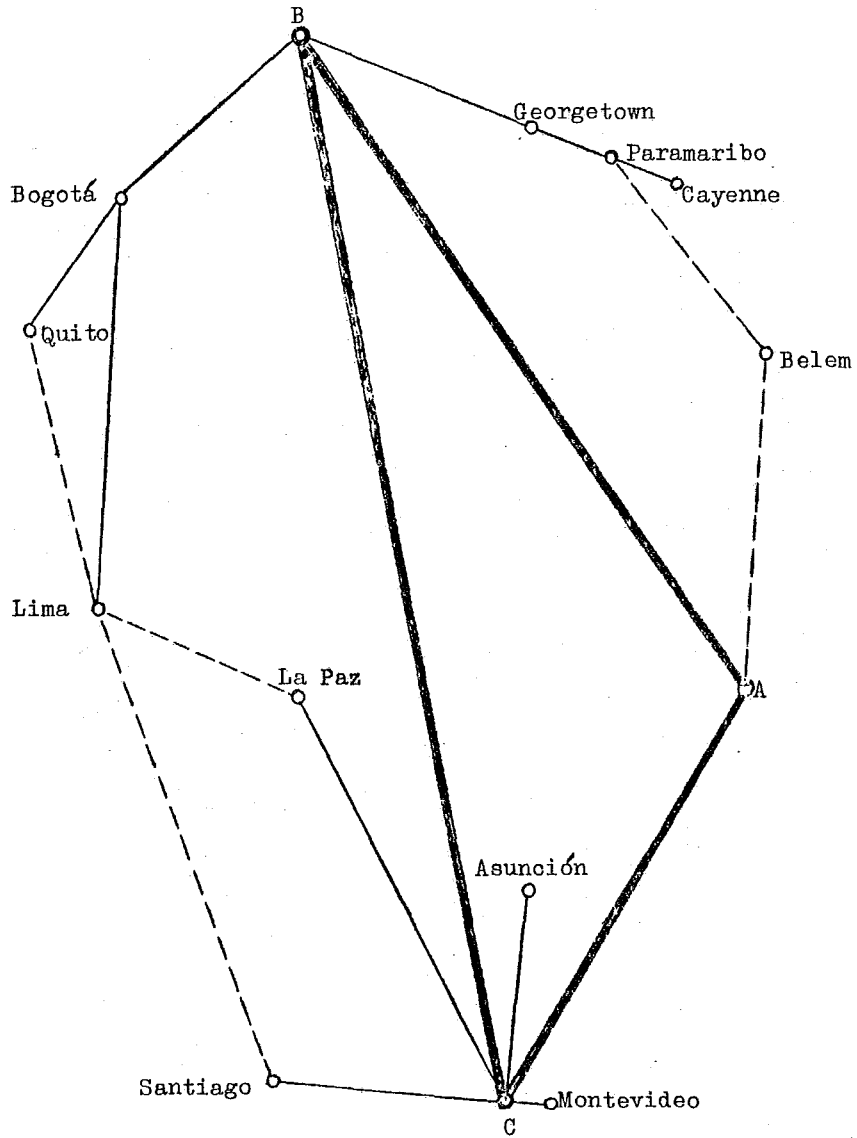
Principle 9

The implementation of the regional telecommunications network should be co-ordinated by the president of Regional Association III through the RA III Working Group on Meteorological Telecommunications and in close collaboration with the Secretary-General.

Note : When implementing the RA III regional telecommunication plan, if no point-to-point circuits of the public telecommunication system can be rented, the possibility of obtaining exclusive channels for the exchange of basic meteorological information by multiplexing existing AFTN radio circuits should be explored in accordance with Recommendation 53 (CSM-III) adopted by Resolution 33 (EC-XIV). By decision of EC-XIV such arrangements are left for national and bilateral consideration, and this conclusion has been supported by Rec. 9/6 - Use of AFTN facilities for providing exclusive channels for basic meteorological information - Limited ICAO South American/South Atlantic Regional Air Navigation Meeting, Lima, November/December 1961.

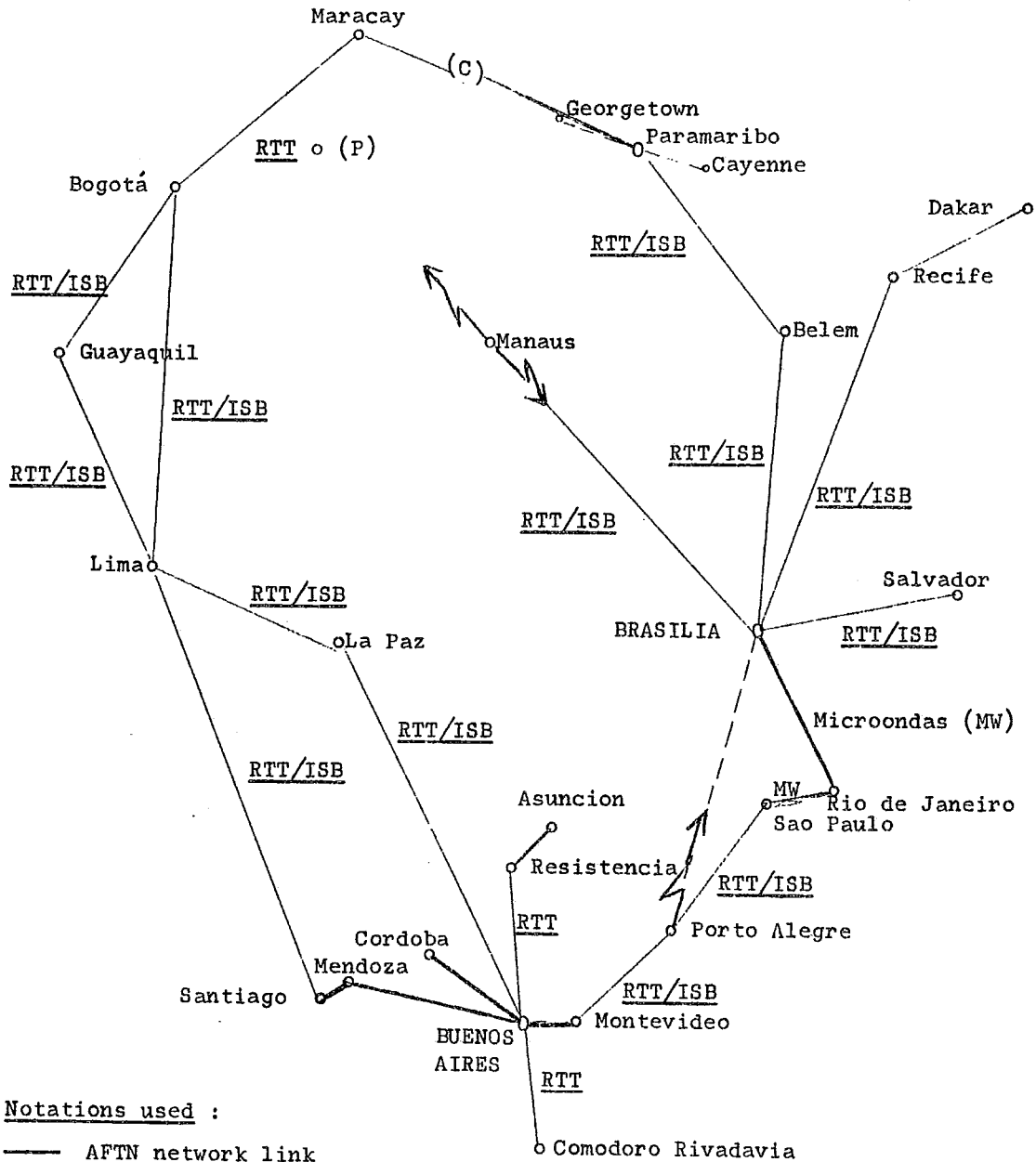
Appendix II

TEN-YEAR PLAN FOR THE ORGANIZATION OF REGIONAL COLLECTION,
EXCHANGE AND DIFFUSION OF CODED BASIC METEOROLOGICAL INFORMATION



Appendix III

FIVE-YEAR PLAN FOR THE ORGANIZATION OF REGIONAL COLLECTION,
EXCHANGE AND DIFFUSION OF CODED BASIC METEOROLOGICAL INFORMATION



Notations used :

- AFTN network link
- Public traffic network
- RTT Radioteleprinter link
- ISB independent side band
- (P) necessary link in the execution of phase b, independently of the AFTN network
- (C) Useful link in the execution of the telecommunications plan

A p p e n d i x IV

REGIONAL FACSIMILE EXCHANGE AND DIFFUSION PLAN

1. Three centres are required for the diffusion of meteorological information in pictorial form, to cater for the needs of the Region.
 2. Each centre must be capable of :
 - (a) Broadcasting the analyses and prognostic charts prepared by the associated Master Analyses (or sub-master analyses) Centres for reception at least in the areas of responsibility of the associated analyses centre and by other facsimile centres of the Region.
 - (b) Re-broadcasting a selection of charts covering the whole southern hemisphere or the whole South American continent, which it receives from other transmitting centres, if required.
 3. The following centres are designated as regional facsimile broadcasting centres :
 - (1) Brasilia
 - (2) Maracay
 - (3) Buenos Aires
 4. The centres designated in paragraph 3 above are required to be able to receive the transmissions of the other regional facsimile centres; preferably the centres should be interconnected by a duplex point-to-point facsimile circuit. In accordance with Recommendation 52 (CSM-III) adopted by Resolution 35 (EC-XIV), Brasilia shall be interconnected by at least one facsimile circuit with the Southern Hemisphere Exchange Centres Nairobi and Melbourne and until a centre can be made fully operational at Brasilia, the existing Rio de Janeiro centre should be used.
 5. The facsimile broadcasts of the centres listed in paragraph 3 above should be engineered (power of the transmitter and selection of radio frequencies) so as to provide the best possible reception in the area assigned to each broadcasting centre.
 6. The Association will decide, in the light of subsequent experience, which meteorological charts should be transmitted.
 7. Consideration may be given to the utilization of the common radio facilities for facsimile and radio teleprinter broadcasts on a time sharing basis as set forth in Recommendation 7 (CSM-III).
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A N N E X III

Annex to Resolution 2 (III-RA III)

AMENDMENTS TO SECTION III, CHAPTER II OF VOLUME B, WMO PUBLICATION No 9.TP.4

- Page II-3-1 - Change letters B to C in FM 32.B, FM 33.B and FM 35.B
 - Amend FM 56.B - HIARF to read FM 56.C - PROAR

Page II-3-2, paragraph (ix) under SYNOP, add the following note :

Note : The group 99ppp, when used, is included in regional and inter-regional exchanges.

- Pages II-3-3 and II-3-4 - Replace the text concerning FM 32.B - PILOT and FM 33.B - PILOT SHIP by the following :

FM 32.C - PILOT(1) Use of sections in the three parts of the PILOT reports

(a) Part A

- Section 4

This section is used to indicate wind data, if available, for the following altitudes which correspond approximately to the standard isobaric surfaces of 850, 700, 500, 400, 300, 200, 150 and 100 mb respectively :

1,500 m	9,000 m
3,000 m	12,000 m
5,400 m	13,500 m
7,200 m	15,900 m

- Section 5

(same text as appearing now on page II-3-3, under Section 5)

(b) Part B

- Section 1

The use of this section is mandatory in Part B. The interval indicator (i_h) is reported only as code figure 4 or 9. Wind data are included, at least for the following altitudes, when available :

surface	2,100 metres
300 metres	2,400 metres
600 metres	4,200 metres
900 metres	6,000 metres

In addition the inclusion of wind data for 1,200, 1,800, 8,100 and 10,500 metres is recommended.

- Section 2

- Section 3

} Same text as appearing now on page II-3-3 for these sections

(c) Part C

The use of Part C is left to the discretion of national services. The altitudes constituting the best approximations to the standard isobaric surfaces of 70, 50, 30, 20 and 10 mb are determined nationally.

(ii) Method of dissemination of the various parts of PILOT messages

- Parts A and B are transmitted together
- Parts A, B and C, when available, are included in Regional exchanges.
- Parts B and C may be included in inter-regional exchanges if required by neighbouring Regions.

FM 33.C - PILOT SHIP

See paragraphs (i) and (ii) under PILOT above.

Page III-3-4 - Replace the text concerning FM 35.B - TEMP by the following :

FM 35.C - TEMP(i) Use of sections in the three parts of the TEMP reports

(a) Part A

- Section 1
Surface data are not included in this section but in Section 2. Wind data, when available, are reported for the mandatory levels.*
- Section 11
- Section 10 } Same text as appearing on page II-3-4 under these sections

(b) Part B

- Sections 2 and 3
The use of Sections 2 and/or 3 as appropriate is mandatory in Part B. Surface data are reported in Section 2. Levels are identified by $n_n n_n$. Wind data for significant levels may be included in this section or in Section 3.
- Sections 4, 5, 6, 7, 8 and 9
The use of these sections is left to national decision.

(c) Part C

- The use of Part C is mandatory in so far as data are available.
- Sections 2 to 9
The use of these sections in Part C is left to the discretion of national services. When included these sections are used in accordance with the relevant Regional practices for Part B.

(ii) Methods of dissemination of the various parts of TEMP messages

- Parts A and B are transmitted together
- Parts A, B and C, when available, are included in Regional exchanges.
- Parts B and C may be included in inter-regional exchanges if required by neighbouring Regions.

Page III-3-5 - Amend FM 56.B - HIARF to read FM 56.C - PROAR

* By international decision the mandatory levels in Part A are 1000, 850, 700, 500, 400, 300, 200, 150 and 100 mb.

LIST OF DOCUMENTS

Doc. No.	Title	Agenda item	Submitted by
1	Revised provisional agenda Rev. 1	2.3	Secretary-General
2	Explanatory memorandum relating to the provisional agenda Add. 1	2.3	Secretary-General
3	Report by the chairman of the Working Group on Problems Relating to Meteorological Reporting by Ships and to Forecasting for Shipping Pur- poses	3.2.2	Chairman
4	Report by the chairman of the Working Group for the Preparation of a Climatic Atlas for South America	3.2.3	Chairman
5	Report on regional code matters Corr. 1	3.4	Secretary-General
6	Report on the survey of telecommunication arrangements for the exchange of basic meteo- rological information in South America Add. 1, Add. 2	3.3	Secretary-General
7	Date and place of fourth session	6	Ecuador
8	Report on the survey of telecommunication arrangements for the exchange of basic meteo- rological information in South America Technical conference on meteorological tele- communications in RA III	3.3	Secretary-General