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INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

AGENDA

1. Election of officers and determination of a quorum.

2. Area Control Facilities.
   Determination of any changes necessary in the present boundaries of control areas, and in the sites of area controls.

3. Regional Procedures.
   Determination of any changes necessary in the present regional procedures; and, in particular, consideration of the following:

   3.1 Altitudes to be flown by aircraft when the efficiency of a control service is impaired by difficulty in establishing communication.

   3.2 Procedures for reporting position.

   3.3 Transmission of messages on behalf of operating agencies.

4. Communications for ATC

   4.1 Adequacy of telecommunications facilities available to ATC services.

   4.2 Standardization of message forms.

   4.3 Standardization of notification to operating agencies.

5. Preparation of Final Report for presentation to the General Committee.

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DOC NA/6
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13/2/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

AIR TRAFFIC CONTROL COMMITTEE

Agenda Item 2: Area Control Facilities - Determination of any changes necessary in the present boundaries of control areas, and in the sites of area controls.

1. The nature of this Region has made very difficult the full application of ICAO Air Traffic Control Standards and Procedures in North Atlantic Control Areas. With this fact in mind, a special paragraph entitled "Control Coordination" (para.4-page 1-2-4-North Atlantic Regional Procedures) was introduced at Dublin in order to provide flexibility to the application of the rules.

2. Experience has shown that, in fact, the service rendered by the "Area Controls" of the North Atlantic Region frequently was more in the nature of Flight Information Service.

3. Therefore, it is suggested that the "North Atlantic Control Areas" be changed to "Flight Information Regions," in which would apply provision similar to that contained in para. 8.6. page 1-2-21 of the EUMED Supplementary Procedures, amended as follows to require compliance:

"8.6 -- Flight Information Regions

"~~Air traffic control is not exercised outside of control areas and control zones. Nevertheless, to~~ /To/ enable the Flight Information Centres to inform aircraft operating under IFR conditions of risks of collision, aircraft commanders flying in Flight Information Regions in IFR conditions ~~are recommended to follow the same~~ /shall comply with the/ procedures as applied to IFR flights in Control Areas and Control Zones, with the following provision regarding clearance: 'Pilots are not required to obtain a clearance to operate an aircraft in IFR conditions in that portion of a Flight Information Region which is not a Control Area or Control Zone'."

- END -

(1 page)

2.3 Altitudes. Unless otherwise authorized or instructed by Air Traffic Control, flights within control areas shall be conducted in accordance with the following altitude table:

Magnetic Course	Cruising Altitude (feet above sea level)
0° - 179° inclusive	Odd thousands of feet (odd multiples of 305 meters)
180° - 359° inclusive	Even thousands of feet (odd multiples of 305 meters)

3. Exchange of Messages. Messages as defined in 3.1 and 3.2 shall be handled as follows:

3.1 Messages for Air Traffic Control Purposes.

3.1.1 Flight Plan. A flight plan, prepared by the person in command of the aircraft, shall be submitted to the designated office at the aerodrome of departure. The designated office shall be responsible for transmission to the appropriate Area Control.

3.1.1.1 Flight plans will be in accordance with the details set out in PICAO Rules of the Air Standards (2.4.4.). The following additional information shall be given:

"ETA at each 10° at Latitude or Longitude (each shown as 0 - total elapsed time on entry of zone)"

3.1.1.2 At the earliest opportunity after the departure of an aircraft, the area control, in whose control area the flight originated, shall be responsible for forwarding the flight plan of the aircraft concerned to other area controls within whose areas the flight will be conducted.

(1) If the point of first intended landing is located within the control area of a continental area control, the last oceanic area control shall be responsible for forwarding the flight plan to the continental area controls concerned.

(2) The flight plan to be forwarded shall contain the actual time of departure rather than the proposed time and shall contain the authorized cruising altitude/s.

3.1.2 Position Reports.

3.1.2.1 On routes not defined by specified reporting points, positions shall be determined as soon as practicable

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INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

AIR TRAFFIC CONTROL COMMITTEE

Agenda Item 3: Regional Procedures - Determination of any changes necessary in the present regional procedures.

INTRODUCTION

The following suggested redraft of the Regional Supplementary Procedures for ATC was submitted by Canada and is presented for consideration.

1. Definitions

1.1 Oceanic Area Control (OATC). An area control unit which provides air traffic control service for aircraft within a defined North Atlantic area.

1.2 Continental Area Control (CATC). An area control unit which provides air traffic control service for aircraft within a defined area adjacent to a North Atlantic Control Area.

1.3 Shoreline. A line following the general contour of the shore, excluding adjacent islands, except that in cases of inlets or bays less than 30 nautical miles (55km.) in width, the lines shall be considered to pass directly across the bay or inlet water area to intersect the general contour on the opposite sides of such area.

2. Special Application of:

2.1 Instrument Flight Rules (IFR). All flights operating over open stretches of water more than 100 nautical miles (180 km.) from the shoreline of any State shall, without regard for weather conditions, comply with the instrument Flight Rules.

2.2 Altimeter Setting. Over land areas, QNH altimeter setting shall be used. Over ocean areas Standard Pressure (1013.2 mbs.) shall be used. Altimeters shall not be changed, until so instructed by Air Traffic Control. Persons in command of aircraft proceeding landwards should ascertain QNH setting prior to reaching land, to ensure that they are at a safe altitude.

(11 pages)

after the first hour of flight and at each hour thereafter and position reports shall be transmitted to the ground station at the earliest opportunity.

3.1.2.2 On routes defined by specified reporting points, positions shall be determined when over the reporting points and position reports shall be transmitted to the ground station at the earliest opportunity.

3.1.2.3 Non-Coded Position Reports. The contents of non-coded position reports shall consist of the following items in the order listed:

(1) Aircraft Identification. (as shown in flight plan)

(2) Position. (Reporting point or position in latitude and longitude. When position is not over a specified reporting point the means of determining, and octant of the globe where necessary, shall be indicated.)

(3) Time Position Established. (GMT, including day if required.)

(4) Altitude.

(5) Flight Conditions.

0 Visual Flight at all levels
1 Visual Flight below clouds
2 On top
3 Between layers
4 Medium icing
5 Heavy icing
6 In and out of clouds, 25% IFR conditions
7 In and out of clouds, 50% IFR conditions
8 In and out of clouds, 75% IFR conditions
9 Continuous IFR conditions.

(6) Track (True).

(7) Ground Speed.

(8) Fuel. (Endurance remaining.)

(Note: 1.- Items (6), (7) and (8) shall be supplied when operating over routes not defined by specified reporting points and when otherwise required.

2.- When making weather reports, items may be added to these position reports as specified in the Standards and Recommended Practices for Meteorology.)

3.1.2.4 Coded.

3.1.2.4.1 Standard Form. - Position reports shall be in the following form:

"U G G G G Q L L L L $L_oL_oL_oL_oP_D$

$F_cT_1T_2T_3S_1$ $S_2S_3H_1H_2H_3$ $F_1F_2F_3F_4F_5$

3.1.2.4.2 Position Report Code

1. U, indication by one figure of the system of units utilized, according to the following:

0 = metric system

5 = English system

G)
G) indication of time given in four figures
G) (based on GMT)
G)

2. Q, indication by one figure of octant in which the aircraft is situated, according to the following:

North Latitude	South Latitude
0 = 0° - 90° W	5 = 0° - 90° W
1 = 90° W - 180°W	6 = 90°W - 180°W
2 = 180°W - 90°E	7 = 180°W - 90°E
3 = 90°E - 0°	8 = 90°E - 0°

3. L_o)
L_o)
L_o) indication of longitude in four figures (degrees and minutes) dropping hundred
L_o) of degrees.

P_D, indication by one figure of means used to determine the position, according to the following:

1 = dead reckoning.
2 = single position line.
3 = single radio bearing position line.
4 = radio fix.
5 = celestial fix

6 = visual or ground fix.
7 = Loran or Consol fix.
8 = radar fix (GEE).
9 = celestial and radio fix.

4. Fc, indication by one figure of flight conditions, according to the following:

0 = visual flight at all levels.
1 = visual flight below clouds.
2 = on top
3 = between layers
4 = medium icing.
5 = heavy icing.
6 = in and out of clouds, 25 per cent IFR
7 = in and out of clouds, 50 per cent IFR
8 = in and out of clouds, 75 per cent IFR
9 = continuous IFR

T_1) indication of true track in degrees,
T_2) given in three figures (T_1= hundred;
T_3) T_2= tens; T_3= single units).

5. S_1) indication of ground speed in three
S_2) figures (S_1= hundreds; S_2= tens;
S_3) S_3= single units).

) indication of altitude, in three figures
H_1) (H_1= ten thousands of feet or thousands
H_2) of metres; H_2 = thousands of feet or
H_3) hundreds of metres; H_3= hundreds of feet
) or tens of metres).

6. F_1) indication of fuel remaining expressed
F_2) in hours and minutes, in four figures.
F_3)
F_4)
)

3.1.2.4.3 Units to be used.

	Metric System	English System
Ground speed:	Kilometres per hour	Knots
Altitude:	Tens of metres	Hundreds of Feet
Weight of fuel:	Kilogrammes	Pounds

3.1.2.4.4 Example

1. Message:
"01415 03045 53307 22903 25125 0630".

2. Meaning:
"At 1415 GMT position: lat. 30°45'N, long. 53°30'W, Loran or Consol determined position - on top - true track, 290 degrees- ground speed, 325 kilometres per hour - altitude, 1250 metres - endurance remaining, 6 hours, 30 minutes".

The units are determined by the first figure which means: "units are shown in metric system" and the octant is indicated by the 6th figure 0 which means: "situated in octant North latitude, between 0° and 90 West".

3.1.2.4.5 This code gives the first portion of the message. The second portion of the message, which relates to the weather, should be sent in accordance with the PICAO Procedures for Air Navigation Services - Meteorology, Appendix J, Paragraph 9.

3.1.2.5 The endurance in weight of fuel remaining may be contained in the remarks portion of the POMAR code form, if so desired.

3.1.2.6 All position reports shall be forwarded by the communications station to the Area Control in whose area the flight will next operate, as well as to the Area Control in whose area the flight is operating.

POMAR form to be included here

3.1.3 Arrival Reports. At the conclusion of each flight, the designated office at the Aerodrome of arrival or the person in command of the aircraft shall forward to the Area Control, within whose area the aerodrome of arrival is located, an arrival message in the following form:

"ARRIVAL .....

1. Aircraft identification (as shown in the flight plan)

2. Aerodrome of arrival

3. Landing time, expressed in six-figure date-time group."

3.1.3.1 Upon receipt of the arrival message as in 3.1.3, the area control shall forward the arrival message to the area control/s concerned.

3.1.4 Transfer of Control Message. The Area Control, whose control area the aircraft is leaving, shall estimate the time of arrival of the aircraft at the control boundary for the purpose of determining control responsibility, and a Transfer of Control Message shall be sent to the Area Control whose area the aircraft will next enter.

3.1.4.1 A Transfer of Control Message shall be transmitted in sufficient time to reach the addressee prior to the time the transfer of control is to become effective, and shall be in the following form:

"Transfer of Control -------

1. Aircraft identification (as shown in the flight plan)
2. Last position and time established.
3. Last authorized altitude.
4. Time estimated to cross the control area boundary.
5. Any other information deemed necessary for control purposes".

3.1.5 Control Messages. Aerodrome Control, Approach Control, and Area Control may send to aircraft or other Aerodrome, Approach and Area Controls such messages as are required to effect proper control or co-ordination of air traffic.

3.1.6 Prefixes on Messages for Air Traffic Control Purposes. The messages defined in paragraphs 3.1.1, 3.1.2, 3.1.3, 3.1.4 and 3.1.5 above, shall carry the prefix "CTL".

3.1.7 Delivery of CTL Messages to Operating Agencies - The messages outlined above in paragraph 3.1.6 may be of concern to the operating agency of the aircraft. Delivery of these messages to the operating agency will be accomplished in accordance with procedures agreed to locally by the appropriate officers of the area controls, communication stations and the operating agencies.

3.2 Messages for other than Air Traffic Control purposes.

3.2.1 Operational Control Messages. Operational Control Messages are any messages originated by aircraft or by operational control and which pertain directly to control of the aircraft by operational control. The prefix "EXC" may be used on these messages.

3.2.2 Routing of Messages. The messages defined in paragraph 3.2.1 above will be sent by the operating agency directly to the appropriate communication station. A copy of messages defined in 3.2.1 shall be sent to area control by the operating agency for information purposes whenever the carrying out of the action indicated by the messages will effect Air Traffic Control or require action by Air Traffic Control.

4. Control Co-ordination.

4.1 Clearance. Before an aircraft is operated in a control area, an air traffic clearance based on the flight plan shall be obtained from the appropriate area control. It will be the responsibility of the person in command of the aircraft to obtain an air traffic clearance in all cases, and to secure other flight information from the appropriate area controls through whose areas the flight will pass. The area control which provides such air traffic clearance is responsible for notifying the area control whose area the flight will next enter, of the issuance of such clearance. In all such cases, the area control in whose area the departure takes place, will also ensure that all area controls concerned are advised of the time of departure of the aircraft.

5. Implementation of Operational Control. To implement Operational Control, the operating agency should have, in so far as possible, direct communication with its aircraft.

5.1 Communication of Air Traffic Control Instructions to the Operation Agencies. Copies of traffic control instructions and information issued to aircraft will be passed immediately to the operating agency concerned, if so desired by the operating agency and communications facilities permit.

5.2 Transmission of Control Messages from Aircraft to the Operating Agency. Control messages from aircraft received by the communications stations will be passed to the operating agencies and the area controls concerned, simultaneously.

6. North Atlantic Control Areas. The limits of North Atlantic control areas are:

6.1 Iceland Control Area. - Commencing at the intersection of the Arctic Circle and the east coast of Greenland, thence proceeding southerly along the said coast to an intersection with the 61st parallel, thence east along the 61st parallel to an intersection with the 1st meridian west, thence north along said meridian to an intersection with the Arctic Circle, then west along the Arctic Circle to an intersection with the east coast of Greenland, the point of commencement.

6.2 Stavanger Control Area. - Commencing at the intersection of the 1st meridian west and the Arctic Circle, thence proceeding south along the 1st meridian to an intersection with the 61st parallel, thence in a north easterly direction along the great circle which passes through the above intersection and an intersection of the 4th meridian east and 62nd parallel, to the last said intersection, thence in a north-easterly direction along the great circle which passes through the last intersection and an intersection of the 10th meridian east and the Arctic Circle to the last said intersection, thence west along the Arctic Circle to an intersection with the first meridian west, the point of commencement.

6.3 Shannon - Prestwick Control Area.- Commencing at the intersection of the 30th meridian and the 61st parallel, thence proceeding south along the 30th meridian to an intersection with the 43rd parallel, thence proceeding east along the 43rd parallel to an intersection with the 10th meridian west, thence in a north-easterly direction along the great circle which passes through the last intersection and an intersection of the 7th meridian west and the 48th parallel to the last said intersection, thence in a north westerly direction along the great circle which passes through the last intersection and an intersection of the 8th meridian and the 50th parallel to the last said intersection, thence in a north-westerly direction along the great circle which passes through the last intersection and an intersection of the 11th meridian and the 51st parallel, thence proceeding north along the 11th meridian to an intersection with the 54th parallel, thence in a north-easterly direction along the great circle which passes through the last intersection of a point located at 08°00'W, 55°30'N, to the last said point, thence north along the 8th meridian to an intersection with the 61st parallel, thence west along the 61st parallel to an intersection with the 30th meridian, the point of commencement.

6.4 Lisbon - Madrid - Casablanca Control Area. - Commencing at the intersection of the 43rd parallel and the 18th meridian west, thence proceeding south along the said meridian to an intersection with the 30th parallel thence east along the 30th parallel to an intersection with the 14th meridian west, thence north-easterly along the great circle which passes through the last said intersection and a point located at 36°30' north latitude, 07°30' west longitude to the said point, thence westerly along the great circle which passes through the aforesaid point and an intersection of the 37th parallel and the 10th meridian west, to this intersection, thence north along the 10th meridian to an intersection with the 43rd parallel, thence west along the said parallel to an intersection with the 18th meridian west, the point of commencement.

6.5 Azores Control Area. - Commencing at the intersection of the 45th meridian and the 43rd parallel, thence proceeding south along the 45th meridian to an intersection with the 30th parallel, thence proceeding east along the 30th parallel to an intersection with the 18th meridian, thence north along the 18th meridian to an intersection with the 43rd parallel, thence west along the 43rd parallel to an intersection with the 45th meridian, the point of commencement.

6.6 New York Control Area. - Commencing at the intersection of the 67th meridian and the east coast of United States, thence proceeding southerly along said coast to an intersection with the 30th parallel, thence east along the 30th parallel to an intersection with the 45th meridian, thence north along said meridian to an intersection with the 43rd parallel, thence west along said parallel to an intersection with the 67th meridian, thence north along the 67th meridian to the east coast of the United States, the point of commencement.

6.7 Moncton Control Area. - Commencing at the intersection of the 61st parallel and the 66th meridian, thence proceeding south along the 66th meridian to an intersection with the 50th parallel, thence east along the 50th parallel to an intersection with the meridian passing 59°30' west, thence south along said meridian to an intersection with the 43rd parallel, thence east along the 43rd parallel to an intersection with the 30th meridian, thence north along said meridian to the 61st parallel, thence west along said parallel to an intersection with the east coast of Greenland, thence southerly and westerly along said coast of Greenland to an intersection with the 61st parallel and the west coast of Greenland, thence west along the 61st parallel to an intersection with the 66th meridian, the point of commencement.

7. Area Controls and Control Areas.

	Location of Area Controls	Control Areas
	Reykjavik	Iceland
	Sola	Stavanger
x	Shannon and Prestwick	Shannon-Prestwick
xx	Lisbon, Madrid, Casablanca	Lisbon-Madrid-Casablanca
	Santa Maria	Azores
	New York	New York
	Moncton	Moncton

x See paragraph 8.1 below
xx See paragraph 8.2 below

8. Special Arrangements

8.1 Special Arrangements between Shannon and Prestwick Area Controls.

Prestwick Area Control and Shannon Area Control will keep each other advised of all flights in their control areas which will effect the safety of North Atlantic flights, except with regard to such matters as may be excluded by mutual agreement, and after discussion with the operating agencies concerned.

8.1.1 The following types of information will be exchanged between Shannon and Prestwick Area Controls:

1. Flight Plans
2. Departure and Arrival messages.
3. In-flight changes in Flight Plans.
4. Position Reports.
5. Delay and Diversion messages.
6. Unusual conditions that may affect flight safety.

8.1.2 All North Atlantic flights east of 30°West Longitude which originate at, or are destined for Shannon will be controlled by Shannon; and all such flights which originate at, or are destined for Prestwick will be controlled by Prestwick.

8.1.3 Complete exchange of information on all flights is necessary between Shannon and Prestwick, and, wherever practicable, co-ordination between the two controls should be effected prior to approval or amendment of a flight plan. Prior co-ordination need not be required when such action will result in a delay to aircraft movements. It is imperative, however, that details of any amendment or change of flight plan that is effected without prior co-ordination be passed to the other control as quickly as possible.

8.2 Special Arrangements between Lisbon, Madrid and Casablanca Area Controls. Aircraft operating within this area shall be controlled by Lisbon except in the following cases;

8.2.1 All traffic to and from Spanish territory immediately adjacent to the Atlantic shall be controlled by Madrid in co-ordination with Lisbon.

8.2.2 All Atlantic traffic to and from French Morocco shall be controlled by Casablanca in co-ordination with Lisbon.

8.2.3 The working arrangements between these area controls shall be similar in principle to those recommended in paragraph 8.1.

- END -

DOC/NA/7
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13/2/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

AIR TRAFFIC CONTROL COMMITTEE

Agenda Item 3: Regional Procedures - Determination of any changes necessary in the present regional procedures.

1. To date, the Air Navigation Committee and the Council have not completed action on the review of Recommendations for Standards, Practices and Procedures, Rules of the Air and Air Traffic Control. It therefore appears that the best basis for the Committee's work are the "Regional Procedures for Air Traffic Control" for the European Mediterranean Region contained in Part I, pages 1-2-1 to 1-2-23, of the "EUROPEAN MEDITERRANEAN ICAO Regional Manual"-(DOC 4600) and the "Regional Procedures for Air Traffic Control" for the North Atlantic Region contained in Part I, pages 1.2.1 to 1.2.7 of the "North Atlantic ICAO Regional Manual" (DOC 4500).

This seems justified by the fact that these two regions adjoin and many of their problems are common; the better the standardization between their respective regional procedures, the easier it will be to comply with them.

2. The Committee will recall that efforts are being made to introduce in the Standards themselves, those regional procedures which appear to be of general application, thus reducing the regional procedures to a minimum. In this connection, reference has been made when appropriate to the supporting documents prepared for the 3rd RAC Section.

3. Some parts of the N.A. Regional Procedures do not have a corresponding part in the EUMED Procedures. It is proposed, therefore, to consider them separately:

(1) para 2. Special Application of Instrument Flight Rules. To consider in relation with DOC 5064 - RAC 516. Section 2.

(2) para 4. Control Coordination.

This provision is similar to the one contained in para. 8.6 page 1-2-21 of the EUMED Regional Manual, which is in the form of a recommendation to pilots. This is in line with the general thought that control proper is very difficult to exercise in the North Atlantic Region except when aircraft are comparatively near terminals.

Therefore, it is proposed to delete this paragraph and to replace it by the one in para. 8.6. of the EUMED ATC Regional Procedures amended to make application mandatory.

(3 pages)

(3) Paras.6 and 7 North Atlantic Control Areas.

These two sections do not appear to serve any useful purpose, as a chart is provided (para 9). It would be appropriate to recommend that coordinates be indicated on the chart where necessary.

(4) Para 8. This section will require review in accordance with the decision on the transformation of the Control Areas into Flight Information Regions.

Attention is particularly called to para. 8.1.2, which requires supplementing to take care of through traffic not originating from or destined for Shannon or Prestwick.

Supplementing para. 3, the following table provides a comparison of the EUMED and N.A. ATC Regional procedures to align as much as possible.

2. p. 1-2-2	(none)	Flight quadrantal ... difficulties experienced ... of air traffic. Arrangements ... based on odd and even thousands of ... system suitable to flights made toward or from Iceland, ... to pressure pattern flying.
3. p. 1-2-3	(none)	Approach Control Procedure under IFR. This section appears suitable for the N.A. Region.
4. p. 1-2-3	(none)	Standard Instrument Approach to landing Procedures. This section appears suitable to N.A. Region.

References

EUMED	N.A.	
5. p. 1-2-3	5. p. 1-2-4	Operational Control Service. This section would appear to be improved by use of the EUMED text, considered in relation with DOC 5046/RAC 514.
6. p. 1-2-4	3. p. 1-2-2 (except 3.4 p.1-2-3)	Air Traffic Control Messages. This section would also appear to be improved by using the EUMED text, considered in relation with DOC 5057/RAC 515. Section 4, and DOC 5024/RAC 504.
7.	(none)	Emergency Procedures. This section does not appear appropriate as it is contained in the Procedures for Air Navigation Services ATC, and also in the Rules of the Air and ATC Standards published by ICAO.
1 p. 1-2-17	(none)	Introduction. May be acceptable to the N.A. Region.
2 p. 1-2-17	(none)	Definition. May be acceptable to N.A. Region.
3 p. 1-2-17	(none)	Call up and answering procedures. Acceptable to N.A. Region.
4 p. 1-2-18	(none)	Visual Flight Rules and Instrument Flight Rules. The Air Navigation Committee and Council have not yet completed action on this point in their review of Recommendations for Standards, Practices and Procedures- Rules of the Air.
5 p. 1-2-19	(none)	Avoidance of Collisions. Duplicates the PANS-ATC presently in force.
6	(none)	Weather Information for landing.
7	(none)	Control of VFR Flight.
8 (except 8.4) p.1-2-19	(none)	Control of IFR Flight.

(These provisions are as appropriate to the N.A. Region as to the EUMED. However, 8.6 should be modified to become mandatory.

8.4 p.1-2-20	3.4 p.1-2-3	Position Reports. Except for the time interval of half an hour, it might be advisable to consider the application of the EUMED provision in the N.A. Region, in relation with the amendment prepared in para. 3. of DOC 5057/RAC 515.

- END -

DOC NA.20
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INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

AIR TRAFFIC CONTROL COMMITTEE

Agenda Item 2: Area Control Facilities - Determination of any Changes Necessary in the Present Boundaries of Control Areas and in the Sites of Area Controls.

1. The Government of Iceland has requested financial aid through ICAO in the maintenance of certain Air Navigation facilities and services. The Council, in considering this request, has directed that the Air Traffic Control services in Iceland be reviewed by the North Atlantic Regional Air Navigation Meeting to determine their necessity in providing safety and regularity of international air navigation in the Region.

2. The services referred to above are as follows:

2.1 Area Control for the Iceland Control Area.

2.2 Approach Control for Reykjavik and Keflavik Aerodromes.

3. The Committee may wish to formulate recommendations regarding the necessity of retention of these services as now rendered by Reykjavik.

- END -

(1 page)

DOC NA/21
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16/2/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

REFERENCES TO SUPPORTING DOCUMENTS

1. Agenda Items

"2"	See DOC NA/6, ATC/NA.2
"3"	See DOC NA/7, ATC/NA.3
"3" Sub-Items	See DOC NA/7, ATC/NA.3, Para. 4

2. For ease of reference: DOC 5024, RAC/504
DOC 5046, RAC/514
DOC 5057, RAC/515
DOC 5064, RAC/516

referred to in DOC NA/7, ATC/NA.3 are attached hereto.

- END -

DOC 5024
RAC/504
23/12/47

INTERNATIONAL CIVIL AVIATION ORGANIZATION

RAC DIVISION

RULES OF THE AIR AND AIR TRAFFIC CONTROL PRACTICES

THIRD SESSION

Agenda Item 2.3.1: Adoption of Standard Flight Plan.

1. This Item, which would otherwise have been discussed under Item 2.1 of the Agenda, has been given separate treatment. The Air Traffic Control Committee of the South Atlantic Regional Air Navigation Meeting specifically recommended study of this subject by the Third Session of the Division. France has also submitted a proposed amendment to the European-Mediterranean Flight Plan form.

2. The comments from France are as follows:

" At the EUMED Regional Conference in Paris (April 1947), a standard type of Flight Plan was proposed for this Region. Furthermore, details on the use of the flight plan are contained in paragraphs 1.1.4.2 and 1.1.5 of DOC P.317, ATC/P/93.

" In particular, it was proposed (Para. 1.1.5.1) that the flight plan should be valid only to the aerodrome of the first intended landing and that consequently, the person-in-command of the aircraft would be required to prepare at each stop a new flight plan which would be valid up to the next point of landing.

" This requirement, while offering certain advantages from the point of view of safety and effectiveness of control, nevertheless constitutes a cumbersome obligation upon air-lines.

" Indeed, it being desirable that the person-in-command of the aircraft should make himself acquainted with the necessary elements for the drawing up of a flight plan, this consequently has the effect of considerably prolonging the duration of stops in many cases.

" This disadvantage may appear slight in territories of large dimensions, where stopping points are relatively far apart, but is of great importance for territories such as Metropolitan France.

" The time lost in stops has proved considerable, compared with the total flight time, which as a result of this fact is substantially increased.

(3 pages)

" The French Government considers it desirable to accept that a single flight plan be drawn up for continental flights, the maximum distance for which such plan would be valid to be determined as required.

" This distance to be in the region of 1500 kilometres.

" Furthermore, the French Government desires that efforts be made to adopt a universal standard flight plan. The advantages of a standard flight plan had occupied the attention of representatives of the States taking part in the EUMED Regional Conference (April 1947) and a flight plan of this nature has been established for this Region.

" Considerable advantage will be derived by the extension of such standardization."

3. The questions requiring decision by the Division are:

(1) Is the "Composition of the text of Flight Plans", as described in Para. 6.4 of the European-Mediterranean Regional Procedures, generally acceptable as an ICAO Standard? If so, would it be acceptable to attach it as an annex to the Rules of the Air?

(1.1) Is the French proposal to permit that a single flight plan be filed for a trip, including intermediate stops, acceptable to the Division?

(1.2) If so, is it deemed sufficient to amend the corresponding text as follows:

a) Para. 6.4.1, page 1.2.5 of the EUMED Regional Procedures: delete the five last lines;

b) Item J of Para. 6.4.1.1, amend Item J to read: "points of intended landing and estimated time aloft";

c) Item J on the Standard form: same as in b) above.

(1.3) If such amendment is brought in, it may be desirable to indicate the minima conditions under which it is permitted to file a single Flight Plan covering more than one stop: by reference to the time spent on aerodrome at each intermediate stop, to the distance to be covered, etc.,

(2) Is the Standard Flight Plan Form, as proposed in Paris, acceptable as an ICAO Standard? If so, would it be acceptable that the Flight Plan Form contained in Pages 1.2.6 and 1.2.7 of the EUMED Procedures be included in the Rules of the Air as contained in Appendix "B" of DOC 2601, following Para. 2.4.4, and the necessary amendments made in said paragraph?

(3) Is the "Distribution and delivery of Flight Plans", as described in Para. 6.3 of the EUMED Regional Procedures (DOC 4600), acceptable as an ICAO Standard? If so, is it acceptable to enter it as Para. 4.11 of the RAC Recommendations for Standards, Practices and Procedures, as contained in Appendix "D" to DOC 2601?

- -

(4) France has found it desirable to provide space on the retained copy of the flight plan, for endorsements from the aeronautical information office and the meteorological station certifying that the aircraft commander has visited these services and has been given all the required information for the performance of his flight. This is used because the Air Traffic Control Service in France is not required to accept a flight plan unless the aircraft commander certifies that all preparatory flight formalities have been performed by him personally. The Division might wish to standardize such procedure?

- END -

DOC 5046
RAC/514
2/1/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

RAC DIVISION

RULES OF THE AIR AND AIR TRAFFIC CONTROL PRACTICES

THIRD SESSION

Agenda Item 3.4: Discussion of Methods of Coordination between Operational Control and Air Traffic Control.

1. In order to take advantage of previous discussions on this question, it seems appropriate to consider it in two parts:

(1) Definition of the term "Operational Control" (Para. 2. hereafter).

(2) Coordination between Operational Control and Air Traffic Control (Para. 3. hereafter).

Points on which it is desired to obtain specific recommendations from the Division are summarized in Para. 4.

2. Definition of "Operational Control"

2.1 The RAC Division at its Second Session recommended that a definition be provided by the OPS Division for the expression "Operational Control". (See Appendix "A", Para. 1).

2.2 The OPS Division could not consider this item during its Second Session.

2.3 The ATC Committee of the European Mediterranean Region during its second special meeting in April-May 1947, prepared a definition for regional use and recommended it for further study (See Appendix "A", Para. 2).

2.4 The United Kingdom, when commenting on the Final Report of the Second Session, recommended that this definition be adopted at the next Session of the RAC Division.

2.5 This definition was presented to the IATA Technical Committee at its meeting in NICE which recommended that the definition proposed by the Paris ATC Committee be adopted with the exception of the first nine words and the insertion of "diverting" between "continuing" and "or terminating flights," .....

3. Coordination between Operational and Air Traffic Control

3.1 During its second special meeting in April-May 1947, the ATC Committee of the European-Mediterranean Region recommended that Para. 3.4 of the RAC Second Session Final Report (See Appendix "A", Para. 3) be slightly amended in order:

(1) to permit local arrangements as necessary (this would avoid complete repetition of the whole paragraph when the local procedures do not comply with the Standards);

3.1
(ctd) (2) to introduce a special rule concerning emergency situations.

3.2 The IATA Technical Committee in NICE recommended that the words "having due regard to facilities available" be deleted as they may weaken the position of the operators if this phrase was used as an excuse to delay the transmission of messages to operators.

It also recommended that the words "as soon as practicable" at the end of Para. 3.4.5 be changed to read "immediately".

3.3 The French Government indicated that in order to simplify the task of Area Control Centres, information to operating agencies will be provided in France by local controls: the latter will be linked to ATC Centres in a manner permitting prompt dissemination to operating agencies of any information concerning Operational Control.

4. The following questions appear to require answering by the Division:

(1) - Is the definition proposed by the Paris ATC Meeting acceptable as it stood (Appendix "A", Para. 2., sub-para."1.6"), or as amended by IATA (Para. 2.5 of this document)?

- Is it considered necessary to maintain Para. 1.6.1.1 in the definition, or would it not be better to consider this paragraph as a rule concerning the decision of landing with regard to weather minima, and as such, to insert it in the paragraph concerning coordination between Operational Control and Air Traffic Control? (Appendix "A", Para. 3: 1.6.1.1. could be placed as Para. 3.4.5 for example; 3.4.5 to be renumbered 3.4.6).

(2) - Are the amendments to the paragraph "Coordination with Operational Control" proposed by the EUMED ATC Committee acceptable as they are (Appendix "A", Para. 3, "3.4.2, 3.4.3, 3.4.4 and 3.4.5")or as they would be if further amended according to the recommendations of the IATA Technical Committee (Para. 3.2)? In either case, the words "in accordance with local agreed procedures" would cover the specific conditions of routing such messages through local control as established by the French Government (See Appendix "A", Para. 3. "3.4.2 and 3.4.5").

(3) - It is further suggested that an improvement would result if the Division wished to recommend to the OPS Division that the expression "Operational Control" be changed for "Operational Supervision" or "Operational Flight Supervision" (See Appendix "A", Para. 1.2). This would avoid confusion between the two expressions: "Air Traffic Control" and "Operational Control".

Also, it appears desirable to recommend the amendment of some expressions used in "Operational Control", in order to distinguish them from the corresponding phrases used in Air Traffic Control. For example: the expression "Flight Clearance" used in the OPS Standards could be termed "Operational Clearance" as opposed to "Air Traffic Control Clearance (ATC Clearance)" as used in the RAC Standards.

APPENDIX "A"

1. RAC Second Session Final Report - DOC 2601, RAC/135, Page 347.

"2.8.8.4 Definition of Operational Control

(1) In dealing with the coordination of Air Traffic Control and Operational Control the RAC Division has considered the text of Para. 3.4.1, Page 35 of DOC 2017, RAC/105, viz:

"Operational Control..... will determine the desirability of initiating, continuing or terminating flight."

(2) The RAC Division realizes that this represents only a part of the responsibilities of Operational Control and therefore recommends that the OPS Division be requested to provide a more appropriate definition of Operational Control at its next session, taking into account the paragraphs dealing with coordination of Air Traffic Control and Operational Control in the Air Traffic Control Standards, the use of the terms "Dispatcher" and "Flight Supervision" in DOC 3030, OPS/145*, and definition 1.16 in DOC 2487, COM/162."

1.1 Excerpt of DOC 2487, COM/162 referred above. (Will also be found in the "COM Procedures" DOC 4478, COM/501):

"1.16 Airline Operating Agency. The operator, organization or agency controlling the operation of aircraft. (This includes scheduled and non-scheduled air carrier agencies.)"

1.2 Excerpt of DOC 3030, OPS/145 referred above:

"7.3 Flight Supervision

An approved method of supervision of flight operations shall be provided for all Air Services. When in the opinion of the State of Registry a Flight Operations Officer is required, he shall be required to hold a licence as set out in the International Standards for Licensing of Personnel and he shall perform the following duties:

"7.3.1 Aid the pilot-in-command in the preparation of the flight plan, and file the flight plan with the appropriate Air Traffic Control.

"7.3.2 Assist in preparing a flight clearance form and furnish the same to the pilot-in-command of the aeroplane, together with other evidence required under paragraph 7.6.

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* DOC 3030, OPS/145 has superseded DOC 1535, OPS/69 originally referred to.

1.2 (ctd) "7.3.3 Furnish the pilot-in-command while en route, through the channels available, information which may be necessary for the safe conduct of the flight. In the event of emergency, he shall initiate such procedures as may be outlined in the Operations Manual for the type of emergency involved.

"7.3.4 He will, unless he has been properly relieved, remain on duty until all the flights under his jurisdiction have been terminated.

"7.3.5 When the air traffic control organization provides a flight information service, or when aeronautical meteorological service, or a mobile aeronautical communications service, is provided by the State Authorities, the Flight Operations Officer shall avoid taking any action which would conflict with the procedures established by such service."

2. Excerpt of the Final Report of the Paris ATC Meeting in April-May 1947 (P.317/ATC P.93):

"2.2.2 Definition of Operational Control

The ATC Committee recommends that the definition and responsibilities of "Operational Control", be composed by the OPS Division and that this information be included in the appropriate Air Traffic Control Publications.

In order to clarify the immediate situation in EUMED, the Air Traffic Control Committee found it necessary to include the following definition in the Supplementary Procedures for the European-Mediterranean Region:

"1.6 Definition of Operational Control Service

"1.6.1 Insofar as it affects Air Traffic Control, Operational Control is that control exercised by the Operating Agency or its designated representative for the movement of its aircraft with respect to the responsibility for initiating, continuing, or terminating flight, and for decisions as to whether aircraft may or may not land at an aerodrome with regard to weather minima.

"1.6.1.1 The decision with regard to landing at an aerodrome under weather minima other than those established by the State in which the aerodrome is located may be exercised by the Operational Control, if such weather minima are contained in an Operations Manual approved by the State of registration of the aircraft."

3. Excerpt of the RAC Second Session Final Report - Standard and Recommended Practices - DOC 2601, RAC/135, Page 199, amended as recommended by the EUMED - ATC Committee Final Report - Paris April-May 1947 - DOC P.317/ATC P.93.
(The amendments are shown as - - - and /- 7).

"3.4 Co-ordination with Operational Control

"3.4.1 The Air Traffic Control Service, in carrying out its objectives, shall have due regard for the requirements of the Operational Control Service provided by the Operating Agency in accordance with the provisions of the Standards for International Air Service Operations and, if so required by the Operating Agency, shall make available to the Agency, or its designated representative, full information pertaining to the conduct of flights, to enable such agency or representative to carry out its responsibilities.

"3.4.2 If so desired by the Operating Agency concerned, all messages and position reports from scheduled aircraft received by the communications stations will be routed to the Operating Agency concerned, or its designated representative, simultaneously with their delivery to Area Control. /- In accordance with agreed local procedures, having due regard to facilities available. 7

"3.4.3 Operational Control instructions involving a change in flight plan shall be co-ordinated with Area Control before transmission to the aircraft.

"3.4.4 Air Traffic Control instructions issued by Area Control shall be routed to the Operating Agency or its designated representative in accordance with ~~published regional~~ /- agreed local 7 procedures /- having due regard to facilities available 7.

"/-3.4.5 Emergency Procedure. In cases of emergency, when the delay caused by effecting the co-ordination described above would prejudice the safety of aircraft, Air Traffic Control shall first issue appropriate instructions to alleviate the emergency and then notify the Operating Agency or its designated representative as soon as practicable 7."

- END -

DOC 5057
RAC/515
7/1/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

RAC DIVISION

RULES OF THE AIR AND AIR TRAFFIC CONTROL PRACTICES

THIRD SESSION

Agenda Item 2.1: Selection of Supplementary Procedures developed at Regional Meetings for incorporation in the Standards and Recommended Practices.

1. Certain provisions of the Regional Procedures for Air Traffic Control are repeated in very similar terms for a number of regions: their integration in the Standards and Recommended Practices is therefore highly desirable and would reduce the bulk of the Regional Manuals.

The following quotations are intended to present the appropriate material to the Division, together with suggestions for its arrangement and integration in the Standards and Recommended Practices.

2. SPECIAL APPLICATION OF INSTRUMENT FLIGHT RULES

2.1 Compliance with the Instrument Flight Rules, without regard to weather conditions, was made compulsory for aircraft flying:

(1) At night: - in the South Atlantic, South American and Caribbean Regions;

(2) Over the sea: - If flying at a distance greater than 20 miles from the shore, in the Caribbean Region;

- if flying at a distance greater than 100 miles from the shore, in the North and South Atlantic Regions.

(3) At any time for international flights within control areas, in the South Pacific Region.

2.2 Discussion on this subject should bear in mind Para. 2.2.19.2 of the Rules of the Air (Appendix "B" of RAC Final Report, DOC 2601, RAC/135), and Para. 4.1.2 of ATC Standards (Appendix "D" to the same document).

"2.2.19.2 Flights Within Control Areas or Control Zones.

If so prescribed by a Contracting State, all aircraft being operated at night within control areas or control zones shall be flown in accordance with the Instrument Flight Rules or as otherwise authorized by Air Traffic Control."

(6 pages)

2.2 (cont'd) "4.1.2 Night Authorization. When a Contracting State prescribes that all night flying within a specified area shall be subject to authorization by Air Traffic Control, such of these Standards and Recommended Practices as are appropriate shall be applied."

2.3 Discussion of these regional rules referred to in Para. 2.1 may be divided as follows:

- avoidance of collision to air traffic by night;
- assistance in search and rescue action for night and over sea flying.

Therefore it seems reasonable, before introducing this material in the RAC Standards, to indicate more clearly what are the responsibilities of aircraft commanders in such special cases and to place reasonable limits thereon. For example:

(1) - aircraft commanders not equipped to comply with IFR might be given a special authorization provided they file a "Flight Plan or Flight Notification" and that they fly quadrantal altitudes or such other altitudes as may be desirable if flying by night;

(2) - aircraft commanders equipped to fly IFR, but operating partly or wholly over areas where there is no coverage by Flight Information Regions or Control Areas, might be instructed to file a "Flight Plan or Flight Notification" and to maintain, as far as possible, communications with available radio stations and to fly at quadrantal altitudes if flying by night;

(3) - aircraft commanders equipped to fly IFR and operating within Flight Information Regions or Control Areas might be instructed to comply fully with Instrument Flight Rules.

2.4 The following paragraphs are therefore submitted to the Division for possible insertion in the General Flight Rules of the Rules of the Air (they do not refer only to aircraft commanders complying with Instrument Flight Rules); if this were accepted, Para. 2.2.19.2 of the Rules of the Air (Appendix "B" to DOC 2601) and Para. 4.1.2 of the ATC Standards (Appendix "D" to DOC 2601) would have to be deleted.

2.4.1 Flights at night. Replace present Para. 2.2.19.2 by:

"2.2.19.2 Flights within Flight Information Regions, Control Areas and Control Zones

Regardless of weather conditions, aircraft commanders operating at night within Flight Information Regions, Control Areas and Control Zones shall:

(1) fly in accordance with Instrument Flight Rules; or

2.4.1 (cont'd)

(2) file a Flight Plan or a Flight Notification with the nearest Air Traffic Control Unit and follow quadrantal altitudes, or such other altitudes as may be instructed by Air Traffic Control."

"2.2.19.3 Flights outside of Flight Information Regions, Control Areas and Control Zones

Aircraft commanders flying at night outside of Flight Information Regions, Control Areas and Control Zones shall file a Flight Plan or Flight Notification to the nearest Air Traffic Control, Communications or Search and Rescue Unit and observe quadrantal altitudes."

2.4.2 Flights over water areas

Insert a new paragraph in the General Flight Rules before notification of flight:

"2.2.21 Flights over large water areas

All flights operating over water and extending more than 20 nautical miles (30 kilometres) water-ward from the shore line shall:

"2.2.21.1 inside Flight Information Regions, Control Areas and Control Zones:

(1) fly in accordance with Instrument Flight Rules; or

(2) file a Flight Plan or a Flight Notification with the nearest Air Traffic Control Unit;

"2.2.21.2 outside Flight Information Regions, Control Areas and Control Zones, file a Flight Plan or Flight Notification to the nearest Air Traffic Control, Communications or Search and Rescue Unit."

3. TIME INTERVALS FOR POSITION REPORTS

3.1 This question should be considered in relation to Para. 4.6, Page 219 of the RAC Final Report, Appendix "D" (DOC 2601).

3.2 Reporting position on routes defined by specified reporting points is governed by them and could be simply expressed as in the EUMED Regional Procedures (See Para. "4.6.1.1" quoted in Para. 3.4)

3.3 Reporting position on routes not defined by specified reporting points has led to various provisions in the various regions:

(1) First position report after first half hour of flight and subsequent reports at each half hour thereafter in the EUMED Region;

3.3 (cont'd)

(2) First position report after first half hour of flight and subsequent reports at each hour thereafter, in the South American, South Atlantic and South Pacific Regions;

(3) First position report after first hour of flight and subsequent reports at each hour thereafter, in the Middle East and North Atlantic Regions.

3.4 For uniformity, it is desirable to reconcile all these provisions in the Standards. It might be possible to adhere to the Paris text, the half hourly interval for subsequent reports being a requirement of the congested areas where it is necessary, and Regions providing locally their exceptions when necessary by virtue of the expression "unless otherwise specified for the route being flown". The introductory sub-paragraph would be transferred to Para. 4.6.3 dealing with the contents of position reports.

"4.6 Position Reporting

"4.6.1 Time of Position Reports

"4.6.1.1 On routes defined by specified reporting points, aircraft position reports shall be made when over or immediately after passing reporting points as established for the route being flown.

"4.6.1.2 On routes not defined by specified reporting points, aircraft shall report position as soon as practicable after the first half hour of flight and at each half hour thereafter unless greater intervals are specified for the route being flown.

"4.6.2 Contents of Position Reports

Position reports shall be made in the following form and contain the indicated information, unless use of POMAR Code is specified (See Para. 4.6.3):

- A - Aircraft identification (as shown in flight plan).

- B - ..... "

4. TRAFFIC CONTROL MESSAGES

4.1 "Departure and arrival messages" have been provided for in all the Regions in which ICAO Regional Air Navigation Meetings have been held; likewise for "Delay or Cancellation Messages" with the exception of the EUMED Region. It is therefore highly desirable to introduce these messages in the ATC Standards to provide for uniformity.

4.2 Air Traffic Control Messages have been the subject of very careful consideration during the EUMED ATC Committee Second Special Meeting, by a working group composed of ATC and COM experts: it might therefore be wise to include in the Standards

4.2
(cont'd)

the provisions contained in the EUMED Regional Procedures, Paras. 6.5 and 6.6 of the ATC Part (DOC 4600 - Part I - Page 1.2.11 and Page 1.2.12), with the following amendments to bring them in line with other Regional Procedures:

- Departure message, Item 3), read "Time airborne" instead of "Actual time of departure" which could be misinterpreted as time leaving the apron;

- Departure message, Item 5), add in brackets "(number of persons on board if different from Flight Plan, and if required)";

- Arrival message, Item 3), add in brackets "(using six figure date time group)".

4.3 The "Cancellation or Delay Message" would have to be added (See Para. 4.1). To bring it in line with the form of the other messages in the EUMED Regional Procedures, it could be worded as follows:

"-.-. DELAY or CANCELLATION MESSAGES.
-.-.1 General"

" If the departure of an aircraft for which a Flight Plan has been transmitted is cancelled, or delayed more than one hour after the proposed time of departure contained in the Flight Plan, a "Delay or Cancellation Message" shall be forwarded, with the minimum delay, to the recipients of the Flight Plan -

-.-.2. <u>Component Parts of the text of a Delay or Cancellation Message</u>.

(1) Aircraft identification and, if different, radio call sign;

(2) Aerodrome of Departure;

(3) Revised estimated time of departure (ETD) for Delay Message only (using six figure date time group);

(4) Any pertinent remarks (i.e. reason for delay or cancellation).

Examples:

(1) DEL FABCD FFOL 181030 ENGINE TROUBLES -

(2) CNL FABCD FFOL WEATHER."

4.4 Furthermore, it might be considered desirable to introduce in the RAC Standards such other paragraphs of Section 6 of the EUMED Regional Manual as might be useful, and specially Para. 6.1.2; 6.2; 6.3.1; and 6.7, dealing with various aspects of Air Traffic Control Messages.

5. ADHERENCE TO IFR FLIGHT PLANS WHEN FLYING UNDER VISUAL FLIGHT CONDITIONS

5.1 This question was brought up during a mission in Europe of the expert of the RAC Section.

5.2 Strict application of the rules concerning departure from the terms of a traffic clearance obliges a pilot to request an authorization to depart from the provisions of an IFR Flight Plan, even if flying in Visual Flight Conditions; (having filed an IFR Flight Plan, he is governed by the Instrument Flight Rules).

5.3 In order to give more flexibility to this provision it was recommended by European ATC experts that the following sub-paragraph be added to Para. 2.4.5 "Air Traffic Clearance" in the Rules of the Air:

"2.4.5.2 A pilot flying on an IFR Flight Plan, may deviate from this Flight Plan when flying in Visual Flight Conditions provided that:

(1) he conducts his flight in such a manner that he can resume flight in accordance with his Flight Plan before proceeding under Instrument Flight Conditions; or

(2) he notifies the Area Control concerned, in which case he must obtain a new clearance before proceeding under Instrument Flight Conditions."

- END -

DOC 5064
RAC/516
8/1/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

RAC DIVISION

RULES OF THE AIR AND AIR TRAFFIC CONTROL PROCEDURES

THIRD SESSION

Agenda Item 2.3.2: ATC Requirements for Altimeter Setting.

1. An "Advance Draft" prepared by the RAC Section of ICAO, on the various methods of setting altimeters to achieve vertical separation of aircraft has already been submitted to States for comments. This paper is reproduced as Appendix "A" to this document. As yet, no comments on this draft have been received.

2. Another paper, dealing with the setting of altimeters in the North Atlantic Region, was prepared by the OPS Section of ICAO and submitted to Contracting States by letter, Ref. T 1/22, dated 27 July 1947. Of seven replies already received, six are in favour of the use of pressure altitude for vertical separation in that region.

3. Furthermore, it is believed desirable to call the attention of the Division to the following material, which may be useful in discussion of this subject:

(1) Present altimeter setting recommended in Regional Meetings (Appendix "B");

(2) Excerpt of a recommendation by the OPS Division at its Second Session (Appendix "C"). This recommendation was approved by the Council.

(3) Comments by the IATA Technical Committee in NICE (September 1947) on the altimeter setting procedures in the North Atlantic and European Mediterranean Region (Appendix "D").

4. The Division may wish to proceed along the following lines:

4.1 Altimeter setting for vertical separation of en route traffic

(1) to consider the merits of pressure altitude and to recommend any action thereon (See Appendix "A"), or

(2) to indicate what other systems of altimeter setting are more appropriate (See Appendix "B").

4.2 Altimeter setting for holding and landing

(1) to recommend altimeter setting to be used through these stages of a flight, and

(2) to recommend under what circumstances (time or location) an aircraft will change from one altimeter setting to another.

(17 pages)

4.3 Transmission of altimeter setting information

(1) to recommend the conditions under which altimeter settings will be broadcast and make appropriate recommendation to the MET Division.

4.4 Check of true height of the altitude

(1) to recommend what action should be taken in Air Traffic Control units to ascertain that an altitude being flown by an aircraft, in respect to a given altimeter setting, provides sufficient clearance from ground obstacles.

A P P E N D I X "A"

(This Appendix was originally sent to States as RAC 3rd Session Draft 2, by letter SD 10/8, dated 8 September 1947.)

SETTING OF ALTIMETERS

(Presented by the RAC Section)

1. INTRODUCTION *

The term "altimeter setting" is difficult to translate into French. "Réglage des altimètres" is in fairly common use but is not proper because the setting of altimeters involves many other requirements than the simple matter of bringing an index to coincide with a scale of pressures. "Etalonnage des Altimètres" is used by Messrs Dedebant and Viaut in their "Pilot's Manual of Meteorology", but, again the word "étalonnage" has a meaning which goes beyond the idea contained in the word "setting". After some hesitation regarding the term "adjustment" the word "calage" was chosed as it has the advantage of previous use in aviation, with the same meaning, and is also used in mechanics as the equivalent of the word "setting" (e.g. "calage" or setting of a magneto). It describes perfectly the process of bringing into coincidence the scale of pressures with the fixed index of the altimeter.

2. EXPOSE

Numerous discussions, or reports on discussions, on the setting of altimeters show that:

- The altimeters utilized for measuring the true altitude of aircraft above land or water will give the best reading when they are set on the "QNH" ** of the station closest to the aircraft concerned (closest horizontally as well as vertically);

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* In this document and in the corresponding diagrams, altitudes are given exclusively in feet: for the moment, this unit of measurement seems better adapted to the demonstrations under consideration because altitude expressed in feet for the vertical separation of aircraft are expressed in round figures; it moreover seemed preferable not to overload the diagrams with the corresponding metric figures.

** "QNH" is a pressure determined in such a way that an altimeter set at this pressure will indicate the true altitude, in relation to sea level, of the point at which it was determined. If an aircraft is in the vicinity of this point, an altimeter thus set will furnish the best indication of its true altitude in relation to sea level.

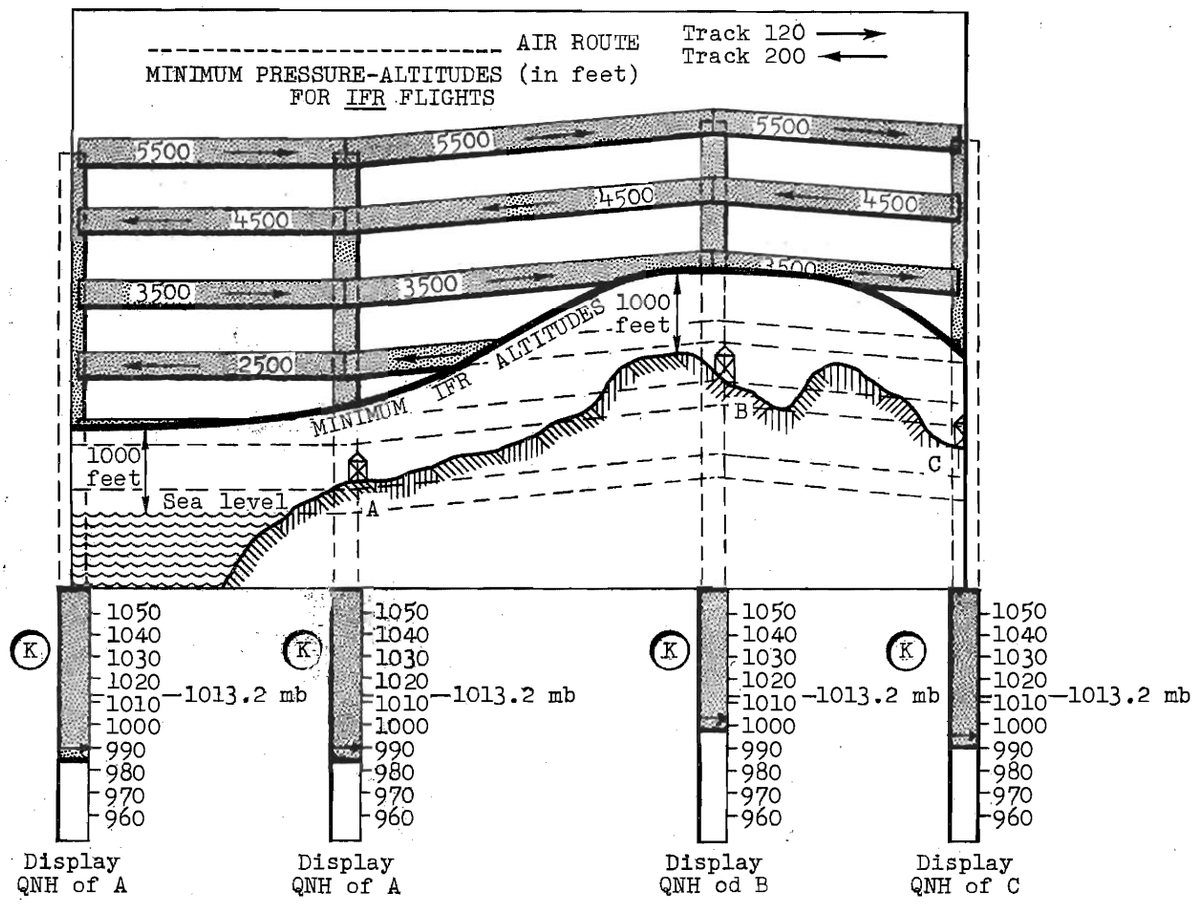

Figure 1.

The vertical cross-section shows the altitude of the terrain and of stationary obstructions in a path 20 kilometers wide extending to each side of route of a bearing of 120° - 300°. The meteorological conditions considered are of low pressures (QNH of A - 990 mb, of B - 1003 mb and of C - 995 mb.).

The shaded portions of the drawing are movable in relation to the cross-section of the terrain; these are placed behind the plate which supports the cross-section and the cross-section finishes along the line representing the minimum IFR altitude. The sliding vertical parts are small rules graduated in altitudes; an arrow on the lower part of each rule is placed in such way that,when brought opposite the 1013.2 mb mark on the pressure-scale, the graduation on the rule, opposite the station, shows the altitude of this station above mean sea-level; by operating knob K the arrow on the rule can be moved to the QNH value at the location under consideration: thus, the horizontal strips showing above the minimum IFR altitude will indicate the minimum pressure altitudes which Control can assign to aircraft.

The practical application of such a system would require adjustments which would have to be studied in each individual case, particularly in respect of the ratio of the scale of distances in relation to the scale of altitudes.

- The altimeters utilized for the navigation and operation of aircraft will give best service if they are set at the standard pressure of 1013.2 mb *;

- The altimeters utilized for vertical separation of aircraft flying within a given region will make such separation possible under the best conditions of safety if they are all set at the same reference pressure **.

None of the services enumerated in the first two paragraphs can be furnished by an altimeter which has been given another setting than the one mentioned in that paragraph: therefore these two settings cannot be combined and must both be used on board an aircraft.

On the other hand, vertical separation may be accomplished by using either of the first two settings as long as all aircraft that are to be vertically separated make use of altimeters set at whichever of these settings has been indicated.

The purpose of this document is to compare the merits of various altimeter settings as regards their practical utilization for air navigation and vertical separation of aircraft.

3. Comparison of "QNH" and "1013.2 mb".

3.1 For vertical separation

Let us suppose that we use a setting in relation to a single value of "QNH" for vertical separation of aircraft in a certain region: this "QNH" must be determined for the whole of the region according to the existing conditions at a certain point in this region. In a neighbouring region, the "QNH" used will usually be different, and aircraft passing from one region to the other will cease to be separated by the standard margin of safety at the moment they cross the border between the two regions; moreover they will have to reset their altimeters to the "QNH" of the region they are entering, and afterwards change their altitude in accordance with this new setting; therefore, if the difference between the two settings

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* The navigator uses true altitude to estimate the true air-speed, to measure the drift by comparing pressure altitude and true altitude obtained by radio altimeter; the engineer uses pressure altitude to adjust his engines.

** The use of "Zone Forecast Pressure" can sometimes give rise to considerable differences in altimeter settings for two aircraft flying the same region.

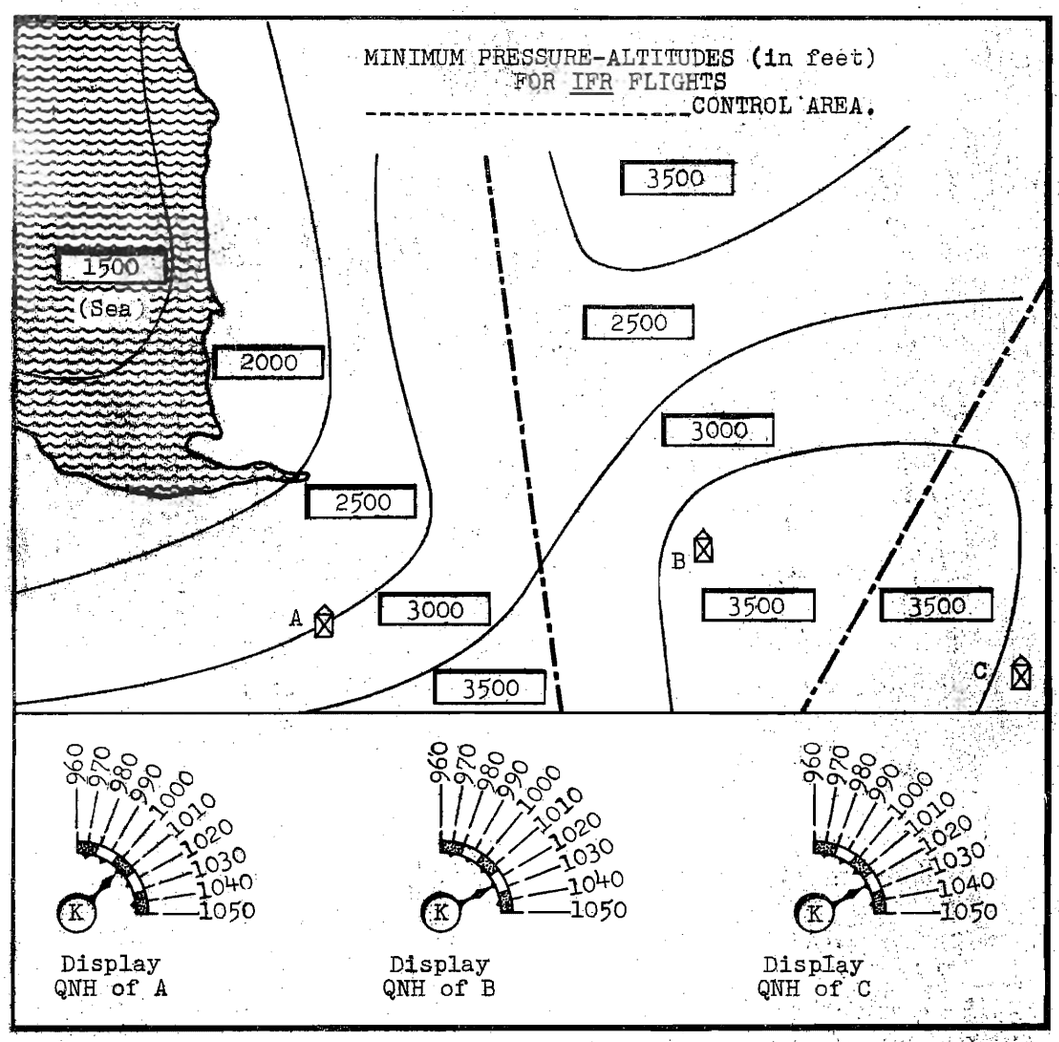


Figure 2.

When different flights take place in one Control Area, it is impossible to represent the cross-section described in Figure 1 for each flight. The minimum altitudes, in relation to the features and the height of obstructions for certain zones, can be portrayed by contour lines: a conspicuous number displayed within each zone would indicate the minimum altitude above sea-level which must be maintained therein. When the "QNH" in a zone is not 1013.2 mb the corresponding pressure-altitudes can be computed (this would only be done for layers spaced at intervals of 500 feet; to follow progressively the values of "QNH", it would be necessary to alter the contour lines, which would be impracticable). If the minimum altitudes are shown on a series of cylinders, and if, for a region where the "QNH" is determined by a certain station, these cylinders are connected to a control knob K set to a mark corresponding to the current "QNH", it is possible to post automatically the corresponding minimum pressure-altitudes. Five marks and five figures on each cylinder would be needed to represent all intervals of 500 feet corresponding to a variation in "QNH" from 960 to 1050 mb.

In the figure, A, B and C are the stations which determine the "QNH"; the lines - - - - - - : show the coverage of each station; e.g. the "QNH" of A is 1010, of B: 1020, of C: 1025.

exceeds a certain value * the altitude separation between the aircraft considered may become negligible, or even nil, and thus create a risk of collision at the time when the change is effected. This disadvantage, and this danger, obviously would not exist if the 1013.2 mb setting were universally adapted for all altimeters intended for vertical separation of aircraft, no matter the region in which they fly.

3.2. For measuring altitude.

While the introduction of a uniform standard setting of 1013.2 mb would solve perfectly the problems of vertical separation of aircraft, an altimeter thus set does not give the pilot his altitude in relation to terrain: the aircraft must therefore carry a second altimeter set at the local "QNH" to show the pilot his true altitude **: this does not create any special difficulty since the Standards on operating practices require that an aircraft which may be flown on instruments be equipped with two altimeters.

Moreover, it is very important to avoid the possibility of Traffic Control giving an aircraft a pressure altitude *** which would result in its flying at a true altitude lower than the "minimum clearance altitude" over a given terrain and which under certain meteorological conditions would actually be lower than terrain or sea level: this difficulty can easily be overcome if the controller can compare a vertical cross-section of a given route with the actual current heights of "pressure-altitudes" *** as determined from local "QNH" values (Figure 1); by this procedure, he will read, automatically and without any difficulty, the minimum "pressure-altitudes" which he can safely assign to aircraft. If the flights are not made over well-established routes and cannot be traced on individual cross-section, it is possible to indicate contour lines corresponding to the minimum IFR altitudes which may be maintained in the region, and show very distinctly the corresponding heights of "pressure-altitudes" (figure 2).

---

* If aircraft are normally separated by intervals of 500 feet - quadrantal altitude rule - theoretically a difference in "QNH" of 15 mb. creates a collision risk. In practice, aircraft cannot maintain exact altitude due to defects in instruments and piloting difficulties, and therefore collision risks may follow pressure variations smaller than 15 mb. This would compel, in Europe for example, all aircraft to use the "QNH" of a point not more than 75 miles distant, which in practice would mean zones of settings for altimeters having no more than a 75 mile radius. This would be very awkward practice.

** The setting of such an altimeter having nothing whatsoever to do with control or vertical separation, the pilot is at liberty to set it at the latest value of "QNH" most appropriate to his route.

*** Altitude determined by an altimeter set at a pressure of 1013.2 mb.

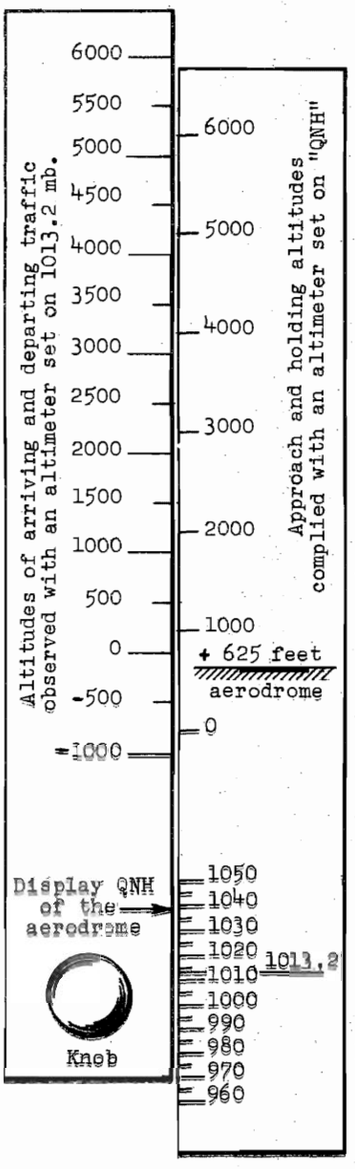


Figure 3

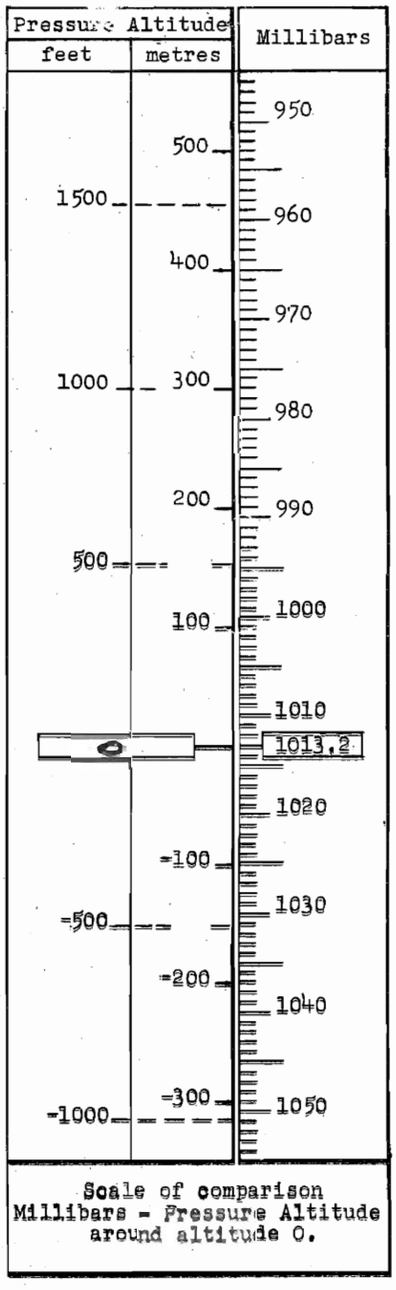


Figure 4

Approach Control places the pointer of the pressure-altitude scale opposite the appropriate "QNH", for example 1039 mb, and informs Regional Control of the pressure-altitudes which corresponds to the lowest flight level available for the sequence of approach.

Area Control, as far as possible, assigns this pressure-altitude, or the closest one according to quadrantal rule, to the approaching aircraft. (If Area Control should assign another altitude, the problem which arises is one for control and independent of the use of pressure-altitude, or of any other basis of reference.)

Example: The aircraft flying from the South-East will be instructed by Area Control to climb or descend to a pressure-altitude of 2,500 feet, as the "QNH" is 1039 and ATC desires the aircraft to fly at 3000 feet "QNH" altitude when it reaches the holding points; the pilot will then read his altitude on the altimeter set on "QNH", instead of reading it on the one set on 1013.2 mb. Since the reading on his "QNH" altimeter is approximately 3,200 feet at that moment, he will have to descend 200 feet.

It must now also be noted that the use of an altimeter set at a regional * "QNH" does not give a satisfactory answer to the important problem of a true altitude reading aboard an aircraft: as a matter of fact, an altimeter set in this manner only shows the true altitude of an aircraft in relation to the terrain or sea-level if this aircraft happens to be flying in the vicinity of the point for which the particular "QNH " was issued. The difference may be particularly great when an aircraft is flying in the vicinity of a high mountain and the "QNH" at which its altimeter is set has been issued by a meteorological station situated on a neighbouring plain.

3.3 Change-over from in-flight setting to local setting of the altimeter at the time of approach.

The change-over from an altitude observed in relation to a 1013.2 mb. setting to an altitude observed in relation to the local "QNH" of the aerodrome at the time of landing has often brought up the following question: When and how will approach control instruct an aircraft to effect this change-over, so as to maintain adequate vertical separation between it and other aircraft?

By checking the position of the "pressure-altitudes" in relation to the "QNH" altitudes above the aerodrome, the controller will be able to assign to an aircraft a "QNH" altitude which will approximate the actual altitude of the aircraft (fig. 3); no special manoeuvre, except for a slight adjustment of altitude, nor any other change in altimeter setting would be necessary: the pilot, when he enters the approach zone or when he reaches the holding point, merely disregards the reading of his altimeter set on 1013.2 mb. and makes any necessary adjustment ** to reach the assigned altitude as indicated on the altimeter set on the "QNH" of the aerodrome. (We are supposing, of course, that there are no changes in altitude to be prescribed to the aircraft for reasons of special traffic conditions; the course to follow in such case is special to each of them, and the problem occurs with any system of altimeter setting).

---

* "Regional QNH": Single QNH determined for a given region, in relation to which aircraft flying under IFR conditions must adjust their altimeters to conform with the altitudes fixed for their vertical separation.

** Although the figures representing the two altitudes in relation to "1013.2 mb." and "QNH" respectively might differ substantially, the corresponding true altitude, that is to say the change in altitude to be effected by the aircraft, would be limited: for example, a maximum of 500 feet if the separation of the aircraft at the stacking point is 1000 feet.

This simple method would apply just as well to aircraft leaving the aerodrome: in this case the opposite would apply, the pilot changing from one altitude reading in relation to "QNH" to an altitude reading in relation to 1013.2 mb.

It must be added that this problem is not particular to the use of the 1013.2 mb pressure as a basis for altimeter settings, and that, while the difference in setting would be, on the whole, smaller when changing from a regional "QNH" to a local "QNH" of an aerodrome, an identical problem exists nevertheless and for the moment no other solution is seen than the one outlined above.

4. USE OF "ZONE FORECAST PRESSURE"

It is known that the lack of observation stations which are sufficiently close to one another in ininhabited regions - such as the North Atlantic - has resulted in setting altimeters in those regions, according to a pressure based on meteorological forecasts. Certain objections have been raised regarding this method, for, by using it, one cannot prevent aircraft, flying over a same region, from maintaining in some cases an altitude in relation to different pressure settings of their altimeters; furthermore this method does not enable the control service to know accurately the vertical separation between aircraft. Moreover it is not suitable either for the navigation of the aircraft, or the control of the engines.

A very recent study made by the "Operations Section" of the ICAO Secretariat on the use of "zone forecast pressure" ("pression prévue de zone"), has shown moreover that altimeter settings in relation to the "zone forecast pressure" are sometimes apt to deceive the pilot as to his true altitude to a greater extent than the use of a "pressure altitude" would have done.

Also, the setting of altimeters by "zone forecast pressure" raises, at the time of landing, the same problems that we have already noted concerning the setting on a regional "QNH" or the use of pressure altitude. And, which is worse, it makes the task of the controller even more difficult for, unless the procedure for issuing amendments to the zone forecast pressure are followed, he does not know the true altitude of the aircraft.

5. CONCLUSION

The preceding discussion may be summarized in the following table which shows the respective advantages of the three altimeter setting procedures which have just been considered:

	Zone forecast pressure	Regional	1013.2 mb
Vertical separation			
1. In a setting zone	Not accurate	Accurate	Accurate
2. At the limit between two zones	Control difficult	Control difficult	No difficulties
3. Before landing	Control difficult	No difficulties	No difficulties
True altitude	Not directly readable	Not directly readable	Not directly readable
Navigation and engine control	Useless	Useless	Necessary

No further comments are necessary to decide in favour of the use of altimeter setting on the basis of 1013.2 mb for the vertical separation of aircraft, even though it may not give a direct reading of the true altitude of the aircraft. It must however be pointed out that, although the other two settings theoretically approximate the true altitude, they may differ from it in an appreciable manner, and thus are more likely to confuse the pilots than when a fixed setting is used, which they know to be completely arbitrary.

6. SUPPLEMENTARY REMARKS

6.1. Use of "millibars" or of units of lengths to indicate pressure altitudes.

We have just said that a pilot is not likely to be tempted to use a pressure altitude to estimate his terrain clearance because he knows that pressure altitude does not generally indicate true heights.

However, altitude readings on an aircraft, whether they are in relation to the local "QNH", or on 1013.2 mb are at present expressed on one single system of units: it might therefore be useful to use pressure units to indicate pressure altitudes and thus avoid any possibility of confusion.

It is worthwhile adding to this note that such a method of indicating pressure altitudes would in no way affect what has been discussed above and would not complicate the proposed solutions for easing the task of control: it would be enough to substitute, in each diagram, the equivalent values expressed in millibars for the values of pressure-altitudes expressed in feet.

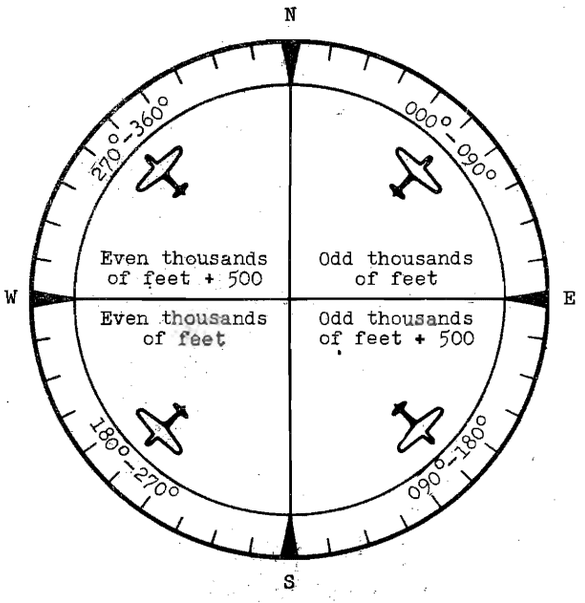


Figure 5.

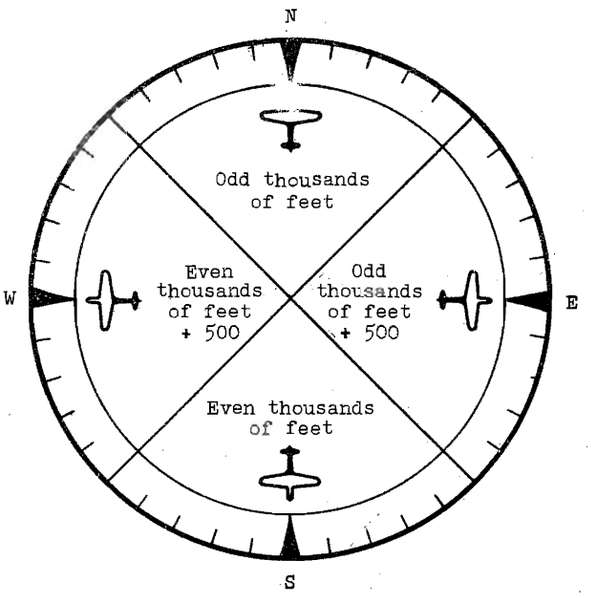


Figure 6.

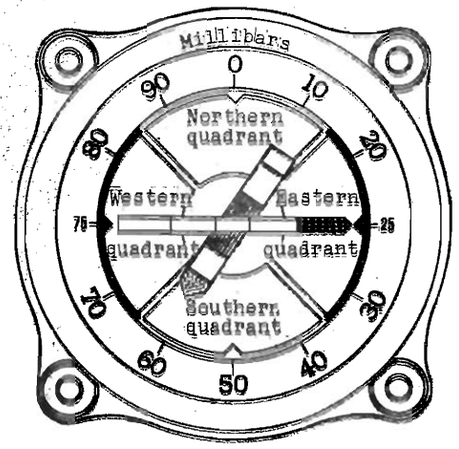


Figure 7

The large pointer indicates tens of millibars, the smaller pointer hundreds of millibars. The altimeter reading is 575 mbs, i.e. a pressure-altitude of 14,856 feet. The pointers turn in a counter-clockwise direction as pressure diminishes, that is to say as altitude increases.

It has been assumed that flight levels could be graduated at intervals of 25 millibars, which would correspond to vertical separations of approximately 750 feet at sea level and approximately 1,200 feet at 18,000 feet.

Better still, the expression of altitudes in "millibars", an international unit, would at last solve the inextricable problem of lack of correspondence between altitudes expressed in feet and in metres, and would eliminate the two quadrantal altitude tables drawn up at the Paris Conference in April 1947.

6.2. Remarks on the quadrantal altitude rule

The quadrantal altitude rule shows a series of altitudes corresponding to quadrants of the compass so that two aircraft, whether heading towards each other or crossing each other are separated vertically by at least 500 feet.

When this rule was drawn up, the quadrants were chosen as indicated in Figure 5.

It would seem practical to alter the orientation of the quadrants for distribution to flight levels so as to establish them as in Figure 6. This would have at least two advantages:

- each quadrant could easily be indicated by one of the following phrases: "North, South, East or West quadrant".

- if the altimeter were graduated so that the long pointer went right round the quadrant between two successive levels of flight, corresponding to the same magnetic course, this pointer should be in the middle of the quadrant on which the magnetic course of the aircraft (Figure 7) is indicated.

7. SUMMARY:

The three questions discussed in this document can be summarized as follows:-

- merits of the use of pressure altitudes for the vertical separation of aircraft (Para. 5) -

- if pressure altitudes were used, is it not preferable to express them in "millibars" instead of units of length? (Para. 6.1) -

- would it not be desirable to change the direction of the quadrants for distribution of quadrantal altitudes? (Para. 6.2).

It would be very much appreciated if the comments on this document were divided according to these three questions.

- END -

A P P E N D I X "B"

REGION	ALTIMETER USED TO COMPLY WITH ALTITUDES REQUIRED BY ATC TO BE SET ON:									
	EN ROUTE				HOLDING			LANDING		
	ZONE FORECAST	QNH	QFF	Standard 29.92-1013.2	QNH	QFF	Standard 29.92-1013.2	QNH	QFF	QFE
NORTH ATLANTIC	x (1)			x (1)	x (2)	x (2)		★ x (3)	x (3)	★ x (3)
EUROPEAN MEDITERRANEAN		x (7)			x			★ x		★ x
CARIBBEAN			x			x		★	x	★ x
MIDDLE EAST		x (7)			x			★ x		★ x
SOUTH PACIFIC				x (4)	x (5)			★ x		★ x
SOUTH AMERICA				x (6)			x (6)	★ x		★ x
SOUTH ATLANTIC				x (6)			x (6)	★ x		★ x

★ Both may be used.

(1) Of seven answers received to date on a paper circulated under reference T 1/22 - 27/7/47, six favour the use of pressure altitude in the North Atlantic Area.

(2) QNH will be used when holding in EUMED Region and in North America.

(3) QNH or QFE will be used when landing in EUMED Region; QNH only in North America.

(4) Apply when flying over water at more than 100 miles from regular and alternate international aerodrome; otherwise, local procedures apply.

(5) Apply when flying within 100 miles from regular or alternate international aerodrome.

(6) Standard is used because of the lack of weather stations - this rule will be reconsidered as soon as weather reports are more dense.

(7) A common QNH is to be used through an entire Flight Information Region and is determined by the meteorological office serving the Control Area. In Sweden, this QNH is determined for each "Communication Area" in a given Flight Information Region.

A P P E N D I X "C"

EXCERPT from OPS Final Report, Second Session, DOC 3030, OPS/145, Pages 153, 154 and 155.

The Operations Division recommends to the Air Navigation Committee that the following recommendations of the Division be brought to the attention of the PICAO Regional Meetings in order that these may form the basis for their discussions.

(a) Approach and Landing. It is recommended that:-

(i) QNH and QFE should both be available;

(ii) QNH continue to be reported in inches Hg., and that a new term be evolved for the same indication when stated in Millibars, which should replace the term QNH as soon as the aircraft instruments in use will permit;

(iii) in order to avoid the possibility of confusion, only one of these settings should be transmitted in the routine broadcasts and exchanges between tower and/or approach control and aircraft;

(iv) the selection of the setting to be used normally should be determined on a regional basis;

(v) QFE, when reported, should continue to be in Millibars;

(vi) arrangements be made for each region to ensure that the setting (QNH or QFE), normally given at each aerodrome, is shown clearly in the Route Guide with a note indicating that the alternative setting is available on request.

NOTE: The Division, although appreciating the desirability for a complete standardization, considered that for the present QFE should continue to be made available on request.

(b) Terrain Clearance en Route. It is recommended that:-

(i) Either QFF or QNH may be provisionally standardized regionally, with QNH becoming the standard as soon as practicable;

(ii) States should be requested to advise PICAO the earliest date at which they would be able to convert in order that a date for the regional introduction of the QNH system may be fixed.

(c) Vertical Separation en Route.

(i) The Division agreed that the use of pressure altitude for vertical separation of aircraft en route has considerable merit and should be given immediate and continuing study by all States, with a view to determining its practicability for international adoption.

(c) (cont'd)

It is recommended that, in these studies, consideration be given to evolving an instrument specifically designed for use in the vertical separation of aircraft en route.

(ii) The Division recommends that the Secretariat forward to Member States a copy of extracts from the documents dealing with the use of pressure altitude for vertical separation which have been produced and studied during the discussions at this Divisional Meeting.

(iii) Until such time as the studies mentioned above permit the determination of the possibility of international acceptance of pressure altitude for vertical separation, the Division recommends that the following procedure be adopted:

(iv) QNH for application in those regions where a network of aeronautical meteorological stations is available, together with communication facilities which will ensure that all aircraft flying in the same vicinity are enabled to operate on the same QNH setting.

(v) In those regions where it is not presently possible to introduce QNH for vertical separation, the recommendation as to the introduction of any other practical system of altimeter settings be made at PICAO Regional Conferences.

The Operations Division recommends that the attention of the COM Division be drawn to these recommendations in order that such adjustments, as may be necessary, may be made to the "Q" code.

Additionally, it is recommended that the RAC Division be requested to include the item "Altimeter Setting" in the clearance to Enter Traffic Circuit.

A P P E N D I X "D"

EXCERPT from Final Report of OPS Working Group of the IATA Technical Committee (NICE - September 1947)

ALTIMETER SETTING OVER THE NORTH ATLANTIC

The regional procedure states "Altimeter setting shall be based on the 'zone forecast' pressure supplied by the appropriate meteorological office". It is a matter for concern that the forecast pressures given by meteorological offices on opposite sides of the Atlantic do not always coincide, and in fact on recent occasions have differed by such a margin as to constitute a hazard to air navigation. It is therefore most urgently recommended that the States concerned should take immediate steps to ensure that the appropriate metecrological offices have laid down a satisfactory procedure in order that identical zone forecast pressures may be issued from each.

It is further recommended that ATC authorities, when it is evident from position reports that two aircraft are on approaching tracks, should inform both aircraft of the estimated time when they will pass each other.

ALTIMETER SETTING OVER THE EUMED REGION

The scheme outlined in Paris is generally satisfactory. There are certain areas, however, where considerable changes in pressure may be experienced between Control Areas. It is recommended that in such cases "Altimeter setting zones" should be set up within a Flight Information Region. When no meteorological station is situated within this zone, a "forecast QNH" should be broadcast by the appropriate Air Traffic Control centre.

STANDARDIZATION OF ALTIMETER SETTINGS

The ultimate programme for the implementation of the altimeter setting is agreed as recommended by the OPS Division of ICAO except for those variations which are necessary in the regions which must be treated in accordance with facilities available and the conditions which exist regionally.

- END -

DOC NA/44
ATC/NA.6
18/3/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Agenda Item 4.1: Adequacy of telecommunications facilities available to ATC Services.

1. In a table attached as Appendix "A" are summarized the communication requirements for Air Traffic Control as described in the Final Report of the Second Session of the RAC Division (Section L of Appendix "E", DOC 2601, RAC/135). Two diagrams are also attached showing:

(a) The point-to-point communication requirements for Air Traffic Control between Area Control Centres or Flight Information Centres (Appendix "B");

(b) The point-to-point communication requirements for Air Traffic Control within a Control Area or Flight Information Region (Appendix "C").

2. It is very important that the ATC Committee of the North Atlantic Regional Air Navigation meeting be provided with detailed information on existing communication facilities for ATC in the region and that this information be presented in a standardized form.

Therefore, States are requested that their delegates bring to the meeting to be held on the 17th May at Paris the information concerning the ATC communications in their countries, presented as in Appendices "B" and "C".

It would be appreciated if a copy of such information could be sent as far in advance as possible to the ICAO Regional Representative in Paris, 60 bis Avenue d'Iéna.

(4 pages)

POINT-TO-POINT COMMUNICATION REQUIREMENTS FOR AIR TRAFFIC CONTROL

FROM THE FOLLOWING AIR TRAFFIC CONTROL UNITS IN A GIVEN CONTROL AREA OR FLIGHT INFORMATION REGION	TO THE FOLLOWING UNITS						
	WITHIN THE SAME CONTROL AREA OR FLIGHT INFORMATION REGION:						IN ADJACENT CONTROL AREAS OR FLIGHT INFORMATION REGIONS:
	APPROACH CONTROL	AERODROME CONTROL	MET	COM	SAR	OPERATIONS AND OTHER AGENCIES	AREA CONTROL CENTRE OR FLIGHT INFORMATION CENTRE
AREA CONTROL CENTRE OR FLIGHT INFORMATION CENTRE	a) "Direct speech" communications with "automatic speech recording", the speed of which should permit instantaneous contact and during peak periods of operation, within not more than five seconds. b) "Printed" communications to handle routine air traffic control messages, the speed of which should be such that the time between delivery of the message to the transmitting agency at the point of origin and the time of delivery to the addressee should not exceed five minutes, to be installed when the load placed on the "direct speech" channels is so great as to make it impossible to maintain the speed required of such channels and/or when a written record is required.						a) "Direct speech" communications with "automatic speech recording", the speed of which should permit instantaneous contact and during peak periods of operation, within not more than ten seconds. Such circuits shall not be required whenever area control centres are separated by more than 300 miles (450 km.) unless it is necessary to clear aircraft destined to or through the adjacent area prior to departure. b) "Printed" communications to handle routine air traffic control messages, the speed of which should be such that the time between delivery of the message to the transmitting agency at the point of origin and the time of delivery to the addressee should not exceed five minutes.
APPROACH CONTROL		"Direct speech" communications, capable of instantaneous contact. (1)	"Direct speech" communications with "automatic speech recording" arranged for "conference", the speed of which should permit instantaneous contact, and during peak periods of operation, within not more than five seconds. (2)				"Direct speech" communications, the speed of which should permit instantaneous contact, and during peak periods of operation, within not more than ten seconds, whenever Approach and Aerodrome Controls are located near the boundary of a Control Area or Flight Information Region. (2)
AERODROME CONTROL							

(1) Whenever Approach Control is combined with Aerodrome Control, this requirement is obviously met.

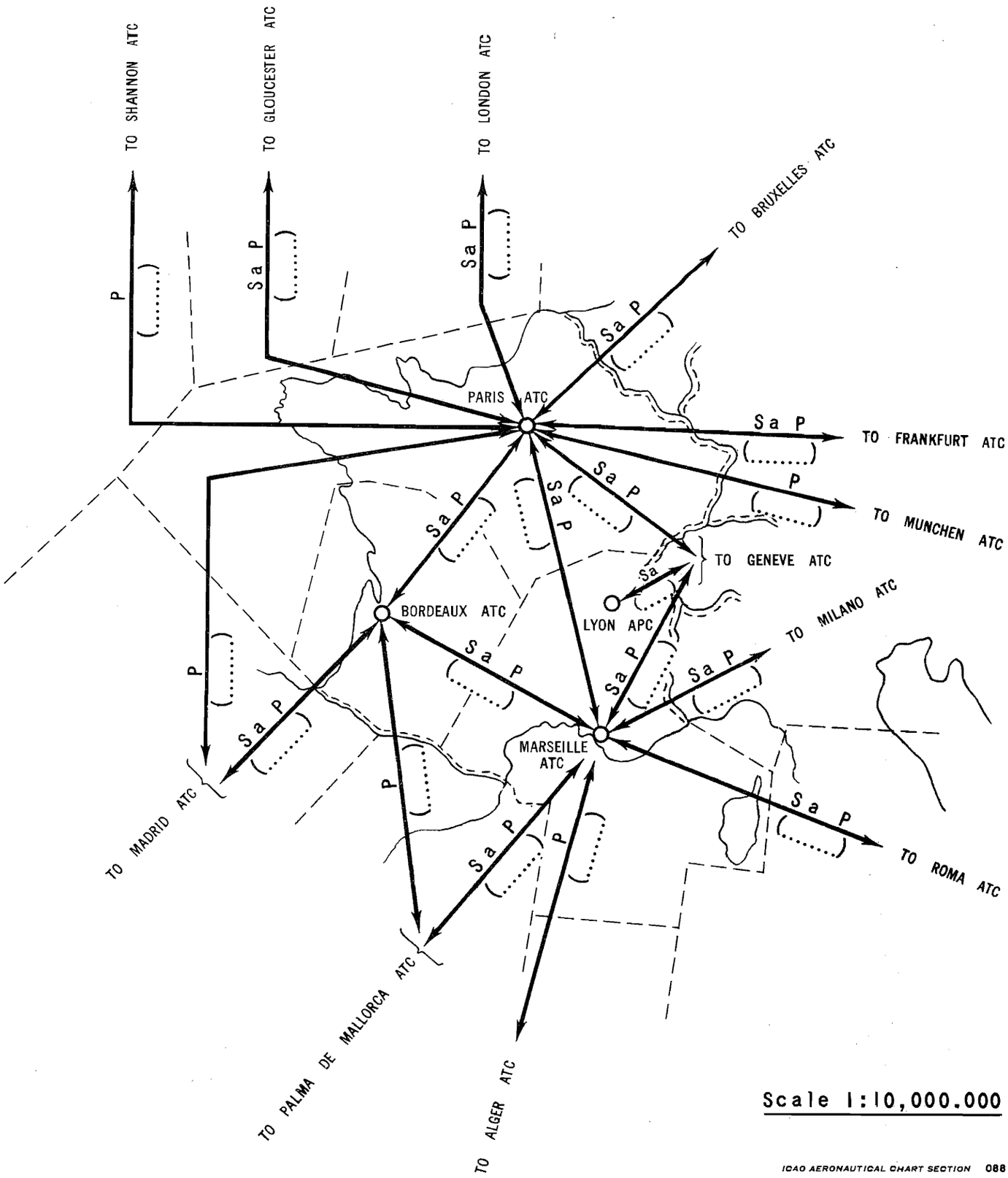
(2) When Approach and Aerodrome Control are combined, this requirement applies to the Combined Unit as a whole.

NOTE: When circumstances so require, uni-directional "printed" communication channels should be established to permit instantaneous contact.

Diagram showing for a State (France as example) the required and existing * point-to-point communications for Air Traffic Control between Area Control Centres or Flight Information Centres.

(In accordance with Appendix "E" of Final Report of the Second Session of the RAC Division DOC 2601, RAC/135)

* The place for indicating the existing facilities has been provided in the diagram as (.....), but symbols and figures have not been printed as examples in order to avoid possible confusion with actual facts.



Symbols used in the example:

1) Required Facilities:

Sa - "Direct Speech" communications with "automatic speech recording", the speed of which should permit instantaneous contact and during peak periods of operation, within not more than ten seconds.

Such circuits shall not be required whenever area control centres are separated by more than 300 miles (450 km.) unless it is necessary to clear aircraft destined to or through the adjacent area prior to departure.

P - "Printed" communications to handle routine traffic control messages, the speed of which should be such that the time between delivery of the message to the transmitting agency at the point of origin and the time of delivery to the addressee should not exceed five minutes.

2) Existing Facilities:

(.....) Existing facilities.

The following symbols shall be used:

S (Speech communications)
Sa (Speech automatic recorded communications)
T (Telegraphic communications)
P (Printed communications)

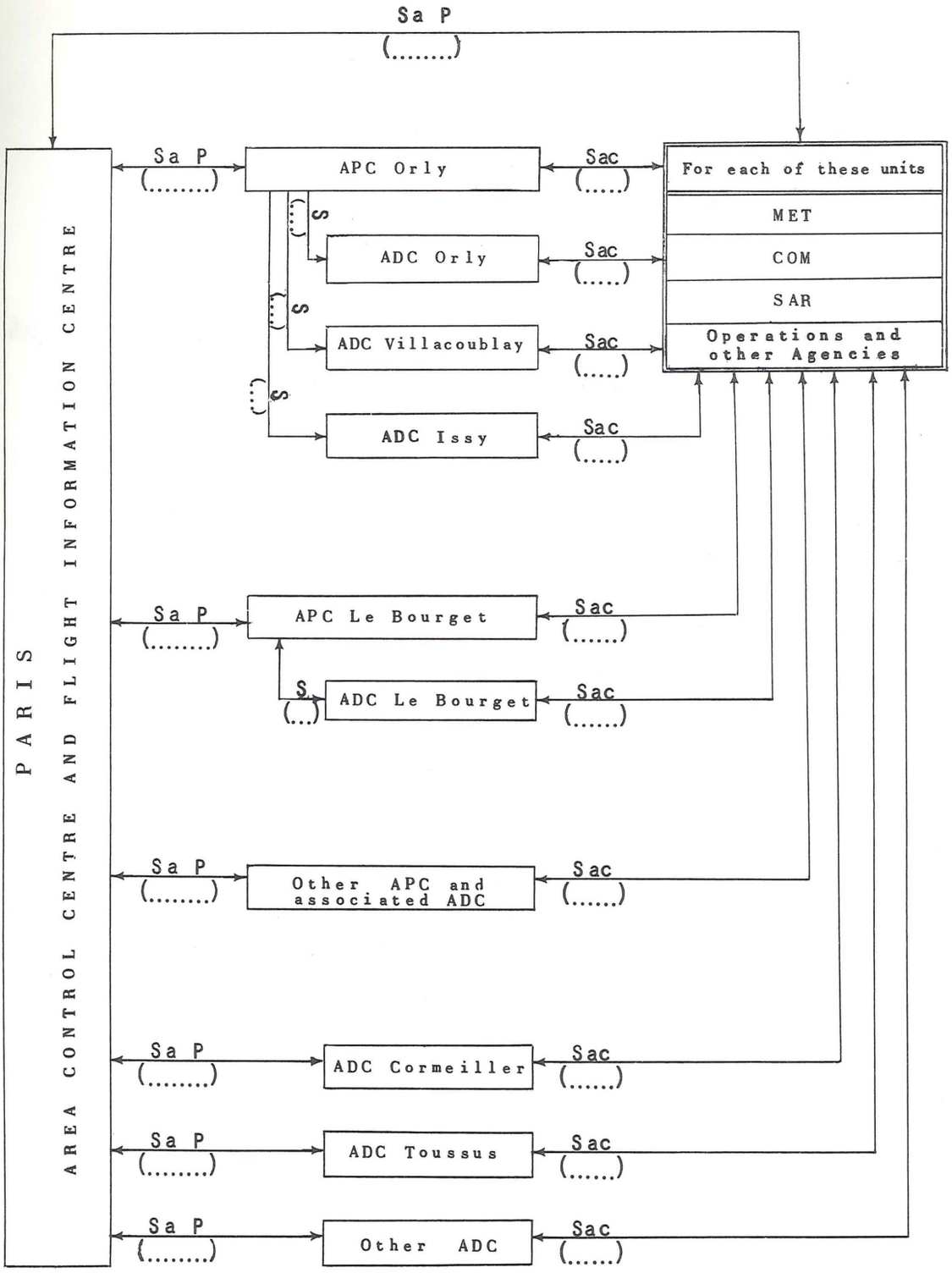
Following each symbol, figures shall indicate the speed of the relevant communications in seconds for "S" and "Sa", and minutes for "T" and "P". Instantaneous shall be indicated by the letter "i".

APPENDIX "C"

am showing for a Control Area (Paris as example) the required and existing * point-to-point communications for Air Traffic ol within a Control Area or Flight Information Region.

(In accordance with Appendix "E" of Final Report of the Second Session of the RAC Division DOC 2601, RAC/135)

e place for indicating the existing facilities has been provided in the diagram as (.....), but symbols and figures have t been printed as examples in order to avoid possible confusion with actual facts.



s used in the example:

quired Facilities:

- "Direct speech" communications with "automatic speech recording", the speed of which should permit instantaneous contact and during peak periods of operation, within not more than five seconds.

c - "Direct speech" communications with "automatic speech recording" arranged for "conference", the speed of which should permit instantaneous contact, and during peak periods of operation, within not more than five seconds.

- "Printed" communications to handle routine air traffic control messages, the speed of which should be such that the time between delivery of the message to the transmitting agency at the point of origin and the time of delivery to the addressee should not exceed five minutes, to be installed when the load placed on the "direct speech" channels is so great as to make it impossible to maintain the speed required of such channels and/or when a written record is required.

isting Facilities:

.....) Existing facilities.

The following symbols shall be used:

S	(Speech communications)
Sa	(Speech automatic recorded communications)
Sac	(Speech automatic recorded communications arranged for conference)
T	(Telegraphic communications)
P	(Printed communications)

Following each symbol, figures shall indicate the speed of the relevant communications in seconds for "S", "Sa" and "Sac", and minutes for "T" and "P". Instantaneous shall be indicated by the letter "i".

ences: ATC - Area Control Centre
APC - Approach Control
ADC - Aerodrome Control

- It is assumed, for the purpose of this example, that Villacoublay and Issy aerodromes traffic pattern conflict with Orly approach pattern. Therefore, Villacoublay and Issy ADC are under the supervision of Orly APC; the same applies in respect to the example given for Le Bourget approach pattern. Furthermore, it is assumed, for the purpose of this example, that Cormeilles, Toussus and "others ADC" do not conflict with any approach pattern and therefore they are directly supervised by Paris ATC.

DOC NA/44
ATC/NA 6
ADDENDUM
30/3/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Agenda Item 4.1: Adequacy of telecommunications facilities available to ATC Services.

1. Add the following note to Appendix "B" and Appendix "C":

" NOTE: - The diagram merely shows ATC requirements to compare them with actual communications obtained. Therefore, details of circuits involved are not shown, as to the relays, switches, combinations of circuits, etc., The latter are purely COM responsibilities and not of direct interest in this diagram in which certain communications, although they might be handled wholly or in part through the same circuit, are shown separately."

2. Add the following note to Appendix "C":

" NOTE: - ATC requirements for communications with MET, COM, SAR and other Agencies are limited to the establishment of adequate communications with these agencies wherever they may be located and regardless of whether anyone of them provides information to one or more ATC Units. For this reason the various MET, COM, SAR and other Agencies are not shown individually."

- END -

(1 Page)

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(ATC NA/ 7
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23/3/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

MAY 1948

COMMUNICATIONS COMMITTEE
AIR TRAFFIC CONTROL COMMITTEE
SEARCH AND RESCUE COMMITTEE

COM Committee Agenda Item 3.2:	Aeronautical Mobile Communication Services
ATC Committee Agenda Item 4:	Communications for ATC
SAR Committee Agenda Item 4:	Examination, with a view to effecting improvement, of the existing means for the co-ordination and alerting of Search and Rescue facilities

ACTION NECESSARY IN THE EVENT OF NON-RECEIPT OF POSITION REPORTS

1. The attention of ICAO has been drawn to the problem of the action to be taken in the event of non-receipt of position reports.

2. Basically, the difficulty arises from the fact that the land radio station with which the aircraft should be in contact may fail to receive a scheduled report and therefore does not know whether:

   a) The aircraft is in difficulty and may require assistance;

   b) A failure of radio communication has occurred.

3. Paragraph 2.4, page 82 of the ATC Procedures for Air Navigation Service (DOC 2017 RAC/105) states that for the purposes of alerting the Rescue Coordination Centre, the area control will consider an aircraft to be in distress when it is overdue "as defined for the particular route or region concerned". No definition applicable on a route or region basis has been prescribed for the North Atlantic and at the present alerting is left to the discretion of the state in which the control is situated.

4. In the event of poor communication conditions a radio fade-out may occur on certain frequencies; under such circumstances ICAO Communication Procedures prescribe that aircraft shall use any relay means available to communicate with the control station (Para. 4.1.7 of DOC 2015 COM/126, Para. 4.1.6 of DOC 4478 COM/501). Whether such procedures are, in fact, being carried out conscientiously by aircrews is not known, but recent IATA proposals

to utilize VHF as a relay medium in the case of radio fade-outs (vide DOC NA.10 COM/NA4) would indicate that airlines are fully cognizant of the problem.

5. The three Committees concerned may wish to form a joint working group to answer the following questions:

5.1 COM Should specific COM Supplementary Procedures be formulated detailing:

5.1.1 The action to be taken by aircraft unable to receive an acknowledgment by ATC of a position report on its normal allotted control frequency or frequencies;

5.1.2 The action to be taken by aircraft who are themselves in communication with Area Controls and who intercept the unacknowledged messages of other aircraft?

5.2 OCEAN STATION VESSELS To what extent may Ocean Station Vessels be expected to assist Area Control in acting as relay stations?

5.3 ATC What action is necessary by Area Controls following the non-receipt of a position report? (e.g. Notification of other Area Controls, Ocean Station Vessels, other aircraft in the area, preliminary warning of Rescue Coordination Centres, etc.).

5.4 ATC Using the hourly position report as a basis for discussion, what internationally standard overdue procedure shall be adopted for the North Atlantic Region?

5.5 SAR On receipt of an alert given in accordance with Para. 5.4, at what time shall Rescue Coordination Centres:

5.5.1 Stand by for search action;

5.5.2 Commence search action?

- END -

DOC No 63
ATC/NA/9
19.5.48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC AIR NAVIGATION REGIONAL MEETING

MAY 1948

Submitted by the French Delegation

ATS COMMITTEE

QUESTION 2

FRENCH PROPOSALS REGARDING THE MARITIME BOUNDARIES OF THE PARIS FLIGHT INFORMATION REGION

1. The French Government request that the boundaries of the Paris Flight Information Region be amended as follows :

1.1 Northern Boundary

- from the Belgium frontier to Meridian 03°00' following parallel 51° 07' North.
- from the above position to position 50°00' North/ 03°00' West.
- from the above position to position 48°50' North/ 08°00' West.

1.2 Western Boundary

- Meridian 08°00' West, latitude 48°50' North to latitude 45°00' North.

1.3 Southern Boundary

- from position 45°00' North/08°00' West to position 44°20' North/04°00' West.

2. The above changes entail the following alterations:

2.1 Gloucester Flight Information Region

2.1.1 Southern Boundary
Merging with North/West boundary of Paris.

2.1.2 Western Boundary
The Western meridian 08°00', latitude 48°50' North, to latitude 50°00' North.

2.2 Madrid Flight Information Region

2.2.1 Northern Boundary
-from the Pyrenean frontier to position 44°20' North/04°00' West : merging with the Southern Boundary of the Bordeaux Flight Information Region.
-from the above stated point to point 45°00' N/08°00' West : merging with the Southern Boundary of the Paris Flight Information Region.

.../...

2.2.3. Western Boundary
-from point 45°00' N./08°00' W. to point 43°00' N 10°00' W.

3. Channels Isles

3.1 The control area of the Channel Isles extends between sea level and an altitude of 1000 metres and is bounded as follows :

3.1.1 To the North :
-by the Southern limit of the Gloucester Flight Information Region

3.1.2 To the East :
-by the meridian 02°00' West, from latitude 50°00' North to latitude 49°02' North

3.1.3 To the South
-by parallel 49°02' North from the meridian of 02°00' West to the meridian of 02°30' West.

3.1.4 To the West
-from the point previously defined to position 49°25' N/03°00' W then from the meridian of 03°00' W to the Southern limit of the Gloucester Flight Information Region.

4. Reasons for this request

4.1 Northern Boundary

4.1.1 to clear the territorial waters which were included in the Southern limits of the Bruxelles Flight Information Region and in the S/E limits of the London Flight Information Region ; in order to allow flight over these waters within the Paris Flight Information Region.

4.1.2 To enable aircraft flying directly from Orly-Gander or from Gander-Orly to pass directly from the Paris Flight Information Region into the Gloucester Flight Information Region, thus avoiding passage through the London Flight Information Region.

4.2 Southern Boundary :

4.2.1 To avoid passage through the Madrid Flight Information Region of aircraft flying directly from Orly/Santa-Maria or from Santa-Maria to orly.

4.3 Western Boundary

4.3.1 To give a wider scope to the Paris Flight Information Region over the North Atlantic and thus provide a more effective control of transatlantic flights to and from France.

- END

DOC NA/65
GC/NA /12
ATC/NA/10
MET /NA 12
COM/NA/31
SAR/NA/ 7

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, May 1948

GENERAL COMMITTEE
ATC COMMITTEE
MET COMMITTEE
COM COMMITTEE
SAR COMMITTEE

(Presented by the French Delegation)

Statement of Question :

The French Delegation believes that it would be useful for all States within the North Atlantic Region to be informed without delay of the operational characteristics of Ocean Weather Stations, particularly as regards any planned or accidental variations in these characteristics.

The French Delegation therefore requests that the following item be placed on the draft agendas of all Committees of the North Atlantic Regional Air Navigation Meeting:

"Action to be taken for a rapid international dissemination of all information concerning the operation of Ocean Weather Stations, such as:

-placing into service
-partial or total interruption of operation
-modification in operational characteristics: operating hours, contents of transmission,....."

Proposals -

As regards the Ocean Weather Stations of points "L" and "K", the President of the European Meteorological Commission of the International Meteorological Commission is prepared to centralize information concerning these ships and to ensure dissemination in Europe.

(Signed) Haguenau
Head of the French Delegation

Doc NA/75
ATC NA/11
21/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

AIR TRAFFIC CONTROL COMMITTEE

1. Agenda Item 4.1. - Adequacy of Telecommunications facilities available to A.T.C. Services -

1.1. The communication requirements for Air Traffic Control Services, based on Appendix E of the Final Report of the Second Session of the RAC Division (Doc 2601 RAC 135), are as follows:

1.1.1. Point to point communications as summarized in Appendix A to Doc NA/44/ATC NA/6.

1.1.2. Air ground communications as in the following paragraphs extracted from Doc 2601 RAC/135 :

a) "1.2. Area Control Requirements.
Air-ground communications should be such that adequate two-way communication can be maintained between the Centre and airborne aircraft operating at any point within the flight information region or control area".

b) "1.3. Approach and Aerodrome Control Requirements.

"1.3.1. Air-ground communications facilities employed by Approach and Aerodrome Control should enable direct, rapid and continuous static-free communication between control personnel and all aircraft being operated under their control.

"1.3.1.1. Where Approach Control is functioning as a separate unit, air-ground communication should be conducted over communications channels provided exclusively for its use.

"1.3.1.2. Where conditions warrant, communications facilities will be required for the control of traffic operating on the movement area.

"1.3.1.3. Speech recording, manual or automatic, should be provided on all Aerodrome and Approach Control air-ground communications channels."

1.2. The Air Traffic Control Committee recognized that these requirements may be considered optimistic at the present time. Nevertheless, it should be our aim to improve ATC Communications to the standards outlined in para. 1.1. It is therefore recommended to the COM Committee that these requirements be kept in mind when discussing the means by which Air Traffic Control messages will be transmitted.

1.3. To permit the COM Committee to take appropriate action on the above requirements, the ATC Committee decided to inform the COM Committee that :

1.3.1. The following control centres, established at the first North Atlantic Regional Air Navigation meeting in Dublin, shall be kept in operation :

Control Areas	Location of Area Control centres
Iceland	Reykjavik *
Stavanger	Sola
Shannon-Prestwick	Shannon
	Prestwick
Lisbon-Madrid-Casablanca	Lisbon
	Madrid
	Casablanca
Azores	Santa Maria
New York	New York
Moncton	Moncton

1.3.2. Approach Control and Aerodrome Control, separately or combined, should be established by States to serve all regular and alternate airports to and from which North Atlantic Flights are operated.

1.4. Point to point Communications

1.4.1. Appreciating the difficulties which are now experienced for the operation of telecommunications, the ATC Committee recognized that point to point telecommunications within the North Atlantic Control Areas proper are generally considered satisfactory at the present time. However the COM Committee is requested to consider the practicability of improving as soon as possible the following telecommunications where delays actually experienced in the transmission of Air Traffic Control messages have materially affected the efficiency of Air Traffic Control Service.

1.4.1.1.
- Moncton to Gander
- Moncton to Goose Bay
- Goose Bay to Seven Islands
- B W 1. (Greenland) to Reykjavik (The circuit presently in operation between Reykjavik and B W 1. should be kept in operation)
- Shannon to Paris
- Lisbon to Casablanca
- Lisbon to Santa Maria
- Santa Maria to Casablanca
- Bermuda to Santa Maria

1.4.1.2. The following were added at the request of the IATA observer, to be called to the attention of the COM Committee :

---

* See Doc NA 76 ATC/NA 12 concerning the recommended relocation of the centre from Reykjanick to Keflavik.

- Stephensville to Moncton
- Goose Bay to Iceland
- Iceland to Gander
- Iceland to Prestwick

1.4.2. The ATC Committee also recommends that the COM Committee take appropriate action to implement communications by teletype, either radio or landline, between the North Atlantic Area Control Centres and other Area Control Centres of Control Areas within which international airports used by North Atlantic flights are situated.

1.5. Air ground Communications

The ATC Committee recognized that air ground communications within the North Atlantic Control Areas are satisfactory for air traffic control purposes, at the present except that :

1.5.1. The ATC Committee recommends that whenever possible radiotelephony should be used for ATC Air/Ground communications serving flights within North Atlantic Control Areas.

1.5.2. The ATC Committee further recommends that it is desirable that all Area Control centres serving North Atlantic Control areas be equipped for radiotelephony communication between aircraft and air traffic control.
In respect to radiotelephony air/ground communications, it should be noted that radiotelephony facilities are presently being used for air/ground communications in the Shannon-Prestwick and the New York Control Areas.

2. Agenda Item 3.3. - Transmission of messages on behalf of the operating agencies.

2.1. The ATC Committee recognizes that it is necessary to handle certain operational messages on air traffic control channels.

2.2. In this connection, the ATC Committee recommends that an additionnal class of messages i.e. OPN CTL (Operation Control) be established by ICAO. Such class of messages to be used by the operating Agency, and the aircraft of such agency, for the exercise of operational control. The priority of such messages should follow that of CTL messages.

2.3. The exact term OPN CTL, is used merely for purposes of demonstration, and it might be the desire of COM to use another group of letters or term in order that there be absolutely no chance of confusing an air traffic control message with that of an operating agency.

2.4. Appropriate action on this Item, i.e. reference to the COM Division, is left to the COM Committee.

END

Doc NA/76
ATC-NA/12
22/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY, 1948

AIR TRAFFIC CONTROL COMMITTEE

Agenda Item 2 - Area Control Facilities - Determination of any changes necessary in the present boundaries of control areas, and in the sites of area controls.

1. The ATC Committee considered Doc 5122-JS/520, Doc NA 20-ATC-NA 14 and Doc NA 67 - GC-NA/14 concerning a request from the Government of Iceland to obtain financial aid through ICAO for the maintenance of certain Air Navigation facilities and services.

2. The ATC Committee confined consideration of this question to a review of the Air Traffic Control services in Iceland which are considered to be necessary to ensure safety and regularity of international Air Navigation in the North Atlantic Region.

3. The ATC Committee recommends that :

3.1. the Area Control in Iceland should be maintained in continuous operation as it is required to protect and safeguard North Atlantic international air operations through the Iceland control area ;

3.2. the location of the Area Control in Iceland should be changed from Reykjavik to Keflavik when appropriate facilities and accomodation are available at the latter, in order to improve Air Traffic Control Service by the closer coordination between Area Control Personnel, MET personnel, operating agencies and pilots.

3.3. approach Control at Keflavik should be retained as it is required for North Atlantic international air operations.

3.4. approach Control at Reykjavik is not necessary for North Atlantic international operations.

4. The delegate for Iceland informed the meeting that the Area Control at Reykjavik is handling Approach Control at this location also and will continue to operate such a service. The delegate for France stated that this service was necessary at Reykjavik at the present time.

5. The delegates for Canada and France were convinced that the Control Area of Iceland was not required for trans North Atlantic operations and requested that this be recorded in the report. They were however in agreement with the recommendations of the Committee that Approach Control Service at Keflavik was necessary for such operations and should be retained.

- END -

Doc NA/77
ATC-NA/13
20/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Minutes of the First Meeting

(Salon Louis XV, Palais d'Orsay, on Tuesday, 18 May, 1948, at 1500 hours)

Present:

DELEGATES

Mr. Aa. Mortensen	Denmark
Mr. M. Agesilas	France
Mr. S.H. Gunnlaugsson	Iceland
Mr. J.P. Saul	Ireland
Mr. Rombouts	Netherlands
Mr. F.W. Thosen	Norway
Mr. V. Veres	Portugal
Mr. K.C. Price	United Kingdom
Mr. W.B. Swanson	United States

ALTERNATES AND ADVISERS

Mr. Lansalot	France
Mr. Kungler	France
Mr. Q.J. Mitchell	United States
Mr. E.R. Mehrling	United States

ICAO

Mr. J. de Vienne	ICAO Representative for RAC
Miss L. Bouché	Interpreter
Miss Gueguen	Stenographer

1. The meeting was called to order at 1500 by Mr. J. de Vienne, Expert of the RAC Section of ICAO, acting as Temporary Chairman.

Agenda Item 1: Election of officers and determination of a quorum.

2. The Temporary Chairman stated that he had been informed of the desire of some delegations to postpone the election of a chairman to the following meeting. In the absence of any comment the Chairman declared that this procedure appeared to be acceptable and that it could be followed also for item 3 of the agenda, Election of a vice-chairman.

3. The Chairman then gave an account of the latest action of ICAO on matters that were of concern to the Committee.

3.1. Adoption by Council of Annex 2 to the Convention Rules of the Air; the major differences between this annex and the Rules of the Air published in Doc 2010 RAC 104 were:

-use of the expression "VFR Weather conditions" and "IFR weather conditions";

-use of "ground visibility" to determine the application of the Instrument Flight Rules in the vicinity of an aerodrome situated within a control zone.

3.2. Recommendation by the RAC Division, which had just met in Montreal for its Third Session:

a) addition to the Rules of the Air:

"recommendation that a pilot should not cancel his flight plan if the flight is not likely to be completed in VFR weather conditions".

b) Air Traffic Control service should be responsible for informing aircraft of a risk of collision with terrain while en route.

c) definition of the expressions:

- controlled aerodrome
- Flight Information Centre
- OAC (area control in charge of control over international waters).

d) Description of an approach zone, within a control area.

e) description of standardized ATC messages.

f) basic description of air traffic control principles.

g) use of the abbreviation "ROA" to signify matters dealing only with Rules of the Air and "ATC" to signify those dealing only with Air Traffic Control.

4. The Chairman in reply to a question from the delegate for France, informed the Committee that appropriate excerpts of the Rules of the Air and the RAC Final Report would be reproduced as as ATC working drafts for information of members of the Committee.

5. Replying to a question from the delegates of the United States, and of France, the Chairman said that the Rules of the Air and Air Traffic Control matters that had just been mentioned had not been raised for discussion by the Committee, but brought to its attention as being the basis for supplementary regional procedures.

6. Since some delegations had few members, the Committee decided in principle not to break into working groups. Nevertheless it was agreed that the Committee would constitute itself as a Working Group and meet formally in plenary session to accept the final drafts prepared.

7. The Chairman then called the attention of the Committee to the necessity for dealing early with the question concerning the ICAO Icelandic report (Doc NA/20 ATC NA/4) and altimeter setting which was to be handled by Subcommittee 1 of the General Committee.

8. It was decided that the working hours should be 0930 to 1230 and 1430 to 1800.

9. The Chairman adjourned the meeting at 1630 to resume next morning at 0930.

END

Doc NA/78
ATC-NA/14
20/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Minutes of the Second Meeting

(Salon Louis XV, Palais d'Orsay, on Wednesday 19 May, 1948 at 0945 hours)

Present :

DELEGATES

Mr. S.G. Graham	Canada
Mr. Aa. Mortensen	Denmark
Mr. M. Kungler	France
Mr. S.H.Gundmundsson	Iceland
Mr. J.P. Saul	Ireland
Mr. Rombouts	Netherlands
Mr. F. W. Thesen	Norway
Mr. V. Veres	Portugal
Mr. K.C. Price	United Kingdom
Mr. W.B. Swanson	United States

ALTERNATES AND ADVISERS

Mr. B.A. Rawson	Canada
Mr. Lansalot	France
Mr. Q.J. Mitchell	United States
Mr. E.S. Lee	United States
Mr. D. Nyrop	United States
Mr. E.M. Ware	United Kingdom (Bermuda)
Mr. F.M. Mc Grath	United Kingdom -Newfoundland)

INTERNATIONAL ORGANIZATIONS

Mr. C. Williams	IATA
Mr. Colgaard	IATA
Mr. R.G. Flynn	IATA

ICAO

Mr. J. de Vienne	ICAO Representative for RAC
Miss L. Bouché	Interpreter

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1. The meeting was called to order at 0945 by Mr J. de Vienne, Expert of the RAC Section of ICAO, acting as temporary Chairman.

Agenda Item 1 : Election of officers

2. Mr. Rombouts, delegate for the Netherlands was nominated by the United States delegate. This nomination was seconded by the delegates for Canada and United Kingdom. There being no other nominations, the temporary chairman declared Mr. Rombouts elected as Chairman and invited him to take the chair.

3. Mr. Rombouts thanked the delegates for his election and called for nominations for a vice-chairman.

4. Mr. K.C. Price, Delegate for the United Kingdom, was nominated by the Delegate for the United States. The nomination was seconded by the Delegate for Portugal. There being no other nominations the Chairman declared Mr. K.C. Price elected as vice chairman.

5. The work plan for the Committee was then discussed.

5.1. It was decided that the items of the Agenda should be dealt with in the following order :

-item 2 : Area Control Facilities.
Determination of any changes necessary in the present boundaries of control areas, and in the sites of area controls.
-item 3 : Regional Procedures.
Determination of any changes necessary in the present regional procedures.
-item 4 : Communications for ATC.

and that a statement on ATC requirement for communication should be passed to the COM Committee not later than 24th May.

5.2. It was decided that the ICAO Icelandic report should not be considered until a paper containing the comment of Iceland was available.

5.3. The Committee decided that Subcommittee 1. of the General Committee should be informed of action that the working group desired to take on altimeter setting.

5.4. On a question raised by the Delegate for Norway, the Committee decided that the action taken by Subcommittee of the General Committee of the Europe-Mediterranean meeting on the subject of the contents of flight plans had no bearing on the work of the North Atlantic Regional ATC Committee.

6. The Chairman adjourned the meeting at 1030 hours and said that the time of the next meeting would be posted on the notice board.

END

DOC NA/79
ATC.NA/I5
22/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS MAY I948

AIR TRAFFIC CONTROL COMMITTEE

Agenda Item 3 - Regional Procedures - Determination of any changes necessary in the present regional procedures.

ATC Regional supplementary procedures for the Alert of Search and Rescue Agencies -

1. The ATC Committee considered DOC NA 69 SAR NA 8 on definitions and procedures for Uncertainty, Alert and Distress phases of Search and Rescue.

2. The ATC Committee found this document satisfactory, but recommends that the first three lines of paragraph 3.2. "Uncertainty phase" and the first three lines of paragraph 3.3 "Alert phase" up to the words " and the " be reworded as follows to avoid any confusion as to the time at which the 30 minutes delay shall originate :

> "If a position report is more than 30 minutes "overdue, i.e. is not received within 30 "minutes after the time at which the position "reports are normally received by the ground "Station"

- E N D -

22/5/48

Replacing
Doc NA/76
ATC-NA/12

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY, 1948

AIR TRAFFIC CONTROL COMMITTEE

Agenda Item 2 - Area Control Facilities - Determination of any changes necessary in the present boundaries of control areas, and in the sites of area controls.

1. The ATC Committee considered Doc 5122-JS/520, Doc NA 20-ATC-NA 14 and Doc NA 67 - GC-NA/14 concerning a request from the Government of Iceland to obtain financial aid through ICAO for the maintenance of certain Air Navigation facilities and services.

2. The ATC Committee confined consideration of this question to a review of the Air Traffic Control services in Iceland which are considered to be necessary to ensure safety and regularity of international Air Navigation in the North Atlantic Region.

3. The ATC Committee recommends that :

3.1. the Area Control in Iceland should be maintained in continuous operation as it is required to protect and safeguard North Atlantic international air operations through the Iceland control area;

3.2. the location of the Area Control in Iceland should be changed from Reykjavik to Keflavik when appropriate facilities and accommodation are available at the latter, in order to improve Air Traffic Control Service by the closer coordination between Area Control Personnel, MET personnel, operating agencies and pilots.

3.3. approach Control and aerodrome Control at Keflavik should be retained as they are required for North Atlantic international air operations.

3.4. approach Control at Reykjavik is not necessary for North Atlantic international operations.

Note. It was noted that Aerodrome Control at Reykjavik is provided by Iceland as it is justified predominantly for domestic services (see Note, page 34 of Doc 5122 JS 520).

4. The delegates for Canada and France were convinced that the Control Area of Iceland was not required for trans North Atlantic operations and requested that this be recorded in the report. They were, however, in agreement with the recommendations of the Committee that Approach Control Service at Keflavik was necessary for such operations and should be retained.

- END -

Doc NA 05
ATC/NA I7
22.5.48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

(Proposal presented by the U.S. Delegation)

Agenda Item 3 : Regional Procedures

Units of measurement with respect to altitude assignment

A problem may arise at the North Atlantic Meeting regarding the possible use of the metric system in the assignment of altitudes for ATC purposes. It is expected that most of the European States will use the metric system in assigning altitudes in control areas under their jurisdiction. Likewise, it will be the prerogative of the United States to use the English system for assignment of altitudes in control areas under our jurisdiction. The possible use of dual units could lead to hazardous practices and considerable confusion to both the air crew and ground personnel.

In the event discussion of this subject arises at the North Atlantic Meeting, the United States will press for the adoption of the following principles :

a) Altitudes to be assigned in the system employed by the State operating the facility.

b) Conversion of units to be accomplished by the air crew.

c) Conversion of altitude assignments from feet to meters or vice versa to be to the nearest 10 meters in accordance with the following table .

Feet	Meters	Feet	Meters	Feet	Meters
1000	300	11000	3350	21000	6400
1500	460	11500	3500	21500	6550
2000	610	12000	3660	22000	6700
2500	760	12500	3810	22500	6860
3000	910	13000	3960	23000	7010
3500	1070	13500	4110	23500	7160
4000	1220	14000	4270	24000	7320
4500	1370	14500	4420	24500	7470
5000	1520	15000	4570	25000	7620
5500	1630	15500	4720	25500	7770
6000	1830	16000	4880	26000	7920
6500	1980	16500	5030	26500	8080
7000	2130	17000	5180	27000	8230
7500	2290	17500	5330	27500	8300
8000	2440	18000	5490	28000	8530
8500	2590	18500	5640	28500	8690
9000	2740	19000	5790	29000	8840
9500	2900	19500	5940	29500	8990
10000	3050	20000	6100	30000	9140
10500	3200	20500	6250		

- END -

Doc NA 86
ATC/NA [redacted] 17
22.5.48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

(Proposal presented by the U.S. Delegation)

Inter-Center Coordination

The United States recommends that operational level informal meetings, consisting of representatives of each control center and communication station serving the control center, be held preferably semi-annually, but not less than annually, for the purpose of effecting necessary inter-center coordination and development of recommendations for the improvement of the services provided. Representatives at these meetings should forward such recommendations to their respective States.

- END -

DOC NA 92
ATC NA 19
24.5.48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Boundaries of North Atlantic Control Area and the Altimeter setting.
(Adopted by the ATC Committee at its fourth meeting)

1. The boundaries of the North Atlantic Control Areas are hereby redefined as follows :

1.1. The Northern limit of the control areas to the Arctic Circle.

1.2. The Eastern limit of the control areas is determined by a line beginning on the Arctic circle at longitude 11°00'E and passing through the following points :

62°00'N	04°00'E ;	61°00'N	01°00'W ;
61°00'N	08°00'W ;	59°00'N	08°00'W ;
56°00'N	13°00'W ;	50°00'N	13°00'W ;
48°50'N	08°00'W ;	45°00'N	08°00'W ;
43°00'N	13°00'W ;	30°00'N	13°00'W ;

1.3. The Western limit of the control areas is determined by a line beginning on the Arctic Circle at longitude 60°00'W and passing through the following points :

60°00'N	60°00'W ;	50°00'N	51°00'W ;
45°00'N	51°00'W ;	45°00'N	58°00'W ;
40°00'N	68°00'W ;	30°00'N	79°00'W ;

1.4. The Southern limit of the control areas is the parallel of latitude 30° North.

1.5. Within these limits there shall be six oceanic control areas, separated by :

1.5.1. The parallel of 43°00'N from the meridian of 13°00'W to the meridian of 45°00'W thence a line to the point 45°00'N 51°00'W;

1.5.2. The parallel of 61°00'N from the meridian of 08°00'W to the meridian of 30°00'W, thence through the points 59°00'N 30°00'W and 59°00'N; 43°00'W to the point 60°00'N 43°00'W.

1.5.3. The meridian of 30°00'W from the parallel of 61°00'N to parallel of 43°00'N ;

1.5.4. The meridian of 01°00'W from the Arctic Circle to the parallel of 61°00'N ;

1.5.5. The east coast of Greenland from the Arctic Circle to the point 60°00'N 43°00'W ;

1.5.6. The meridian of 45°00'W from the parallel of 43°00'N to the parallel of 30°00'N.

1.6. For the purpose of determining the altimeter setting, the areas within circles of approximately 100 nautical miles radius from Kinley Field, Bermuda, Santa Maria, Azores, Keflavik, Iceland and BW 1., Greenland shall be excluded from the Oceanic Control Areas.

1.7. The lower limit of North Atlantic control areas is (....) above the surface of the water.

2. All other areas within the formerly defined North Atlantic Area shall be considered as Flight Information Regions, in which local cntrol areas may be established as necessary, and within which domestic flight rules shall apply. The lower limit of these local control areas shall be 200 metres (700 feet) above the water, or the lower limit established for the adjacent domestic control areas.

3. Within the North Atlantic Control Areas, the standard altimeter setting of 1013.2 millebars shall be used for vertical separation.

4. Within local cntrol areas or flight information regions, the appropriate QNH value for altimeter settings shall be used for purposes of vertical separation.

5. The change-over from one altimeter setting to the other shall be automatic upon crossing the boundary between an oceanic Control Area and a Flight Information Region of local Control Area, unless otherwise instructed by Air Traffic Control.

END

Doc NA/93
ATC NA/20
21/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Minutes of the Third Meeting

(Salon Louis XV, Palais d'Orsay on Friday 21st 1948 at 1435 hours)

Present :

DELEGATES

Mr. S.G. Graham	Canada
Mr. Aa. Mortensen	Denmark
Mr. L.L. Lansalot	France
Mr. S.H. Gundmundsson	Iceland
Mr. J.P. Saul	Ireland
Mr. P.J.C. Rombouts (Chairman)	Netherlands
Mr. F.W. Thesen	Norway
Mr. V. Veres	Portugal
Mr. K.G. Price	United Kingdom
Mr. W.B. Swanson	United States

ALTERNATES AND ADVISERS

Mr. B.A. Rawson	Canada
Mr. de Lamotte	France
Mr. E.L. Lesage	France
Mr. Q.J. Mitchell	United States
Mr. E.S. Lee	United States
Mr. E.M. Ware	United Kingdom (Bermuda)
Mr. T.M. Mc Grath	United Kingdom (Newfoundland)

INTERNATIONAL ORGANIZATIONS

Mr. C. Williams	IATA
Mr. R.G. Flynn	IATA

ICAO

Mr. J. de Vienne	ICAO Representative for RAC
Miss Bouvhé	Interpreter
Miss J. Gueguen	Stenographer
Miss Yonef	Stenographer

1. The meeting was called to order at 1435 by Mr. Rombouts Chairman.

2. The draft minutes of the first and second meetings were presented to the Committee. The Delegate for United States moved their adoption, this was seconded by the Delegate for United Kingdom.

There being no comment to the contrary the Chairman declared that they were adopted.

3. Agenda Item 2 - Area Control Facilities - Determination of any changes necessary in the present boundaries of control areas, and in the sites of area controls.

3.1. The Committee considered Doc 5122 JS/520, Doc NA/67 GC NA/14 and Doc NA/20 ATC NA/4 concerning a request from Iceland for financial aid.

3.2. The Delegate for Canada stated that Canada did not believe that it was necessary to continue the operation of the Icelandic area control centre. He indicated, however, that Canada agreed to the necessity of having approach and aerodrome control service at Keflavik.

He insisted on the fact that these views were directed with consideration only to North Atlantic transatlantic operation. He also indicated that Reykjavik was of no interest from the point of view of international operations.

3.3. The Delegate for Norway stated that control in that area was important for the safety of international operations which were not transatlantic operations.

3.4. The Delegate for United States indicated that, as the Committee recognized that control areas were necessary throughout the North Atlantic region, there could be no gaps between them and therefore he suggested that the Iceland control area should continue to be operated.

3.5. The Delegate for United States moved that "Area Control in Iceland be maintained in continuous operation as it is required to protect and safeguard North Atlantic international air operations through the Icelandic control area". This motion was seconded by the Delegate for Norway. There being no comment to the contrary, the Chairman declared that the motion was carried.

3.6. The Delegate for Canada requested that his comments, as to the fact that this area control was not necessary to the safety of Trans North Atlantic operations, be included in the report which was to be forwarded to the General Committee.

The Delegate for France associated himself with the remark of the delegate for Canada and requested that his statement be also inserted in the said report.

3.7. A lenghty discussion followed as to the ability of the ATC Committee to recommend the relocation of the Icelandic area control from Reykjavik to Keflavik, the Delegate for Canada, France and United Kingdom indicated that in their opinion this was not a purely air traffic control requirement, provided that the facilities at the Centre were adequate.

3.8. It was moved by the Delegate for United States and seconded by the Delegate for Ireland that : "The Committee recommends that the Area control in Iceland be changed from Reykjavik to Keflavik when appropriate facilities and accomodations are available at the latter, in order to improve air traffic control service by the closer coordination between area control personnel, operating agencies and pilots."

There being no comment to the contrary, the Chairman declared the motion carried.

3.9. The Committee then considered the desirability for the operation of approach control services in Ireland and it was moved by the Delegate for Canada and seconded by the Delegate for United States that : "Approach control and aerodrome control are required at Keflavik for international air operation, but not required at Reykjavik".

There being no comment to the contrary, the Chairman declared that the motion was carried.

3.10. The Delegate for Iceland informed the Committee that the area control at Reykjavik will continue to operate approach control at this location. The Delegate for France stated that this service was necessary at Reykjavik at the present time.

3.11. During the discussion of the desirability of relocating the area control from Reykjavik to Keflavik it was emphazised by the Delegate for United States and the Delegate for Ireland that the location of the area control at such a place, which would permit better contact between air traffic control personnel, operating agencies and pilots, was highly desirable for the efficient operation of air traffic control services.

4. Agenda Item 4.1.- Adequacy of telecommunications facilities available to ATC Services.

The Committee considered recommendations presented by working group 1. Minor amendments were proposed to these recommendations which were approved for transmission to the COM Committee for appropriate action. The recommendations are contained in section 1. of Doc NA/75 ATC NA/11.

5. Agenda Item 3.3.- Transmission of messages on behalf of operating agencies.

The Committee considered recommendations presented by working group 1. and approved these recommendations for transmission to the COM Committee for appropriate action. These recommendations are contained in section 2 of Doc NA/75 ATC NA/11.

6. Agenda Item 3.- Regional Procedures - Determination of any changes necessary in the present regional procedures.

6.1. The Committee considered Doc NA/69 SAR NA/8 on which the Chairman of the SAR Committee had called the attention of Chairman of the ATC Committee. This document was considered satisfactory to the ATC Committee, but it was suggested that the first 3 lines of para. 3.2. and 3.3. be amended in order to avoid confusion as to the time at which the delay of 30 minutes shall originate.

6.2. The following wording was approved to be forwarded to the SAR Committee for their consideration : "If a position report is more than 30 minutes overdue i.e. if not received within 30 minutes after the time at which the position reports are normally received by the ground station."

7. The Chairman proposed that a drafting group be formed to help in the preparation of the final report. It was decided that Mr. Lee of the United States Delegation and Mr. Mc Grath of the United Kingdom Delegation (Newfoundland) would compose the drafting group together with the Chairman, the Vice-Chairman and Mr. de Vienne.

8. The Chairman then asked the Chairman of sub-working group A of the progress made. Captain Saul indicated that the question concerning boundaries in the North Atlantic region is nearly finished and a draft was to be typed on the question of altimeter setting.

9. The Chairman then requested the Chairman of working group 1. to report on the progress made, and Mr. Price stated that the working group had begun the consideration of the regional procedures.

10. At 1720 the Chairman was obliged to leave the chair and the Vice-Chairman replaced him.

11. It was decided that the 4th Meeting of the Committee would be held on Monday morning May 24th at 930 hours.

12. In order to answer as quickly as possible the question raised by Sub-Committee 1 of the General Committee on the procedures for altimeter setting, it was suggested that this question be, if possible, discussed at this meeting.

12.1. Captain Saul, Chairman of sub-working group A, submitted the draft prepared by his working group.

12.2. After considerable discussions, it was decided that the Sub-Committee 1 of General Committee should be informed that the question of transition of altimeter setting from standard pressure to QNH was referred again to a working group and could not be communicated to them before Monday May 24th.

13. There being no other business, the meeting adjourned at 19 hours.

END

Doc NA/97
ATC-NA/21
26/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Minutes of the Fourth Meeting

(Salon Louis XV, Palais d'Orsay on Monday 24th at 0945 hours)

Present:

DELEGATES

Mr. Aa. Mortensen	Denmark
Mr. E.J. Kungler	France
Mr. J.P. Saul	Ireland
Mr. P.J.C. Rombouts (Chairman)	Netherlands
Mr. K.G. Price (Vice-Chairman	United States
Mr. W.B. Swanson	

ALTERNATES AND ADVISERS

Mr. L.L. Lansalot	France
Mr. E.L. Lesage	France
Mr. B.O. Prowse	United Kingdom
Mr. T.M. McGrath (Newfoundland)	United Kingdom
Mr. E.M. Ware	United Kingdom
Mr. E.S. Lee	United States
Mr. Q.J. Mitchell	United States

INTERNATIONAL ORGANIZATIONS

Mr. C. Williams	IATA
Mr. R.G. Flynn	IATA
Mr. J. Edwards	IATA
Mr. J.M. Meline	IATA

ICAO

Mr. J. de Vienne	ICAO Representative for RAC
Miss L. Bouché	Interpreter
Miss J. Guegen	Stenographer

1. The meeting was called to order at 0945 by Mr. Rombouts Chairman.

2. The Delegate for United Kingdom proposed that a recess be allowed for about one hour in order to enable the members of the Committee to read the documents presented. He hoped that this would speed up their acceptation by the Committee.

3. There being no objection to this course of action, the Chairman declared the meeting adjourned until 1045.

4. The meeting resumed its work at 1045.

5. Approval of the minutes of Third Meeting.
The minutes of the Third Meeting were adopted without amendment.

6. Air space reservations -
The Committee considered a proposal by the United States. On a motion by the Delegate for United Kingdom, seconded by the Delegate for Ireland the proposal was adopted.

7. Use of the expression QDM and QFU in the Manual.
To answer a question by the Manual working group of Sub-Committee 1, the Delegate for United Kingdom moved that the terms "QFU" be used in place of the term "QDM" in the North Atlantic Manual, pages 3.3.1. to 3.3.7. to indicate the magnetic direction of the runways of an aerodrome. This was seconded by the Delegate for France. There being no comments to the contrary, the Chairman declared the proposal adopted and that the Manual working group should be informed.

8. Reports from Working Group 1 -

8.1. Recommendations for the amendment of the North Atlantic Control area were accepted with the following modifications:

8.1.1. In paragraph 1.2., 7th line read "48°50'" instead of "50°00'" North.

8.1.2. In paragraph 1.5. read "six" Oceanic control areas instead of "seven" control areas.

8.1.3. Delete paragraph 1.5.6.

8.1.4. Paragraph 1.6. read: "For the purpose of determining the altimeter setting, the areas within circles of approximately 100 nautical miles radius from Kindley Field, Bermuda, Santa Maria, Azores, Keflavik, Iceland and B.W.1., Greenland, shall be excluded from the Oceanic control areas.

8.1.5. Paragraph 1.7. insert "2,000 feet" between "is" and "above".

8.1.6. Paragraph 2. at the end of the third line add the following: "and within which domestic flight rules shall apply".

8.1.7. Paragraph 5, replace "redefined North Atlantic" by "Oceanic".

8 1.8. Throughout the whole document replace "North Atlantic Control Areas" by "Oceanic Control Areas".

8.2. Early in the discussion the Delegate for United States said that the Delegate for Iceland had requested him to inform the Committee of his desire to extend the circle proposed in para. 1.6. of Draft 13 to include all the area within 100 miles of the coast of Iceland. There being no support for the proposal, it failed.

8.3. The Delegate for IATA objected to the change of altimeter setting being considered independently of air traffic control boundaries. IATA maintain the position that for reason of safety a change in altimeter setting should be made during ascent to or descent from cruising altitude when aircraft are operating under the terms of a definite clearance from air traffic control. He considered that para. 1.6. and 2. of Draft 13 inferred that altimeter setting transition could take place automatically within flight information region. It was further the position of IATA that aircraft should not operate over land areas on a standard altimeter setting.

9. Addressing of ATC Messages -
A draft was accepted after minor amendment.

10. The Committee considered recommendations from Working Group N° 1.

11. It was noted that the proposed change to the boundary of the Shannon-Prestwick control area as originally proposed by Sub-Working group A had already been taken care of.

11.1. After amendments, the proposals were adopted

12. The meeting recesses at 1 o'clock for lunch.

13. The meeting resumed its work at 1435.

14. Establishment of a control area from Goose Bay to Seven Island.
The Committee recommended the following for inclusion in the final report:

"The Committee noted the recommendation of the IATA Delegate that a control area be established from Goose Bay to Seven Island, north of the present Canadian domestic control areas boundary, and recommends that Canada investigate the possibility of meeting this requirement."

15. Implementation of the findings of the meeting.
It was moved by the Delegate for United Kingdom, and seconded by the Delegate for Ireland, that the recommendations of this Committee concerning the "new control area boundaries" and the "Regional Procedures" be implemented October 1st 1948. There being no comments to the contrary, this motion was carried.

16. Conversion table "feet to metres"

16.1. The Committee considered a table proposed by the Delegate for United States for the conversion of altitude assignments from feet to metres, or vice-versa, contained in Doc NA 85 ATC NA/17.

16.2. A motion was made by the Delegate for France that in place of this table, the altitudes shown in Paragraph 2.1.2. page 1.2.2. of the Regional Procedures for EUROPE MEDITERRANEAN Region be used to apply metric equivalent to thousand of feet. This was seconded by the Delegate for Norway and supported by the Delegate for Denmark.

16.3. The Delegate for United States withdrew his proposal as contained in Doc NA/85 ATC NA/17 and suggested that the following wording be inserted in the regional procedures: "The States should use their prerogative to issue altitude assignments in feet or metres. The conversion should be made by the pilot to the nearest 10 metres or 100 feet".

16.4. The Delegate for Ireland indicated that he would support the use in the North Atlantic of the altitudes shown in the European-Mediterranean Regional Procedures, to avoid use of two different tables by air traffic control units in charge of both EUMED and North Atlantic traffic.

16.5. The Delegate for IATA stated that the EUMED procedures were satisfactory for use in the North Atlantic, but he stated that in order to permit standardisation on a world wide basis and have only one procedure followed by pilots he was of the opinion that the proposal by the Delegate for United States should be accepted.

16.6. The Chairman asked the Committee to take position on the motion which had been tabled by France and had to be disposed of, since the Delegate for France maintained his motion. A vote was taken as follows:

- to apply metric equivalents as shown in the EUMED regional procedures: France, Denmark, Ireland, Norway;
- against: Canada, United Kingdom, United States;
- abstaining: Iceland.

16.7. The Chairman therefore declared that the motion was carried.

16.8. The Delegate for Norway indicated that he was empowered by the Swedish Delegation to vote in their name. This was not accepted by the Committee because it had been decided by the General Committee that the ATC Committee did not require a quorum. The Delegate for Norway therefore requested that it be investigated by the

Secretary General if this ruling was correct. He did not question the issue of the vote in which the motion that he favoured had been carried, but indicated his desire to be informed about this question of procedure.

16.9. The Delegate for United States indicated that he would reserve his position on this decision as:

16.9.1. The altitude in metres decided to be used as equivalent to altitude in feet expressed in round numbers could not be implemented in Western Atlantic.

16.9.2. These altitudes were downgrading the vertical separation of aircraft.

16.9.3. He further stated that aircraft flying in the New York Control Area would continue to be assigned altitudes in thousands of feet and it would be the responsibility of the pilots to convert these altitudes into metres to the nearest 10 metres.

16.10. The Delegate for Canada associated himself with the last remarks of the United States Delegates. He stated that, in a control area, altitudes are at present given in feet and will continue to be, but that Canada will do its best to abide by the decision taken by a majority vote although it was not thought the decision just carried would be possible of implementation.

16.11. The Delegate for United Kingdom indicated that he had also to associate himself with the reservations made by the Delegate for United States and Canada as far as Newfoundland was concerned.

16.12. In reply to a question by the Delegate for United States, the Delegate for Ireland indicated that Ireland will assign altitude in feet in the Shannon-Prestwick control area. The Delegate for Canada also replied that they would continue to use feet for the present. The Delegate for Iceland stated that he was not in a position to answer that question.

16.13. The Delegate for United States asked that it be recorded that the previous discussion had shown that altitudes in thousand of feet would continue to be issued in the three largest control areas of the North Atlantic Region.

17. The Chairman was obliged to leave the chair due to other duties and Mr. Price, the Vice-Chairman took his place.

18. Inter center coordinataion -

The Committee considered Doc NA/86 ATC NA/18 and decided to insert it in the final report as a recommendation of the Committee.

19. Information on Ocean weather stations -

19.1. The Committee considered Doc NA/65 ATC NA/10. Mr. Haguenau of the French Delegation stated why this paper had been tabled and the action which had recently been taken by the MET Committee.

19.2. The ATC Committee decided to recommend to Sub-Committee 1 that the movements of ocean weather stations, when they are off station, should be the subject of information issued through class 1 NOTAMS and made available to ATC on both sides of the Atlantic as this information is of interest to operating agencies.

19.3. The Delegate for Ireland indicated that it would be necessary to notify the movements of weather ships in class 1 NOTAMS, which should be issued in due time and made available to Air Traffic Control. He added that this would be a recommendation to the Manual Working group of Sub-Committee 1. The Delegate for United States associated himself with the comments of the Delegate for Ireland and suggested that the recommendation should indicate that these NOTAMS be addressed to both sides of the Atlantic as the information was of interest to Operating Agencies. He proposed that the recommendation refer to the movement of the Ocean weather stations when they were off stations.

19.4. The Delegates for Norway and Canada also indicated their support for the previous recommendations.

19.5. The Delegate for United Kingdom further recommended that a letter be sent to the MET Committee to suggest that the correct position of the Ocean weather stations be inserted in the route forecast. This was accepted by the Committee.

19.6. The Chairman indicated that the letter to the Manual Working Group and the MET Committee would be sent in accordance with the decisions of the ATC Committee.

20. The Secretary at the request of the Chairman pointed out that there remained only the Regional Procedures to be completed to cover the items of the Agenda, and it was decided that the Working Group 1 should meet on the 25th May at 0930 to review these Regional procedures.

21. 5th meeting -

It was decided that the 5th meeting should take place on Wednesday 26th in the afternoon with a view to complete the action of the ATC Committee.

22. Other business -

22.1. The Delegate for France raised the point that there was

an overlap between the "Azores Control Area" as accepted by the ATC Committee and the "Casablanca-Sal flight information region" in the south Atlantic region. He further indicated that he had discussed the point with the Delegate for Portugal and that he would be in a position to table a definite proposal on the subject on the 25th.

It was decided that a working group should be composed of Portugal, France, Ireland and the United States to study the necessary re-arrangements of the boundary of the above referred control area and flight information region and that this proposal should be brought up on Wednesday afternoon at the full meeting of the Committee.

22.2. The Secretary called the attention of the meeting to the fact that SAR Committee had studied the proposal contained in Doc NA/17 ATC NA/15 to change the wording of the first paragraph on the "uncertainty alert phases" of Doc NA/69 SAR NA/8 page 2.

It was the desire of the SAR Committee that their original wording Doc NA/69 SAR NA/8 be used as much as possible and that in the third line of each of paragraphs 3.2 and 3.3 the word "if" be changed to read "when" and the words "should have been received" be added after the words "position report". This was considered satisfactory by the ATC Committee and it was decided to accept it.

23. There being no other business the meeting was adjourned at 1815.

- END -

1.
The meeting was called to order by Mr. Rombouts (Chairman).

2.
Minutes of the Fourth Meeting.
After minor amendment, adoption of the draft minutes of the Fourth Meeting was moved by the Delegate for Ireland and seconded by the Delegate for the United States; there being no other comments, the Chairman declared that they were accepted.

3.
New class of operational messages.
The Chairman of the Com Committee indicated to the ATC Committee the action taken by Com on the subject of creation of a new class of operational messages. After a lengthy discussion it was decided that a letter be sent to the Com Committee in which the desire of the ATC Committee should be expressed as follows :

"1. It was the intention of the ATC Committee, when the subject referred to above was discussed, to obtain a mean which would permit the requirement contained in para. 2.2 of Doc NA/75 ATC NA/11 to be met in the Region.

"2. In view of the possible ambiguity of para. 2.4. of this same document the ATC Committee agrees to delete this paragraph, which has no direct bearing on immediate action.

"3. Furthermore, the ATC Committee desires to inform the COM Committee of the following details :

"3.1. The messages referred to in para. 2.2 of Doc NA/75 ATC NA/11 should be defined as follows :

"Messages originated by the airlines operating agencies concerning clearance for flight."

"3.2. The priority of such messages should follow immediately that of "CTL".

"4. It is requested that an appropriate prefix be used for such messages in order to differentiate them clearly from other existing categories of messages.

"5. This action is recommended with a view to permit its early implementation in the North Atlantic region.

4.
The meeting recessed at 16.10 and resumed at 16.45.

5.
Report of Working Group 1 on Regional procedures.
5.1 5.1. The first report of Working Group 1 was considered. It was decided not to complete at that time the paragraph concerning the question of altimeter setting now under discussion in Sub-Committee No. 1. Adoption of the report was moved by the Delegate for Ireland and seconded by the Delegate for the U.K., with the exception of this question of altimeter setting referred to above. There being no comments to the contrary the Chairman declared the report was adopted.

5.2. The second report of Working Group 1 was then considered. It was moved by the Delegate for the U.S. and seconded by the Delegate for Canada that this report be adopted. There being no comments to the contrary the Chairman declared that it was accepted.

6.
Modification of boundaries of the Azores, Madrid, Lisbon and Casablanca control areas or flight information Regions.
The Delegate for France presented a joint proposal from the French and Portuguese delegations with reference to the boundaries of the Azores control area, Casablanca-Sal, Madrid and Lisbon flight information regions. It was moved by the Delegate for the United States and seconded by the Delegate for France that this proposal be adopted. There being no other comments the Chairman declared it accepted.

6.1. The Delegate for France during the discussion pointed out that it should be necessary to indicate in ICAO documents what type of line is used when joining two points on a Chart, e.g. rhumb line or great circle.

7.
Draft Final Report.
The ATC Committee considered the first draft for the Final Report. It was pointed out that this draft was not complete as regards Section 3, which would contain the material of the reports of Working Group 1 just accepted for the review of Supplementary Procedures. The Delegate for France moved that this draft be adopted; this was seconded by the Delegate for the U.S. There being no other comments, the Chairman declared the draft Final Report was accepted.

8.
Inter-centre coordination.
The Delegate for the U.S. tabled a proposal that informal meeting be held among oceanic area control centres personnel. The Delegate for the U.K. said that he was directed by the Chief of his Delegation to inform the meeting that the United Kingdom would welcome the first of such meetings being held in London at the end of 1948 or the beginning of 1949, when some matters experienced during the operations of air traffic control services within the North Atlantic Region would justify such a meeting. The Committee decided that the proposal by the Delegate for the U.S. would be included in the Final Report as a recommendation by the Committee and that the invitation by the Delegate for the U.K. should also be noted.

10.
The Meeting adjourned at 1900 hours to reconvene on May 27th at 1530 hours.

- END -

DOC NA/102
ATC-NA/23
29/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Minutes of the Sixth Meeting

(Salon Louis XV, Palais d'Orsay on Thursday 26th at 1530 hours)

Present :

DELEGATES

Mr. B.A. Rawson	Canada
Mr. Aa Mortensen	Denmark
Mr. Kungler	France
Mr. J.P. Gudmundsson	Iceland
Mr. J.P. Saul	Ireland
Mr. P.J.C. Rombouts (Chairman)	Netherlands
Mr. K.G. Price	United Kingdom
Mr. W.B. Swanson	United States

ALTERNATES AND ADVISERS

Mr. E. Lesage	France
Mr. L. Lansalot	France
Mr. F.M. Mc Grath	United Kingdom (Newfoundland)
Mr. Q.J. Mitchell	United States
Mr. E.S. Lee	United States

INTERNATIONAL ORGANISATIONS

Mr. C. Williams	IATA

ICAO

Mr. J. de Vienne	ICAO Representative for RAC
Miss L. Bouché	Interpreter
Miss J. Gueguen	Stenographer

1.
The meeting was called to order at 1530 by Mr. Rombouts Chairman.

2.
The Secretary informed the Meeting that a cable had been received from the Secretary general of ICAO now in Geneva on the subject of vote by one delegate in the name of two States or more. He read the cable which was as follows:
"Plural vote not allowed in ICAO Meeting."

3. Final Report.
The Final Report was presented to the Committee in Doc NA 205. ATC NA 25. There were some amendments and additions which were discussed, which will be found in the corrigendum of this Document. Adoption of this report was moved by the delegate for Ireland and seconded by the delegate for United Kingdom, being understood that the amendments or additions accepted by the Committee should be made the subject of a corrigendum.

4.
During the consideration of the Final Report, the question of altimeter setting was particularly discussed. Although Sub-Committee No. 1 was discussing the matter, it was decided that the ATC Committee should finalize its report in regard to air traffic control purposes and that subsequent action by Sub-Committee 1 should not call for further ATC meetings, unless it should change the substance of the decisions of the ATC Committee. It was decided that the Control areas around Kindley Field (Bermuda), the Azores, B W.I (Greenland) and Keflavik (Iceland) should be considered as "local control areas" not pertaining to the "oceanic control areas" and that in these control areas, domestic flight rules should apply. Appropriate rewording of paragraph 2.1.1.6. and 2.1.3 of the Final Report was accepted to be inserted in the corrigendum.

5.
Additional recommendations -

5.1.
The Delegate for U.S. proposed 2 additional recommendations:

1) States should be requested to notify the information concerning the designation of the Control areas referred to in 2.1.7.1. in Notams issued not later than the 1st of August 1948 for implementation by the 1st of October 1948. These Notams should be specifically notified to the ICAO Regional representative in Paris, 60bis Avenue d'Iéna, not later than August 1st 1948.

2) That the ATC messages for the North Atlantic Region be also implemented in the EUMED region by the 1st of October 1948, in order to avoid any possible confusion in the exchange of such messages within the region, and that Council takes appropriate action to amend accordingly the EUMED Regional Procedures.

5.2.
These recommendations were accepted by the Committee for insertion in the appropriate place of the Final Report.

.../

6.
Altitudes in meters.

6.1.
The Delegate for U.S. made a last plea to change the rules concerning metric equivalents of altitude expressed in thousands of feet. The former decision of the Committee on the subject was for the use of the Table contained in EU-MED Regional Procedures, para 2.1.2, page 1-2-2 and he felt very strongly that the differences between altitude in feet and their equivalent in meters which were contained in this Table would jeopardize the safety of aircraft, especially when flying at an altitude of 3,400 metres where this difference was nearly 150 feet.

6.2.
The Delegate for France indicated that aircraft were never stacked at this altitude, which was above the upper limit of control areas in France (3,000 metres).

6.3.
After a lengthy discussion on the subject, it was decided that the provision stated in the present document final report would be retained, and the Delegate for U.S. therefore handed a reservation on the subject to the Secretary.

7.
At this stage of the meeting, there being no other business, the Delegate for IATA said that he understood that this meeting could be the last, and he therefore was willing to extend to the members of the Committee his appreciation for having allowed him to make his points and for having in many cases, favourably received those points.

8.
The delegate for France desired to thank the Chairman in the name of the Committee for the way in which he had directed the work. (Applause.)

9.
The Chairman said that, although it was not certain that this meeting would be the last one, he thanked the delegates for their co-operation in the work of the Committee. He cited particularly Mr. Price, delegate for U.K. who had handled most of the job as Chairman of Working Group 1, Mr. Lee of the U.S. delegation who participated in the Drafting Group. He also thanked Mr. de Vienne, Miss Bouché, Miss Gueguen and all the members of the Secretariat+who had devoted their full time to the preparation of the work of the Committee and recording of its findings.

+(applause)

.../

10. Delegation of authority.
The Chairman received the following delegation of authority from the Committee:

- to approve outstanding minutes (5th and 6th meeting)
- to amend and complete the final report in line with actions taken at the 6th or further meetings -
- to call a further meeting in case other business were referred to the ATC Committee by other committees.
- to declare the session closed when no other business was expected.

11.
The Meeting adjourned at 1800 hours.

- END -

DOC NA/102
ATC NA/23
31/5/48
Corrigendum

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Corrigendum to the Minutes of the sixth meeting,
(DOC NA/102, ATC-NA/23)

1.
Paragraph 4, 8th line delete the words " was decided" and, after the word "Committee" insert the following:

"The Delegate for the United States stated that the problem of control area boundaries was highly confused and, in addition no reply had been received from Subcommittee N° 1 with respect to boundaries for change of altimeter settings and, therefore, requested that one additional meeting of the ATC Committee be held to consider the effect of the reply from Subcommittee N° 1 when received. The Delegate from Canada associated himself with these remarks. It was after decided ....."

- END -

Doc NA/103
ATC-NA/24
29/5/48

INTERNATIONAL CIVIL AVIATION ORGANISATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Closing of the Session of ATC Committee.

Acting under the authority given to me by the ATC Committee at its Sixth Meeting, which is as follows :

"-To declare the session closed when no other business was expected."

and sincethere have been no other matters which would have justified the calling of a new meeting of the ATC Committee, I hereby formally declare that the Session of the ATC Committee of the North Atlantic Regional Air Navigation Meeting (May 1948) is closed.

END

NAT/ATC/DRAFT/1
18/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

ORDER OF BUSINESS

FIRST PLENARY MEETING

Agenda Item 1 : Election of Officers and determination of a quorum.

1. Opening of Meeting by Temporary Chairman.
2. Election of Chairman of the Committee.
3. Election of Vice-Chairman of the Committee.
4. Statement by the ICAO Representative.
5. Formation of Sub-Committees and allotment of Items of the Agenda for their study.
6. Submission of additional Agenda Items by Delegates.
7. Selection of time and place of the Second Plenary Meeting.
8. Any other business.

- END -

NA/ATC/Draft/2

EUROPEAN-MEDITERRANEAN AND NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETINGS

EXTRACT
from

Annexe 2 - RULES OF THE AIR
Edition of April 1948 - Pages 15 and 16

CHAPTER 2. - GENERAL

2.3. Aircraft shall be flown at all times in compliance with the rules contained in Chapter 2 and Section 1 of Chapter 3; in addition, except as provided in Paragraph 2.3.5, they shall be flown in compliance with the rules contained in Section 2 of Chapter 3 when the flight is conducted in conditions of visibility or distance from clouds less than those indicated in the following table :

	Control area	Control Zone	Elsewhere
Visibility	5 kilometres (3 miles) Flight Visibility	5 kilometres (3miles)	1.5 Kilometres (1mile) Flight Visibility
Distance from clouds	150 metres (500 feet) vertically	150 metres (500 feet) vertically	at 200 metres (700 feet) or more from the ground or water : 150 metres (500 feet vertically) 600 metres (2000 feet horizontally
	600 metres (2000 feet) horizontally	600 metres (2000 feet) horizontally	below 200 metres (700 feet) from the ground or water; clear of clouds

N or higher as specified by State concerned.

Fig. 1

2.3.1 Note

1) When the weather conditions permit a pilot to conduct his flight in conditions of visibility and distance from clouds equal to or greater than those indicated in the table, they are said to be "VFR weather conditions".

2) When the weather conditions do not permit a pilot to conduct his flight in conditions of visibility and distance from clouds greater than those indicated in the table they are said to be "IFR weather conditions".

2.3.2. The rules contained in Section 1 of Chapter 3 are the Visual Flight Rules (VFR).

2.3.3. The rules contained in Section 1 and 2 of Chapter 3 are the Instrument Flight Rules (IFR).

2.3.4. It shall be the responsibility of the pilot in command of an aircraft to ascertain whether the conditions permit the flight to be conducted in accordance with visual flight rules or require compliance with instrument flight rules.

2.3.5. Flight may be conducted within control zones in IFR weather conditions without complying with instrument flight rules provided that special authorization is obtained from air traffic control.

2.3.6. When so prescribed by the appropriate authority, all aircraft being operated at night within control areas or control zones shall be flown in accordance with the instrument flight rules or as otherwise authorized by air traffic control.

2.3.7. Contracting States shall take appropriate action to prevent aircraft within control zones taking off, landing or approaching to land at an aerodrome or flying within the pattern of traffic formed by aircraft taking off, landing or approaching to land at an aerodrome when the ground visibility at that aerodrome is less than five kilometres (three miles), unless authorized by air traffic control.

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PART V I I I

MISCELLANEOUS

SECTION 1

DRAFT PRESENTED BY WORKING GROUP "4" OF SUB-COMMITTEE B

BASIC PRINCIPLES OF THE AIR TRAFFIC CONTROL SERVICE

CHAPTER 1. GENERAL

Item : Extract from RAC Division - 3rd Session Final Report (pages 63 to 70)

1.1 INTRODUCTION - The provision and operation of the Air Traffic Control Service (+) shall be based on the Standards and Recommended Practices for Rules of the Air.

1.2 Objective of the Air Traffic Control Service

1.2.1 The primary objective of the Air Traffic Control Service shall be to :

(a) Prevent collisions between aircraft, and between aircraft and obstructions on the manoeuvring area and between aircraft and obstructions while en route;

(b) Expedite and maintain an orderly flow of air traffic.

1.2.2 The Air Traffic Control Service shall also :

(a) assist pilots in command of aircraft by providing such advice and known information as may be deemed useful for the safe and efficient conduct of flight;

(+) Throughout the document the term "service" is used as an abstract noun to designate functions; the term "unit" is used to designate a collective body performing the service or part of the service.

(b) notify appropriate organizations regarding aircraft known to be or believed to be in need of search and rescue aid, and assist such organizations as required.

1.2.3. The functions which are concerned with the prevention of collisions between aircraft and the expediting of air traffic are described in Chapter 2 and are referred to as "Air Traffic Control Service".

The functions which are concerned with the provision of flight information are described in Chapter 3 and are referred to as "Flight Information Service".

The functions which are concerned with the alerting of search and rescue organization are described in Chapter 4 and are referred to as "Alerting Search and Rescue."

Note : This document does not contain Chapters 3 and 4 which will have to be developed.

CHAPTER 2. AIR TRAFFIC CONTROL SERVICE

2.1 Determination of the need for Air Traffic Control Service

To determine the need for Air Traffic Control Service in a given area or at a given location, due regard shall be had to :

(a) the density of air traffic;

(b) the meteorological conditions;

(c) such other factors as may be relevant.

Note : Due to the number of elements involved, including a variety of local conditions, it has not been possible to develop specific data to determine the need for Air Traffic Control Service in a given area or at a given place.

2.2. Application of Air Traffic Control Service

2.2.1. Basic principles

.../...

In order to fulfil its objective a unit (+) of the Air Traffic Control Service :

(a) needs to have

(i) prior knowledge of intended movement of each aircraft, or variations therefrom ;

(ii) current knowledge of actual progress of each aircraft.

(b) determines, from the information received, the relative position of known aircraft, one to another ;

(c) issues, as appropriate to the situation, clearances and instructions to aircraft concerned.

2.2.2 Types and Units

2.2.2.1 The Air Traffic Control Service is in itself divided into three types of service as follows :

(i) Area control service.

(ii) Approach control service.

(iii) Aerodrome control service.

2.2.2.2. These types of service shall comprise the following functions :

(+) Throughout the document the term "service" is used as an abstract noun to designate functions; the term "unit" is used to designate a collective body performing the service or part of the service.

(a) Area control service : To provide Air Traffic Control Service for IFR Flight (+) except for those parts of the flight described in (b) ;

(b) Approach control service : To provide Air Traffic Control Service for those parts of an IFR Flight when an aircraft is engaged in special procedures associated with arrival or departure;

(c) Aerodrome control service : To provide Air Traffic Control Service for all traffic on the manoeuvring area and VFR Flight in the immediate vicinity of an aerodrome.

2.2.2.3. The units which exercise the types of Air Traffic Control Service shall be identified as follows :

(i) Area control to provide area control service.

(ii) Approach control to provide approach control service.

(iii) Aerodrome control to provide aerodrome control service.

2.2.2.4. Where circumstances permit or require that it be done, two or more of the types of service described above may be performed by a single air traffic control unit.

(+) In compliance with the Rules of the Air, an IFR Flight, to be operated either inVFR or IFR Weather Conditions within a control area or control zone, shall be initiated by the filing of an IFR Flight Plan. The Flight shall subsequently be conducted in accordance with the approved Flight Plan. Amendments thereto shall require prior authorization by Air Traffic Control and adherence to Air Traffic Control instructions and clearances is obligatory. Air Traffic Control shall be notified when the flight will no longer be conducted in compliance with the Instrument Flight Rules which means that the IFR Flight Plan is cancelled. Such change from IFR to VFR shall be made only if the aircraft is actually flying in VFR weather conditions. Such action should not be made unless operation under uninterrupted VFR weather conditions is anticipated.

2.2.3. Place

2.2.3.1. When it has been determined that, in particular portions of the airspace,

(a) The need for Air Traffic Control Service to IFR Flights exists and

(b) that Air Traffic Control Service for such flight will be provided

then those particular portions shall be designated either as control areas (+) or control zones (++).

Air Traffic Control Service shall be provided in those control areas and control zones simultaneously with their designation.

2.2.3.2. When, within the vicinity of an aerodrome, the need and provision for Air Traffic Control Service for VFR flight and ground manoeuvre have been determined, then the aerodrome shall be designated as a controlled aerodrome (+++).

Air Traffic Control Service shall be provided at a controlled aerodrome simultaneously with such designation.

2.2.3.3. Elsewhere, Air Traffic Control Service shall not be provided.

Note: This does not preclude an Air Traffic Control Unit from providing Flight Information Service and alerting Search and Rescue elsewhere.

\+ Definition of a Control Area. Chapter 1 of the Rules of the Air.

Designation of a Control Area. Chapter 2 para. 2.4 of the Rules of the Air.

++ Definition of a Control Zone. Chapter 1 of the Rules of the Air.

Designation of a Control Zone. Chapter 2 para. 2.5 of the Rules of the Air.

+++ See proposed definition in Para. 4, Page 2.

.../...

2.3. Transfer of Control of IFR Flight

2.3.1 Whenever an aircraft is controlled, it shall be under the responsibility of one Air Traffic Control Unit only at any one time. Consequently, coordination will have to be made when the responsibility for control of such aircraft is to be transferred from one Air Traffic Control Unit to another.

2.3.2. Place or time of transfer of responsibility

2.3.2.1 Between two Area Control Units

The responsibility for the control of an aircraft shall be transferred from one area control to that of an adjoining area control at the time it is estimated the aircraft will cross the control boundary.

2.3.2.2 Between an Area Control Unit and an Approach Control Unit

The responsibility for the control of an aircraft shall be transferred from area control to approach control, and vice-versa, when the aircraft has reached a specified point in time or space and the receiving air traffic control unit has agreed to accept control at the specified point.

2.3.2.3. Between Approach Control Unit and Aerodrome Control Unit

(a) from Approach Control to Aerodrome Control

The responsibility for the control of an aircraft approaching to land shall be retained by approach control until the point when the aircraft is within the vicinity of the aerodrome, and

(i) is in sight of the ground and is considered to be a special VFR flight, or
(ii) has reached uninterrupted VFR weather conditions, or
(iii) has landed;

whichever is the earliest.

At this point responsibility for control shall be transferred from Approach Control to Aerodrome Control.

.../...

(b) from Aerodrome Control to Approach Control

(i) If VFR Weather Conditions prevail at the aerodrome.

The responsibility for control of a departing aircraft shall be retained by Aerodrome Control up to the point

- either of leaving the vicinity of the aerodrome

- or of entering IFR Weather Conditions

whichever is the earlier.

At this point, responsibility for control shall be transferred from Aerodrome Control to Approach Control.

(ii) If IFR Weather Conditions prevail at the aerodrome.

The Responsibility for control of a departing aircraft shall be transferred from Aerodrome Control to Approach Control immediately the aircraft enter the runway in use for take off.

2.3.3 Coordination for transfer of control

2.3.3.1 The coordination prior to the transfer of control from the responsibility of one Air Traffic Control Unit to another shall normally be initiated through the submission of appropriate parts of the IFR Flight Plan and of any amendments thereto.

2.3.3.2 Upon receipt of such submission, the receiving Air Traffic Control Unit shall :

(a) indicate its ability to accept control on the terms offered; or indicate any necessary amendments thereto;

(b) include any other information or instructions which it requires the aircraft to have at the point of transfer;

(c) specify any other relevant information.

2.3.4 Transfer of Control when two or more types of Air Traffic Control Service are performed by a single Air Traffic Control Unit

. ./...

Whenever two or more types of Air Traffic Control Service are performed by a single Air Traffic Control Unit, such unit shall, by reason of the combined service it provides, carry out all necessary coordination relevant to all stages included in the combined service.

2.4 Limits of Controlled Airspaces

2.4.1 Control Area Boundaries

(a) A Control Area shall be established so as to encompass sufficient airspace to permit en route IFR flights to be made inside the boundaries of the area within the capabilities of the navigational aids normally used in that area.

(b) The lateral limits of a control area shall be depicted on a chart.

(c) A lower limit shall be specified as in Rules of the Air.

(d) An upper limit may be established.

2.4.2. Control Zone Boundaries

(a) A Control Zone shall be established so as to encompass sufficient airspace to permit arriving or departing IFR flights to be made inside the zone when manoeuvring at a height lower than the lower limit of the control area if the aerodrome is located within the geographical limits of that control area.

(b) When the aerodrome is located outside the geographical limits of a control area, the control zone shall encompass sufficient airspace to contain at least the holding and letting down manoeuvres of IFR flights.

(c) The limits of a control zone shall extend to at least 8 km (5miles)from the centre of the aerodrome in the directions from which approaches may be made.

(d) Any one control zone may include one or more aerodromes.

.../...

(e) The lateral limits of a control zone shall be depicted on a chart.

2.4.3. Approach Zone Boundaries

(a) When there is a requirement for designating a part of the Airspace within a control Area and within which Approach Control Service will be provided an Approach Zone may be designated.

(b) An Approach Zone shall encompass sufficient airspace to provide for Holding and letting down of an aircraft arriving at the aerodrome or aerodromes concerned.

(c) The lateral limits of an Approach Zone shall be depicted on a chart.

(d) An upper limit may be established.

(e) If the lower limit of the Control Area is higher than 200 metres (700 feet), this limit may be lowered as necessary down to 200 metres (700 feet) within the Approach Zone.

END

NA/ATC/DRAFT/4
18/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

ORDER OF BUSINESS

SECOND PLENARY MEETING

SALON LOUIS XV - 19 MAY 1948 - 09.30

1. Opening of Meeting by Temporary Chairman
2. Election of Chairman of the Committee
3. Election of Vice-Chairman of the Committee
4. Order in which the items of the Agenda will be studied
5. Selection of time and place of the third plenary meeting
6. Any other business.

E N D

ATC/NAT/Draft/5
19/5/48

INTERNATIONAL CIVIL AVIATION ORGANISATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

May 1948

Subject: Excerpt of RAC Final Report (first Draft - RAC.Draft 28)

3. DEFINITION OF OPERATIONAL CONTROL SERVICE

3.1 In its consideration of the definition of Operational Control the Division took as its basic definition the one contained in the European-Mediterranean Regional procedures (DOC 4600). The Division agreed to the following amendment being made to the EUMED definition:

(a) The word "diverting" has been added between "initiating" and "continuing" in 1.6.1;

(b) The words "or take off" have been added after "or may not land" in 1.6.1;

(c) The words "and take off" have been added after "regard to landing" in 1.6.1.1;

It discussed also the following suggested amendments:

(d) The words "In so far as it affects air traffic control" to be deleted in 1.6.1;

(e) The words "and the State in which the aerodrome is located" to be added at the end of 1.6.1.1;

but makes no recommendation concerning them since it is felt that these points are within the province of the OPS Division.

3.2 The RAC Division recommends therefore that the following definition, which contains all the suggested amendments above, be submitted to the OPS Division for their consideration:

"1.6 Definition of Operational Control Service

1.6.1 Operational Control is that control exercised by the operating agency or its designated representative for the movement of its aircraft with respect to the responsibility for initiating, continuing, diverting or terminating flight, and for decisions as to whether aircraft may or may not land or take off at an aerodrome with regard to weather minima.

1.6.1.1 The decision with regard to landing and take-off at an aerodrome under weather minima other than those established by the State in which the aerodrome is located may be exercised by operational control, if such weather minima are contained in Operations Manuals approved by the State of registration of the aircraft and the State in which the aerodrome is located. "

- END-

ATC/NAT/ Draft/6
I9/5/48

INTERNATIONAL CIVIL AVIATION ORGANISATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

May I948

Subject: Excerpt of RAC Final Report (first Draft: RAC draft 28)

AMENDMENTS TO THE PROCEDURES FOR AIR NAVIGATION SERVICES
AIR TRAFFIC CONTROL (DOC 4444, RAC/50I)

1. The Division recommends that the following changes be made to the procedures for Air Navigation Services - Air Traffic Control - (DOC 4444, RAC/50I):

1.1 The following new definitions be added in Section 1:

(a) Flight Information Centre

The unit designated for providing Flight Information Service within a Flight Information Region, when such service is not provided by an area control.

(b) OAC

The symbol used to designate an area control which specifically provides Air Traffic Control Service over international waters.

2. Air Traffic Control Messages

2.1 The Air Traffic Control Messages described hereafter be inserted following "Section 1 - Definitions".

2.1.1. Origination

2.1.1.1 Flight Plan, Departure, Arrival, Delay and Cancellation Messages shall normally be originated by air traffic control on the basis of information filed by the pilot or the operator, except that a contracting State may authorize special local arrangements permitting pilots or operators to originate such messages.

2.1.1.2 Transfer-of-Control Messages, when required, shall be originated by the area control whose control area the aircraft is leaving and shall be sent to the area control whose control area the aircraft will next enter, and shall be transmitted in sufficient time to reach the addressee prior to the time that transfer of control is to become effective.

2.2 Addressing

Air Traffic Control Messages originated by or for air traffic control shall be addressed in accordance with the provisions of paragraph 3.5.13 of DOC 4478, COM/50I, as required for air traffic control purposes.

2.2.1 With the authorization of the contracting State concerned, operating agencies may specify certain additional addresses for their purposes. Arrangements for such additional addresses and delivery shall be accomplished by local agreement with the appropriate authority of the State concerned.

3. Service Prefix

The Service Prefix shall normally be specified by the air traffic control officer originating the air traffic control message, in accordance with the provisions of paragraph 3.8.4 of DOC 4478, COM/501.

3.1 A Combined Flight Plan-Departure Message shall be assigned the Service Prefix DEP.

4. Contents

4.1 Flight Plan Message

The contents of a Flight Plan Message shall consist of the following elements in the order listed, except that two or more States, by common agreement, may elect to exchange Flight Plan Messages in an abbreviated form:

(a) The name of the units used.

(b) The aircraft identification and radio call sign if different from the aircraft identification.

(c) The name of the operator and the flight number, where applicable.

(d) The type of aircraft, or in the case of a formation flight the types and number involved.

(e) The name of the pilot in command of the aircraft, or in the case of a formation flight the name of the formation commander.

(f) The point of departure.

(g) The cruising altitude, or altitudes, and the route to be followed.

(h) The point of first intended landing.

(i) The proposed true air speed at cruising altitude.

(j) Radio transmitting and receiving frequency or frequencies to be used.

(k) The navigational and approach aids to be used in flight.

(l) The proposed time of departure.

(m) The estimated elapsed time until arrival over the point of first intended landing.

(n) The alternate aerodrome or aerodromes to which the aircraft will proceed when a landing at the intended destination becomes inadvisable.

(o) The amount of fuel on board expressed in hours.

(p) The number of persons on board.

(q) Any other pertinent information which the pilot in command of the aircraft, or air traffic control, deems necessary for control purposes.

4.2 Departure Message

The Departure Message shall consist of the following elements in the order listed :

(a) Aircraft identification and, if different, radio call sign (as shown in Flight Plan).

(b) Aerodrome of departure.

(c) Actual time aircraft airborne (using six figure date/time group).

(d) Aerodrome of first intended landing.

4.3 Flight Plan Departure Message

A Flight Plan Message may be combined with a Departure Message. In this case the superfluous elements resulting from the combination should be omitted.

4.4 Arrival Message

The Arrival Message shall consist of the following elements in the order listed :

(a) Aircraft identification and, if different, radio call sign.

(b) Time of arrival.

(c) The identification or name of airport where the aircraft landed.

(d) Any pertinent remarks.

4.5 Delay Message

The Delay Message shall consist of the following elements in the order listed :

(a) Aircraft identification (as shown in the Flight Plan as transmitted).

(b) Revised ETD expressed as a six figure date/time group.

(c) Any pertinent remarks.

4.6 Cancellation Message

The Cancellation Message shall consist of the following

elements in the order listed :

(a) Aircraft identification (as shown in the Flight Plan as transmitted).

(b) Any pertinent remarks.

4.7 Transfer-of-Control Message

The Transfer-of-Control Message shall consist of the following elements in the order listed :

(a) Aircraft identification (as shown in the Flight Plan).

(b) Last authorized altitude.

(c) Estimated time of crossing the control area boundary.

(d) Any pertinent remarks.

(NOTE: EXAMPLES OF ATC MESSAGES SHOULD BE INSERTED AFTER EACH TYPE ABOVE. IT IS REQUESTED THAT THIS WORK BE PERFORMED BY THE SECRETARIAT)

5. General

5.1 Delay Message

When the departure of an aircraft has been appreciably delayed and a Flight Plan has been sent, a Delay Message may be sent to all recipients of the Flight Plan. The period of delay necessitating the transmission of the message shall be determined by agreement between the States concerned.

5.2 Cancellation Message

When a Flight Plan has been sent and a flight has subsequently been cancelled, a Cancellation Message shall be sent to all recipients of the Flight Plan.

5.3 Transfer of Control Message

The area control responsible for the control area the aircraft in leaving shall calculate the estimated time at which the aircraft will arrive over the control boundary for the purpose of determining control responsibility.

6. Coordination between Air Traffic Control and Operational Control.

The following wording be included as a new section immediately after the section dealing with Air Traffic Control Messages.

6.1 Coordination with Operational Control

6.1.1 The Air Traffic Control Service in carrying out its objectives shall have due regard for the requirements of the Operational Control Service provided by the operating agency in accordance with the provisions of the Standards for Inter-

national Air Service Operations and, if so required by the operating agency, shall make available to the agency or its designated representative full information pertaining to the conduct of flights to enable such agency or designated representative to carry out its responsibilities.

6.1.2. If so desired by the operating agency concerned, all messages and position reports from scheduled aircraft received by the communications stations shall be made available to the operating agency concerned or its designated representative, simultaneously with their delivery to area control.

6.1.3. Operational Control instructions involving a change in flight plan shall be coordinated with area control before transmission to the aircraft.

6.1.4 Air Traffic Control instructions issued by area control shall be routed to the operating agency or its designated representative in accordance with agreed local procedures.

6.1.4.1 When the delay caused by effecting the coordination described above would prejudice the safe separation of aircraft, Air Traffic Control shall first issue appropriate instructions to alleviate the situation, and then notify the operating agency or its designated representative as soon as practicable.

7. Long Distance Flight

This paragraph be deleted.

8. Position Reporting

8:1 The paragraphs entitled "Time Interval of Position Reports" (paragraphs 2.2.5.1 and 2.2.5.2) be replaced by a new paragraph 2.2.5.1 as follows:

"2.2.5.1 Time Interval of Position Reports.

(1) On routes defined by specified reporting points, aircraft position reports shall be made when over or immediately after passing reporting points as established for the route being flown, and when over such other reporting points as may be specified by Air Traffic Control.

(2) On routes not defined by specified reporting points, aircraft shall report position as soon as practicable after the first half-hour of flight and at half-hourly intervals thereafter, unless greater intervals are specified for the route being flown. "

9. Indication of the remaining endurance in the POMAR Code.

9.1 The title of the third group in the operational

part of the POMAR Code (paragraph 2.2.5.4 and Table) be changed to read:

ENDURANCE
Remaining Endurance in hours and minutes

9.2 A note be added to indicate that " When required by operating agencies, the weight of fuel remaining on board may be stated in the REMARKS portion of the position report".

10. Approach Sequence

The following wording replaces paragraph 2.2.8 (1):

"2.2.8.1 Priority

(1) The first aircraft estimated to arrive over the point from which approaches are commenced will normally be the first aircraft cleared to approach. Other aircraft will have priority in the order of their estimated arrival over such point except that a special priority may be given to :

(1.1) An aircraft which anticipates being compelled to land because of factors affecting the safe operation of the aircraft (engine failure, shortage of fuel, etc.);

(1.2) Hospital aircraft or aircraft carrying any sick or seriously injured persons requiring urgent medical attention, when circumstances permit.

Note: An aircraft which has actually encountered an emergency is handled as outlined in 2.2.15."

11. Authorizing use of manoeuvring area for arriving aircraft

The following paragraph be added as paragraph 3.2.7.3:

"3.2.7.3. Special authorization for use of the movement area may be given to:

(1) An aircraft which anticipates being compelled to land because of factors affecting the safe operation of the aircraft (engine failure, shortage of fuel, etc.)

(2) Hospital aircraft or aircraft carrying any sick or seriously injured persons requiring urgent medical attention, when circumstances permit. "

12. Air Traffic Control Phraseologies

In paragraph 3.5.6.

Delete "I will repeat", and replace with "I say again"; Also delete "wrong", and replace with "negative".

13. In addition, it is recommended that the Secretariat make the necessary changes to the ground signals, visual signals, and definitions, and effect such other editorial changes as may be necessary to make the PANS 3rd edition conform to the Rules of the Air as contained in DOC 5367.

- E N D -

NA/ATC Draft 1
19/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

MAY 1948

WORKING GROUP 1

PROPOSAL PRESENTED BY THE U.S. DELEGATION

ON THE SUBJECT OF AIRSPACES RESERVATIONS

Airspace reservations, either stationary or mobile, may be established within control areas for the use of large formation flights or other air operations. Arrangements for the reservation of such airspace may be accomplished by the user notifying the appropriate oceanic area control centers of the geographical limits and altitudes and the period of time the airspace is required. This notification should reach the appropriate OAC centers in sufficient time to permit the issuance of flight information service to all aircraft concerned.

END

ATC Draft NA/8
20/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Minutes of the Second Meeting

(Salon Louis XV, Palais d'Orsay, on Wednesday 19 May, 1948 at 0945 hours)

Present :

DELEGATES

Mr. S.G. Graham	Canada
Mr. Aa. Mortenson	Denmark
Mr. M. Kungler	France
Mr. S.H. Gudmendssnn	Iceland
Mr. J.P. Saul	Ireland
Mr. Rombouts	Netherlands
Mr. F.W. Thesen	Norway
Mr. V.Veres	Portugal
Mr. K.C. Price	United Kingdom
Mr. W.B. Swanson	United States

ALTERNATES AND ADVISERS

Mr. B.A. Rawson	Canada
Mr. Lanselot	France
Mr. Q.J. Mitchell	United States
Mr. E.S. Lee	United States
Mr. D. Nyrop	United States
Mr. E.M. Ware	United Kingdom (Bermuda)
Mr. F.M. Mc Grath	United Kingdom (Newfoundland)

ATC Draft NA/8
20/5/48

INTERNATIONAL ORGANIZATIONS

Mr. C. Williams	IATA
Mr. Oolgaard	IATA
Mr. R.G. Flynn	IATA

ICAO

Mr. J. de Vienne	ICAO Representative for RAC
Miss L. Bouché	Interpreter

1. The meeting was called to order at 0945 by Mr. J. de Vienne, Expert of the RAC Section of ICAO, acting as temporary Chairman.

Agenda Item 1. : Election of officers

2. Mr. Rombouts, delegate for the Netherlands was nominated by the United States delegate. This nomination was seconded by the delegates for Canada and United Kingdom. There being no other nominations, the temporary chairman declared Mr. Rombouts elected as Chairman and invited him to take the chair.

3. Mr. Rombouts thanked the delegates for his election and called for nominations for a vice chairman.

4. Mr. K.C. Price; Delegate for the United Kingdom was nominated by the Delegate for the United States. The nomination was seconded by the Delegate for Portugal. There being no other nominations the Chairman declared Mr. K.C. Price elected a vice chairman.

5. The work plan for the Committee was then discussed.

5.1. Itwas decided that the items of the Agenda should be dealt with in the following order :

- item 2)
- item 4) (Items from DOC NA 2, ATC/NA.1.)
- item 3)

and that a statement on ATC requirement for communication should be passed to the COM Committee not later than 24th May.

5.2. It was decided that the ICAO Icelandic report should not be considered until a paper containing the comment of Iceland was available.

5.3. The Committee decided that Subcommittee 1. of the General COmmittee should be informed of action that the working group desired to take on altimeter setting.

5.4. On a question raised by the Delegate for Norway, the Committee decided that the action taken by Subcommittee of the General Committee of the European-Mediterranean meeting on the subject of the contents of flight plans had no bearing on the work of the North-Atlantic Regional ATC Committee.

6. The Chairman adjourned the meeting at 1030 hours and said that the time of the next meeting would be posted on the notice board.

END

NA-ATC/Draft/3

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

ORDER OF BUSINESS

THIRD PLENARY MEETING

1. Approval of minutes of first and second meeting.

2. Consideration of the request from Iceland (Doc 5122/JS/520)
(Doc NA/20/ATC-NA/4
(Doc NA/67/GC/14)
With regard to the provision of Air Traffic Control services.

3. Approval of the ATC requirements for Communications to be communicated to the COM Committee.

4. Consideration of definitions and procedures for Uncertainty Alert and Distress phases of Search and Rescue (Doc NA/59 SAR-NA/8
(Doc NA/45 ATC-NA/7

5. Nomination of a drafting Group.

6. Consideration of progress made in the work of the Committee and of any necessary revision of the work plan.

7. Selection of time and place for the fourth meeting.

8. Any other business.

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ATC Draft NA/79
20/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Minutes of the First Meeting

(Salon Louis XV, Palais d'Orsay, on Tuesday, 18 May, 1948, at 1500 hours)

Present :-

DELEGATES

Mr. Aa. Mortensen	Denmark
Mr. M. Agesilas	France
Mr. S.H. Gudmundson	Iceland
Mr. J.P. Saul	Ireland
Mr. Rombouts	Netherlands
Mr. F.W. Thesen	Norway
Mr. V. Veres	Portugal
Mr. K.C. Price	United Kingdom
Mr. W.B. Swanson	United States

ALTERNATES AND ADVISERS

Mr. Lansalot	France
Mr. Kungler	France
Mr. Q.J. Mitchell	United States
Mr. E.R. Mehrling	United States

ICAO

Mr. J. de Vienne	ICAO Representative for RAC
Miss L. Bouché	Interpreter
Miss Gueguen	Stenographer

ATC Draft NA/7
20/5/48

1. The meeting was called to order at 1500 by Mr. J. de Vienne, Expert of the RAC Section of ICAO, acting as Temporary Chairman.

Agenda Item 1 : Election of officers and determination of a quorum.

2. The Temporary Chairman stated that he had been informed of the desire of some delegations to postpone the election of a chairman to the following meeting. In the absence of any comment the Chairman declared that this procedure appeared to be acceptable and that it could be followed also for item 3 of the agenda, Election of a vice-chairman.

3. The Chairman then gave an account of the latest action of ICAO on matters that were of concern to the Committee.

3.1. Adoption by Council of Annex 2 to the Convention, Rules of the Air ; the major differences between this annex and the Rules of the Air published in DOC 2010 RAC 104 were :

- use of the expression "VFR Weather conditions" and "IFR weather conditions" ;

- use of "ground visibility" to determine the application of the Instrument Flight Rules in the vicinity of an aerodrome situated within a control zone.

3.2. Recommendation by the RAC Division, which had just met in Montreal for its Third Session :

a) addition to the Rules of the Air:

"recommendation that a pilot should not cancel his flight plan if the flight is not likely to be completed in VFR weather conditions".

b) Air Traffic Control service should be responsible for informing aircraft of a risk of collision with terrain while en route.

c) definition of the expressions :

- controlled aerodrome
- Flight Information Centre
-- OAC : (area control in charge of control over international waters).

d) Description of an approach zone, within a control area.

e) description of standardized ATC messages.

f) basic description of air traffic control principles.

g) use of the abbreviation "ROA" to signify matters dealing only with Rules of the Air and "ATC" to signify those dealing only with Air Traffic Control.

4. The Chairman in reply to a question from the delegate for France, informed the Committee that appropriate excerpts of the Rules of the Air and the RAC Final Report would be reproduced as ATC working drafts for information of members of the Committee.

5. Replying to a question from the delegates of the United States, and of France, the Chairman said that the Rules of the Air and Air Traffic Control matters that had just been mentioned had not been raised for discussion by the Committee, but brought to its attention as being the basis for supplementary regional procedures.

6. Since some delegations had few members, the Committee decided in principle not to break into working groups. Nevertheless it was agreed that the Committee would constitute itself as a Working Group and meet formally in plenary session to accept the final drafts prepared.

7. The Chairman then called the attention of the Committee to the necessity for dealing early with the question concerning the ICAO Icelandic report (DOC NA 20 ATC NA 4) and altimeter setting which was to be handled by Subcommittee L of the General Committee.

8. It was decided that the working hours should be 0930 to 1230 and 1400 to 1800.

9. The Chairman adjourned the meeting at 1630 to resume next morning at 0930.

END

NA/ATC/Draft /11
2?/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

AIR TRAFFIC CONTROL COMMITTEE

1. Agenda Item 4.1. - Adequacy of Telecommunications, facilities available to A.T.C. Services -

1.1. The communication requirements for Air Traffic Control Services, based on Appendix E of the Final Report of the Second Session of the RAC Division (Doc 2601. RAC 135), are as follows:

1.1.1. Point to point communications as summarized in Appendix A to Doc NA.44/ATC NA 6.

1.1.2. Air ground communications as in the following paragraphs:

a) "1.2. Area Control Requirements.
Air-ground communications should be such that adequate two-way communication can be maintained between the Centre and airborne aircraft operating at any point within the flight information region or control area".

b) "1.3. Approach and Aerodrome Control Requirements.

"1.3.1. Air-ground communications facilities employed by Approach and Aerodrome Control should enable direct, rapid and continuous static-free communication between control personnel and all aircraft being operated under their control.

"1.3.1.1. Where Approach Control is functioning as a separate unit, air-ground communication should be conducted over communications channels provided exclusively for its use.

"1.3.1.2. Where conditions warrant, communications facilities will be required for the control of traffic operating on the movement area.

"1.3.1.3. Speech recording, manual or automatic, should be provided on all Aerodrome and Approach Control air-ground communications channels."

1.2. The Air Traffic Control Committee recognized that these requirements may be considered optimistic at the present time. Nevertheless, it should be our aim to improve ATC Communications to the standards outlined in para. 1.1. It is therefore recommended to the COM Committee that these requirements be kept in mind when discussing the means by which Air Traffic Control messages will be transmitted.

1.3. To permit the COM Committee to take appropriate action on the above requirements, the ATC Committee decided to inform the COM Committee that :

1.3.1. The following control centres, established at the first North Atlantic Regional Air Navigation meeting in Dublin, shall be kept in operation :

Control Areas	Location of Area Control centres
Iceland	Reykjavik ©
Stavanger	Sola
Shannon-Prestwick	Shannon Prestwick
Lisbon-Madrid-Casablanca	Lisbon Madrid Casablanca
Azores	Santa Maria
New York	New York
Moncton	Moncton

1.3.2. Approach Control and Aerodrome Control, separetely or combined, should be established by States to serve all regular and alternate airports to and from which North Atlantic Flights are operated.

1.4 Point to point Communications

1.4.1. Appreciating the difficulties which are now experienced for the operation of telecommunications, the ATC Committee recognized that point to point telecommunications within the North Atlantic Control Areas proper are generally considered satisfactory at the present time. However the COM Committee is requested to consider the practicability of improving as soon as possible the following telecommunications where delays actually experienced in the transmission of Air Traffic Control messages have materially affected the efficiency of Air Traffic Control Service.

1.4.1.1.
- Moncton to Gander
- Moncton to Goose Bay
- Goose Bay to Seven Islands
- B W 1. (Greenland) to Reykjavik (The circuit presently in operation between Reykjavik and B W 1. should be kept in operation)
- Shannon to Paris
- Lisbon to Casablanca
- Lisbon to Santa Maria
- Santa Maria to Casablanca
- Bermuda to Santa Maria

1.4.1.2. The following were added at the request of the IATA observer, to be called to the attention of the COM Committee :

- Stephensville to Moncton
- Goose Bay to Iceland
- Iceland to Gander
- Iceland to Prestwick

1.4.2. The ATC Committee also recommends that the COM Committee take appropriate action to implement communications by teletype, either radio or landline, between the North Atlantic Area Control Centres and other Area Control Centres of Control Areas within which international airports used by North Atlantic flights are situated.

1.5. Air ground Communications

1.5.1. The ATC Committee recognized that air ground communications within the North Atlantic Control Areas are satisfactory for air traffic control purposes, except that at times and also noted that the COM Committee was considering their improvement.

1.5.2. The ATC Committee recommends that whenever possible radiotelephony should be used for ATC Air/Ground communications serving ~~en route~~ flights within North Atlantic Control Areas.
The ATC Committee further recommends that all communication stations serving these Control Areas be equipped for radiotelephony communications, as soon as possible, as a supplement to existing radiotelegraph communications.
In respect to radiotelephony air/ground communications, it should be noted that radiotelephony facilities are presently being used for air/ground communications in the Shannon-Prestwick and the New York Control Areas.

2. Agenda Item 3.3. - Transmission of messages on behalf of the operating agencies.

2.1. The ATC Committe recognizes that it may be necessary to handle operational messages on air traffic control channels.

2.2. In this connection, the ATC Committee recommends that an additionnal class of messages i.e. OPN CTL (Operation-Control) be established by ICAO. Such class of messages to be used by the Operating Agency, and the aircraft of such agency, for the exercise of operational control. The priority of such messages should follow that of CTL messages.

2.3. The exact term OPN CTL, is used merely for purposes of demonstration, and it might be the desire of COM to use another group of letters or term in order that there be absolutely no chance of confusing an air traffic control message with that of an operating agency.

2.4. Appropriate action on this Item, i.e. reference to the COM Division, is left to the COM Committee.

END

ATC/Draft/NA/12
21/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

AIR TRAFFIC CONTROL COMMITTEE

Paris, May 21st, 1948

From Chairman ATC Committee

to Chairman COM Committee

1. You requested in the Coordinating Committee that the ATC requirements for telecommunications be notified to COM not later than May 24th.

2. The ATC has considered these requirements which are outlined in section 1. of Doc NA/75 ATC/NA/11, of which a copy is attached hereto for consideration by your Committee.

3. It was also the desire of the ATC Committee to inform the COM Committee of our position with regard to transmission of operational messages on ATC channels. The recommendations of the ATC Committee in that respect are contained in section 2 of Doc NA/75 ATC/NA/11 referred to above.

P.J.C. ROMBOUTS

Chairman ATC Committee

NA-ATC Draft 13
22/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Report of Working group 1. on the boundaries of North Atlantic Control Area and the Altimeter setting.

1. The boundaries of the North Atlantic Control Areas are hereby redifined as follows :

1.1. The Northernmost limit of the control areas to the Arctic Circle.

1.2. The Easternmost limit of the control areas is determined by a line beginning on the Arctic Circle at longitude 11°00'E and passing through the following points :

62°00'N	04°00'E ;	61°00'N	01°00'W ;
61°00'N	08°00'W ;	59°00'N	08°00'W ;
56°00'N	13°00'W ;	50°00'N	13°00'W ;
50°00'N	08°00'W ;	45°00'N	08°00'W ;
43°00'N	13°00'W .	30°00'N	13°00'W .

1.3. The Westernmost limit of the control areas is determined by a line beginning on the Arctic Circle at longitude 60°00'W and passing through the following points :

60°00'N	60°00'W ;	50°00'N	51°00'W ;
45°00'N	51°00'W ;	45°00'N	58°00'W ;
40°00'N	68°00'W .	30°00'N	79°00'W .

1.4. The Southernmost limit of the control areas is the parallel of latitude 30° North.

1.5. Within these limits there shall be seven control areas, separated by :

1.5.1. The parallel of 43°00'N from the meridian of I3°00'W to the meridian of 45°00'W thence a line to the point 45°00'N 5I°00'W ;

1.5.2. The parallel of 6I°00'N from the meridian of 08°00'W to the meridian of 30°00'W, thence through the points 59°00'N 30°00'W and 59°00'N; 43°00'W to the point 60°00'N 43°00'W.

1.5.3. The meridian of 30°00'W from the parallel of 6I°00'N to parallel of 43°00'N ;

1.5.4. The meridian of 0I°00'W from the Arctic Circle to the parallel of 6I°00'N ;

1.5.5. The east coast of Greenland from the Arctic Circle to the point 60°00'N 43°00'W ;

1.5.6. The meridian of I8°00'W from the parallel of 43°00'N to the parallel of 30°00'N ;

1.5.7. The meridian of 45°00'W from the parallel of 43°00'N to the parallel of 30°00'N.

1.6. The areas within circles of approximately 100 nautical miles radius around Bermuda; Santa Maria, Azores; Keflavik and BW 1., Greenland, shall be excluded from the North Atlantic Control Areas.

1.7. The lower limit of North Atlantic control areas is (.....) above the surface of the water.

2. All other areas within the formerly defined North Atlantic Area shall be considered as Flight Information Regions, in which local control areas may be established as necessary. The lower limit of these local control areas shall be 200 metres (700 feet) above the water, or the lower limit established for the adjacent domestic control areas.

3. Within the North Atlantic Control Areas, the standard altimeter setting of 1013.2 millebars shall be used for vertical separation.

4. Within local control areas or flight information regions, the appropriate QNH value for altimeter settings shall be used for purposes of vertical separation.

5. The change-over from one altimeter setting to the other shall be automatic upon crossing the boundary between a redefined North Atlantic Control Area and a Flight Information Region of local Control Area, unless otherwise instructed by Air Traffic Control.

END

ATC Draft NA/14
22/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATON MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Agenda Item 3.- Regional Procedures.- Determination of any changes necessary in the present regional procedures.

1. Working Group 1. has reviewed Paragraph 3, Page 1.2.2. of Doc 4500 and Paragraph 2.2.1. of ATC/NAT/Draft 6 and after consideration recommends to the full Working Group that Paragraph 3, Page 1.2.2. of Doc. 4500 be deleted and that the following paragraphs be inserted in the revised ATC Supplementary Procedures for the North Atlantic Region :

"3. The Air Traffic Control messages, as defined in Paragraph 3.8.4. of the COM Procedures for Air Navigation Services, Doc 4478, COM/50I shall in addition to the addresses specified by Air Traffic Control, also be sent to the addresses specified by the operating agency to the airport of first intended landing and/or not more than two operational control centers concerned with the same priority as the Air Traffic Control messages"

"3.1. Messages concerning Aircraft movements destined for stations other than those specified in Paragraph 3 above, which are required by the operating agencies will be initiated by such agencies and be given priority No. 14 as contained in Paragraph 3.9. of the COM Procedures for Air Navigation Services, Doc. 4478, COM/50I."

2. The Working Group reviewed certain Air Traffic Control messages that had been transmitted in accordance with the procedures specified in Paragraph 3 of Doc. 4500 and found that in certain instances the privilege of operating agencies to specify address had been used to excess. For example, on one day, one station handled nine aircraft movements for one company involving 18 messages, 71 addresses and 46 transmissions. It is therefore strongly recommended that all operating agencies review their requirements for the transmission of aircraft movement messages and that they take corrective action to comply with the above procedures.

END

MV

ATC Working Draft NA/15
22/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

1) The following letter has been received from Manual Working Group of Sub-Committee 1:-

"To : CHAIRMAN of ATC COMMITTEE

From: MANUAL WORKING GROUP.

Sir,

Your attention is called to the following recommendation made by France concerning listing of Aerodromes in the North Atlantic Manual Pages 3.3.1 to 3.3.7:

> "Pages 3.3.1 to 3.3.7 containing a list of aerodromes be retained but the tabulation adopted is that given in the section on Aeronautical Instructions. The expression QFU is furthermore considered preferable to the expression QDM."

The above-mentioned is respectively referred to your attention for recommendations."

(signed) MANUAL WORKING GROUP.

2) It was felt that the following quotations would help references by the members of ATC in considering this question:-

.....

MV

a)	QDM	What is the MAGNETIC COURSE to steer, with zero wind, TO reach you (or...(place) ?	The MAGNETIC COURSE to steer with zero wind TO reach me (or...(place)) is... degrees at...(time).
b)	QFU	What is the magnetic course or (number) of the RUNWAY to be used ?	The magnetic course or (number) of the RUNWAY to be used is ... (Note: The RUNWAY number is indicated by a two-figure group and the COURSE by a three-figure group.)

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NA-ATC/Draft:16

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

ORDER OF BUSINESS

FOURTH PLENARY MEETING

1. Approval of minutes of third meeting (Draft ATC NA/10)

2. Proposal by the United States on the subject of air space reservations (NA/ATC/Draft/7).

3. Request from the Manual Working Group of Sub Committee 1 of the General Committee (NA-ATC/Draft/15)

4. Reports from Working Group 1.

   4.1 Boundaries of North Atlantic Control Areas and altimeter setting (NA-ATC/Draft/13)
   Determination of the lower limit of the North Atlantic Control Area (Para.1.7 of NA-ATC/Draft/13) and of the circular areas around aerodroms locations (para. 1.6.)

   4.2. Addressing of ATC messages (NA-ATC/Draft/14)

   4.3. Review of regional procedures (NA-ATC/Draft/20)

   4.4. Various questions (NA-ATC/Draft/19)

5. Request by I.A.T.A. for the establishment of a control area from Goose Bay to Seven Islands (NA-ATC/Draft/17)

6. Date of implementation of the recommendations of the Committee:

6.1. New area Control Boundaries.

6.2. Regional procedures.

7. Proposal by the United States for conversion of altitudes, metres to feet (Doc NA-65 ATC-NA/17).

8. Proposal by the United States for intercentre coordination (Doc NA/86-ATC-NA/18).

9. Statement by the French delegation for information on ocean weather stations (Doc NA/65 ATC-NA/10)

10. Consideration of progress made in the work of the Committee and of any necessary revision of the work plan.

11. Selection of time and place for the fifth meeting.

12. Any other business.

- END -

NA-ATC/Draft/17

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Agenda Item 2. Air Traffic Control Facilities.

1. At the first Meeting of Working Group 1 the Delegate for IATA requested that a control area be established in the North of the present Canadian Domestic Control Areas boundary to include the route from Goose Bay to Seven Islands.

2. The delegate for Canada stated that he could not at this time take position on this question, and requested that the ATC Committee be invited to state its desire on the subject.

3. It was decided that this should be deferred until a later meeting.

4. It is recalled, therefore, to the attention of the ATC Committee for appropriate action.

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NA/ATC/Draft/18
21/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1946

AIR TRAFFIC CONTROL COMMITTEE

Minutes of the Third Meeting

(Salon Louis XV, Palais d'Orsay on Friday 21st 1948 at 1435 hours)

Present :

DELEGATES

Mr. S.G. Graham	Canada
Mr. A. Mortensen	Denmark
Mr. Lansalot	France
Mr. S.H. Gudmensson	Iceland
Mr. J.P. Saul	Ireland
Mr. P.J.C. Rombouts (Chairman)	Netherlands
Mr. F.W. Thesen	Norway
Mr. V. Veres	Portugal
Mr. K.G. Price	United Kingdom
Mr. W.B. Swanson	United States

ALTERNATES AND ADVISERS

Mr. B.A. Rawson	Canada
Mr. De Lamotte	France
Mr. Lesage	France
Mr. Q.J. Mitchell	United States
Mr. E.S. Lee	United States
Mr. E.M. Ware	United Kingdom (Bermuda)
Mr. F.M. Mc Grath	United Kingdom (Newfoundland)

INTERNATIONAL ORGANIZATIONS

Mr. C. Williams	IATA
Mr. R.G. Flynn	IATA

ICAO

Mr. J. de Vienne	ICAO Representative for RAC
Miss Bouché	Interpreter
Miss J. Gueguen	Stenographer
Miss Yonef	Stenographer

1. The meeting was called to order at 1435 by Mr. Rombouts Chairman.

2. The draft minutes of the first and second meetings were presented to the Committee. The Delegate for United States moved their adoption, this was seconded by the Delegate for United Kingdom.

There being no comment to the contrary the Chairman declared that they were adopted.

3. Agenda Item 2 - Area Control Facilities - Determination of any changes necessary in the present boundaries of control areas, and in the sites of area controls.

3.1. The Committee considered Doc 5122 JS/520, Doc NA/67 GC/NA/14 and Doc NA/2[illegible] ATC NA/4 concerning a request from Iceland for financial aid.

3.2. The Delegate for Canada stated that Canada did not believe that it was necessary to continue the operation of the Icelandic area control center. He indicated, however, that Canada agreed to the necessity of having approach and aerodrome control service at Keflavik.

He insisted on the fact that these views were directed with consideration only to North Atlantic transatlantic operation. He also indicated that Reykjavik was of no interest from the point of view of international operations.

3.3. The Delegate for Norway stated that control in that area was important for the safety of international operations which were not transatlantic operations.

3.4. The Delegate for United States indicated that, as the Committee recognized that control areas were necessary throughout the North Atlantic region, there could be no gaps between them and therefore he suggested that the Iceland control area should continue to be operated.

3.5. The Delegate for United States moved that "Area Control in Iceland be maintained in continuous operation as it is required to protect and safeguard North Atlantic international air operations through the Icelandic control area". This motion was seconded by the Delegate for Norway. There being no comments to the contrary; the Chairman declared that the motion was carried.

3.6. The Delegate for Canada requested that his comments, as to the fact that this area control was not necessary to the safety of Trans North Atlantic operations, be included in the report which was to be forwarded to the General Committee.

The Delegate for France associated himself with the remark of the delegate for Canada and requested that his statement be also inserted in the said report.

3.7. A lengthy discussion followed as to the ability of the ATC Committee to recommend the relocation of the Icelandic area control from Reykjavik to Keflavik, the delegate for Canada France and United Kingdom indicated that in their opinion this was not a purely air traffic control requirement, provided that the facilities at the Centre were adequate.

3.8. It was moved by the Delegate for United States and seconded by the Delegate for Ireland that : " The Committee recommends that the Area control in Iceland be changed from Reykjavik to Keflavik when appropriate facilities and accomodations are available at the latter, in order to improve air traffic control service by the closer coordination between area control personnel, operating agencies and pilots."

There being no comments to the contrary, the Chairman declared the motion carried.

3.9. The Committee then considered the desirability for the operation of approach control services in Iceland and it was moved by the Delegate for Canada and seconded by the Delegate for United States that : "Approach control and aerodrome control are required at Keflavik for international air operation, but not required at Reykjavik".

There being no comments to the contrary, the Chairman declared that the motion was carried.

3.10. The Delegate for Iceland informed the Committee that the area control at Reykjavik will continue to operate approach control at this location. The Delegate for France stated that this service was necessary at Reykjavik at the present time.

3.11. During the discussion of the desirability of relocating the area control from Reykjavik to Keflavik it was emphasized by the Delegate for United States and the Delegate for Ireland that the location of the area control at such a place, which would permit better contact between air traffic control personnel, operating agencies and pilots, was highly desirable for the efficient operation of air traffic control services.

4. Agenda Item 4.1 - Adequacy of telecommunications facilities available to ATC Services.

The Committee considered recommendations presented by working group 1. Minor amendments were proposed to these recommendations which were approved for transmission to the COM Committee for appropriate action. The recommendations are contained in section 1. of Doc NA/75 ATC NA/11.

5. Agenda Item 3.3. - Transmission of messages on behalf of operating agencies.

The Committee considered recommendations presented by working group 1. and approved these recommendations for transmission to the COM Committee for appropriate action. These recommendations are contained in section 3 of Doc. NA/75 ATC NA/11.

6. Agenda Item 3 - Regional Procedures - Determination of any changes necessary in the present regional procedures.

6.1. The Committee considered Doc NA/69 SAR NA/3 on which the Chairman of the SAR Committee had called the attention of Chairman of the ATC Committee. This document was considered satisfactory to the ATC Committee, but it was suggested that the first 3 lines of para. 3.2. and 3.3. be amended in order to avoid confusion as to the time at which the delay of 30 minutes shall originate.

6.2. The following wording was approved to be forwarded to the SAR Committee for their consideration: "If a position report is more than 30 minutes overdue i.e. if not received within 30 minutes after the time at which the position reports are normally received by the ground station."

7. The Chairman proposed that a drafting group be formed to help in the preparation of the final report. It was

decided that Mr. Lee of the United States Delegation and Mr. Mc Grath of the United Kingdom Delegation (Newfoundland) would compose the drafting group together with the Chairman, the Vice-Chairman and Mr. de Vienne.

8. The Chairman then asked the Chairman of sub-working group A of the progress made. Captain Saul indicated that the question concerning boundaries in the North Atlantic region is nearly finished and a draft was to be typed on the question of altimeter setting.

9. The Chairman then requested the Chairman of working group 1. to report on the progress made, and Mr. Price stated that the working group had begun the consideration of the regional procedures.

10. At 1720 the Chairman was obliged to leave the chair and the Vice-Chairman replaced him.

11. It was decided that the 4th Meeting of the Committee would be held on Monday morning May 24th at 9.30 hours.

12. In order to answer as quickly as possible the question raised by Sub-Committee 1 of the General Committee on the procedures for altimeter setting, it was suggested that his question be, if possible, discussed at this meeting.

12.1. Captain Saul, Chairman of sub-working group A, submitted the draft prepared by his working group.

12.2 After considerable discussions, it was decided that the Sub-Committee 1 of General Committee should be informed that the question of transition of altimeter setting from standard pressure to QNH was referred again to a working group and could not be communicated to them before Monday May 24th.

13. There being no other business, the meeting adjourned at 19 hours.

END

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Various questions treated by Working Group 1 -

1. There are some questions which have been dealt with by Working Group N°1 during the course of its meetings which should be acted upon apart from the complete report on the regional procedures. These points are contained hereafter:

2. Item 2 of the Agenda - Area Control Facilities - Determination of any changes necessary in the present boundary of control areas and in the sites of area controls.

2.1 The Working Group recommends that the Control areas and relevant area controls listed in Paragraph 7, page 1-2-5 of the ICAO Regional North Atlantic Manual be retained with the exception of the Lisbon-Madrid-Casablanca control area.

2.1.1 Recommended changes of the existing boundaries are contained in NA-ATC/Draft/16 which the Committee might desire to amend in line with the Chart finally drafted by Sub-Working Group A.

These amendments affect :

2.1.1.1 the boundaries of the Shannon-Prestwick control area to avoid that an aircraft flying to Paris in the Shannon flight information region should in certain cases cross again the Shannon-Prestwick control area.

2.1.1.2 the boundaries of the Azores control area, to include in the latter all of the area situated West of the Meridian 18°00 W. to Meridian 13°00 W. between Parallels 43°00 N. and 30°00 N. This modification would permit the suppression of the Lisbon-Madrid-Casablanca control area and the deletion of all special regulations pertaining to that particular control area. It appeared that this was highly desirable and the change was accepted by France and Portugal.

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2.1.2 The corresponding amendments to NA/ATC/Draft/16 are as follows :

- Paragraph 1.2, seventh line, change "50°00' North" to read "48°50' North."
- Paragraph 1.5, first line, change "seven" to read "six".
- Paragraph 1.5.6, delete the whole of the paragraph.

2.1.3 It was noted that ICAO ATC Documents imply that flight information service be provided by area controls within the relevant control areas. In view of this, it was recommended that the air space below the lower limit of the North Atlantic control areas should be considered as Flight Information Regions in which the area control responsible for the control area above shall provide flight information service.

2.1.4 The Working Group considers that, although full air traffic control service may in some cases be difficult to provide in the North Atlantic Control areas, it is an objective towards which all efforts should be directed. It is further considered that Air Traffic Control Personnel and Operating Agencies should maintain the closest liaison and cooperation for their own mutual interests, and that the review of the Regional Procedures made at this meeting will contribute generally towards a more efficient ATC Service.

2.2 It has been recommended that the western and eastern boundaries of the North Atlantic control areas be established at a distance of about 100 nautical miles from coastline. The Working Group accordingly recommends that :

2.2.1. Control areas may be designated for the purpose of linking up the North Atlantic Control Areas with the domestic control areas and that their designation be left to the States concerned, taking into account the requirements of North Atlantic operations in that area.

2.2.2. The lower and upper limits of such control areas should be the same as those of the adjacent domestic control areas.

2.3. The Working Group considered a proposal made by the French Delegation (WGC NA/63 ATC/NA/9) that the boundaries of the Paris Flight Information Region be modified to avoid North Atlantic Flights to Paris crossing the Gloucester and Madrid Flight Information Regions respectively. As this

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proposal concerned both the North Atlantic and European Mediterranean Regions, it was felt that the Committee was entitled to make appropriate recommendations.

The delegate for United Kingdom indicated that he agreed with the proposal and the Working Group therefore recommends that the relevant modification be included in the Final Report for appropriate action by Council.

2.4 The Working Group also recommends that :

2.4.1. Approach control and aerodrome control should be established to serve all regular international airports serving or within the North Atlantic control areas.

2.4.2. Control zones should also be established at these locations, the designation of which should be left to States concerned.

3. Item 3 of the Agenda - Regional Procedures - Determination of any changes necessary in the present Regional Procedures -

The Working Group considered paragraph 8.1.4, page 1-2-5 of the North Atlantic Regional Manual concerning the coordination of control in the Shannon Prestwick control area and recognized that there was a shortcoming in this paragraph re regarding the control of aircraft flying through the control area without landing at or originating from either Shannon or Prestwick. It was therefore recommended that the following sentences be added in this paragraph :

" In the case of other aircraft operating through this control area, the control centre to which the Flight Plan is originally addressed will be the centre in control of the Flight through the area, and meteorological and communications responsibility will follow accordingly. Should difficulties of communication render a change of area control centre unavoidable, the aircraft or centre initiating the change will notify all other parties concerned."

4. Item 4 of the Agenda - Communications for ATC.

In accordance with the suppression of the Lisbon-Madrid-Casablanca control area, the Committee might consider

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desirable to amend as follows Document NA 75 ATC/NA/11 :

- Paragraph 1.3.1, delete all references to Lisbon-Madrid-Casablanca in both columns "Control areas" and "Boundaries of area control centers."

- E N D -

ATC Draft nA/20
25/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Subject : Report of Working Group number 1 on agenda item 3.

In order to avoid confusion and unnecessary references to papers, the Regional Procedures agreed by the Working Group have, as far as possible, been reproduced in full.

1. Procedures for Air Navigation Services - Air Traffic Control -

Doc 4444 RAC 501 was accepted by the Working Group to take effect from October 1st 1948 and it was further agreed that such future amendments as may be approved by the Council, should automatically come into force within the North Atlantic Region on the date specified by the Council.

It was recommended that the North Atlantic Region Air Traffic Control Procedures shall terminate at Eastern and Western boundary lines as agreed for the change of altimeter setting, and that the EUMED Air Traffic Control Procedures should commence, on the Eastern side of the boundary. In respect of the Western boundary, domestic procedures would apply on crossing the boundary line. Aircraft should change Air Traffic Control Procedures to conform with the Regulations of the area entered on crossing the boundary line.

It was stressed by the Working Group that it should be their aim to achieve as much standardization as possible between the different areas and it was hoped that when the work of the Group was completed, there would be little differences between the respective areas.

2. INTRODUCTION

These procedures detail the specific arrangements applicable to the North Atlantic Region and provide, in conjunction with general Procedures for Air Navigation Services - Air Traffic Control-Doc 4444 RAC 501, as amended

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by the Council, complete information regarding the Air Traffic Control Organization for international civil aviation within the Region.

3. AIR TRAFFIC CONTROL

3.1 Altimeter setting

3.1.1. Within the oceanic Control Areas, the standard altimeter setting of 1013.2 millebars shall be used for vertical separation.

3.1.2. Within local control areas or flight information regions, the appropriate QNH value for altimeter settings shall be used for purposes of vertical separation.

3.1.3 The change-over from one altimeter setting to the other shall be automatic upon crossing the boundary between an Oceanic Control Area and a Flight Information Region or local Control Area, unless otherwise instructed by Air Traffic Control.

3.2 Special application of Instrument Flight Rules (IFR)

All flights operating through the North Atlantic oceanic control areas and extending 100 nautical miles (180 km) from the shoreline shall comply with Instrument Flight Rules (IFR). The necessity for certain exceptions in the case of military operation aircraft is recognized.

Note: The shoreline is considered to be a line following the general contour of the shore except that in cases of inlets or bays, less than 30 nautical miles (55 km) in width, the line shall be considered to pass directly across the bay or inlet water area to intersect the general contour on the opposite side of such area.

3.3 Air Traffic Control Messages

3.3.1. The Air Traffic Control Messages, as defined in Paragraph 3.8.4. of the COM Procedures for Air Navigation Services, Doc 4478, COM/501 shall in addition to the addresses specified by Air Traffic Control, also be sent to the addresses specified by the operating agency to the airport of first intended landing and/or not more than two operational control centers concerned with the same priority as the Air Traffic Control messages.

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3.3.2. Messages concerning Aircraft movements destined for stations other than those specified in Paragraph 3.3.1. above, which are required by the operating agencies will be initiated by such agencies and be given priority No.14 as contained in Paragraph 3.9. of the COM Procedures for Air Navigation Services, Doc. 4478, COM/501."

3.3.3. Flight Plan

3.3.3.1. It was agreed to adhere to the Flight Plan message prepared by the RAC Division at its third session:

3.3.3.2. It was also agreed that an example showing the use of the elements contained in the Flight Plan should be given and that an example should also be reproduced, to show how these elements would appear in the messages.

3.3.3.3. It was further agreed that certain elements could be deleted by mutual agreement between contracting States in the case of scheduled flights, and that in order to preserve the format of the Flight Plan when any item was not used, the word "NIL" should be inserted in its place.

3.3.3.4. It was also agreed that explanatory notes for the use of an abbreviated Flight Plan should be included in the examples.

3.3.3.5. The Irish Delegate reserved the position of his country in respect of the filing of direct flight plans through intermediate stops (See para 3.3.1.7.1)

3.3.3.6. Description of a flight plan message:

3.3.3.6.1. Order of the elements:

(a) The name of the units used.
(b) The aircraft identification and radio call sign if different from the aircraft identification.
(c) The name of the operator and the flight number, where applicable.
(d) The type of aircraft, or in the case of a formation flight the types and number involved.
(e) The name of the pilot in command of the aircraft, or in the case of a formation flight the name of the formation commander.
(f) The point of departure.
(g) The cruising altitude, or altitudes, and the route to be followed.
(h) The point of first intended landing.
(i) The proposed true air speed at cruising altitude.

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(j) Radio transmitting and receiving frequency or frequencies to be used.
(k) The navigational and approach aids to be used in flight.
(l) The proposed time of departure.
(m) The estimated elapsed time until arrival over the point of first intended landing
(n) The alternate aerodrome or aerodromes to which the aircraft will proceed when a landing at the intended destination becomes inadvisable.
(o) The amount of fuel on board expressed in hours.
(p) The number of persons on board.
(q) Any other pertinent information which the pilot in command of the aircraft, or air traffic control, deems necessary for control purposes.
(r) E.T.A by Zones.

3.3.3.6.2. ETA by Zones. (This information shall be included as element (r) when required and will be indicated as the total estimated elapsed time from point of departure to entry into each successive zone. A zone shall be considered as 10 degrees of latitude or longitude.)

3.3.3.6.3. To indicate the navigational and approach aids to be used in flight, the appropriate code figures from the following group shall be used:

-1, ILS -2, SBA -3-BABS, -4, M/F Range -5, VHF Range -6, GEE, -7, LORAN, -8, RADIO COMPASS, -9, LOOP -0, Consol

. The following example outlines the meaning of the various elements of the flight plan:

Element	As indicated in Flight Plan	Meaning
Unites to be used	5 (or o)	ENGLISH (METRIC)
Aircraft identification	NC97145	Aircraft registration number
	KHGAD	Aircraft radio call sign
	OA0103	Company trip number

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Element	As indicated in Flight Plan	Meaning
Type of aircraft	L49	Lockheed 49
Pilot's name	DOE	
Point of departure	KIGA	New York
Altitude	190	Nineteen thousand
Route of flight	Nantucket, Sable Island, R/L	Via Nantucket, Sable Island on Rhumb Line Course
Point of first intended landing	GAAA	London
Proposed true air speed (knots)	210	210 knots
Radio frequencies	STD FREQ	Standard route frequencies
Navigational and approach aids to be used in flight	I	Instrument landing to be used
Proposed time of departure	291305	Date and time group based on GMT.
Estimated elapsed time until arrival over point of first intended landing expressed in four figure time group	1237	12 hours, 37 minutes
Alternate	GABA	Croydon
Amount of fuel on board expressed	1630	16hours,30 minutes
Number of persons onboard	36	
Any other information	NIL	None
Total estimated elapsed time from Point of departure through each successive zone when required	0052,0310, 0509 etc	52 minutes to 2nd zone; 1 hour and 57 minutes to 3rd zone,etc.

3.3.3.6.4. The following is an example of the text of a flight plan as it will appear in transmission:

"PLN5 NC97145 KHGAD AOA103 L49 DOE KLGA 190 NANTUCKET SABLE ISLAND R/L GAAA 210 ST FREQ I 291305 1237 GABA 1630 36 NIL 0052, 0310, 0509 etc.

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(Notes)

(1) It is recognized that in some cases all of the elements are not required, therefore when such elements are omitted from the standard flight plan the word NIL shall be inserted in lieu thereof.

(2) When aircraft are equipped with standard transmitting and receiving frequencies the abbreviation STD FREQ shall be inserted in lieu of such frequencies.

(3) The flight plan and departure messages shall be combined wherever possible. When a flight plan is transmitted showing ETD the message shall be prefixed by PLN. When the message includes the actual time of departure the message will carry the prefix DEP.

3.3.3.7. A flight plan may be filed through intermediate stops. Information referring to these stops shall be contained in the remarks portion of the flight plan. However, in case of delay of one hour or more in excess of scheduled ground time the flight plan will be refiled or a new flight plan made, whichever is applicable

3.3.3.7.1. When a flight plan has been filed through intermediate stops the number of passengers and fuel on board shall be included in the departure message from each of the intermediate stops.

3.3.4. Delay notice and message

3.3.4.1. When the departure of an aircraft is postponed or appreciably delayed after the proposed time of departure contained in the Flight Plan, the operated company will notify the Area Control by sending a delay notice in the following standard form.

a) Aircraft identification (as shown in the Flight Plan transmitted)

b) Revised ETD expressed as a six figure date-time group.

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c) Any pertinent remarks.

3.3.4.2. Area Control at the point of Departure will pass the message on to all recipients of the relevant Flight Plan.

3.3.5 Cancellation message

When cancellation messages are sent, they shall take the following form:

a) Aircraft identification (as shown in the Flight Plan transmitted).

b) Any pertinent remarks.

3.3.6. Departure Message

3.3.6.1. Immediately after the departure of an aircraft, the aerodrome control at the point of departure will pass to the area control the message as outlined below. The Area Control will pass this message to all recipients of the Flight Plan.

a) Aircraft identification, and if different, radio call sign (as shown in the Flight Plan),

b) Aerodrome of Departure,

c) Actual time aircraft was airborne (using six figure date-time group),

d) Aerodrome of first intended landing,

3.3.6.2. Whenever the Flight Plan has been filed through intermediate stops, the departure message to be sent at each point of departure should contain the number of persons on board, and the amount of fuel on board expressed in hours.

3.3.7. Flight Plan Departure Message

A Flight Plan Message may be combined with a departure message. In this case, the superfluous elements resulting from the combination should be omitted.

3.3.8 Position Report

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3.3.8.1 General

a) On routes defined by specified reporting points, aircraft position reports shall be made when over or immediately after passing reporting points as established for the route being flown, and when over such other reporting points as may be specified by Air Traffic Control.

b) Position reports on routes or portions of routes not defined by specified reporting points, shall be determined as soon as practicable after the first hour of flight from departure time and at each hour of flight thereafter, and shall be transmitted to the ground station at the earliest opportunity.

c) The first position report after passing from one oceanic control area to an adjacent oceanic control area shall be addressed to Oceanic Area Control Centre having control over the area which the aircraft has left, as well as to the Oceanic Area Control Centre within whose area the flight is operating.

d) After the aircraft has crossed both the boundary between two control Areas, and the point of no return, position reports should then be sent only to the Oceanic Area Control centre within whose area the flight is operating or will next operate

3.3.8.2. Coded position report

It was decided that the POMAR Code would be acceptable for use in the North Atlantic Region with the following amendments:

a) Aircraft radio call sign shall in all cases be used in the identification section, (Ia Ia Ia Ia) in the Code.

b) When required by the operating agency, the weight of fuel remaining on board may be stated in the remarks portion of the position report. The title of the third group in the operational part of POMAR Code and the same section in the table

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should be changed to:

ENDURANCE

Remaining Endurance
in hours and minutes

3.3.8.3 Non-Coded Position report

The contexts of a non-coded position report shall consist of the following items in the order listed and shall only be transmitted by radio telephone.

1) Aircraft Identification (as shown in flight plan)

2) Position (Reporting point or position in latitude and longitude. When position is not over a specified reporting point, the means of determining, and octant of the globe where necessary, shall be indicated).

3) Time Position Established (GMT including day if required)

4) Altitude

5) Flight conditions

Visual flight at all levels
Visual flight below clouds
On top
Between layers
Medium icing
Heavy icing
In and out of clouds, 25% IFR conditions,
In and out of clouds, 50% IFR conditions,
Continuous IFR conditions.

6) Track (True) - Course

7) Ground speed

8) Fuel (Endurance in hours and minutes).

(Note : 1 - Items 6, 7 and 8 shall be supplied

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when operating over routes not defined as specified reporting points and when otherwise required.

2- When making weather reports, items may be added to these position reports as specified in the Standards and Recommended Practices for Meteorology.

3.3.8.4. Arrival Message

At the conclusion of each flight, the aerodrome control at the aerodrome of landing shall send an arrival message to the Area Control which will pass this message to other Area controls concerned. The message will be in the following standard form:

a) Aircraft identification, and if different, radio call sign,

b) Time of arrival

c) The identification or name of airport where the aircraft has landed

d) Any pertinent remarks.

END

NA-ATC Draft/21
(lère partie)
25/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

SECTION 1 - CHAIRMAN'S REPORT

PART 1 - HISTORICAL STATEMENT

1.1
Place and Length of Meeting

The Air Traffic Control Committee held ... meetings in the Palais d'Orsay, Paris, between the 18th and ... May 1948, under the Chairmanship of Mr. Rombouts, Delegate of the Netherlands.

1.2
Representation

The following States and International Organizations were represented on the Committee :

Contracting States

Canada	Mr. S.G. Graham	Delegate
	Mr. B.A. Rawson	Alternate
Denmark	Mr. Aa. Mortensen	Delegate
France	Mr. M. Agesilas	Delegate
	Mr. M.E.J. Kungler	Alternate
	Mr. L.L. Lansalot	Alternate
	Mr. de Lamotte	Adviser
	Mr. E.G. Lesage	Adviser
Iceland	Mr. S.H. Gundmundsson	Delegate
Ireland	Mr. J.P. Saul	Delegate
Netherlands	Mr. P.J.C. Rombouts (Chairman)	Delegate
Norway	Mr. F.W. Thesen	Delegate

Portugal	Mr. V. Veres	Delegate
United Kingdom	Mr. K.G. Price (Vice-Chairman)	Delegate
	Mr. B.O. Prowse	Adviser
(Bermuda)	Mr. E.H. Ware	Adviser
(Newfoundland)	Mr. T.M. McGrath	Adviser
United States	Mr. W.B. Swanson	Delegate
	Mr. O.J. Mitchell	Adviser
	Mr. E.R. Mehrling	Adviser
	Mr. E.S. Lee Jr.	Adviser
	Mr. D. Nyrop	Adviser

INTERNATIONAL ORGANIZATIONS

IATA	Mr. C. Williams	Observer
	Mr. Oolgaard	Observer
	Mr. R.G. Flynn	Observer
	Mr. J. Edwards	Observer
	Mr. J.M. Moline	Observer
ICAO	Mr. J. de Vienne	ICAO Representative for RAC
	Miss L. Bouché	Interpreter
	Miss J. Gueguen	Stenographer
	Miss Yonef	Stenographer

1.3
Minutes of Meetings

A record of the proceedings of the Air Traffic Control Committee is contained in the minutes of the meetings held. The minutes do not form part of this Report, but reference to them will be found in the index of documents issued (page ..), which contains a list of all documents issued during the meeting in connection with the work of the Committee.

1.4
Agenda

The Agenda of the ATC Committee was approved by the General Committee at its First Meeting on the 18th of May.

1.5 Working Group

1.5.1 Since some delegations had few members, the Committee decided in principle not to break into working groups. Nevertheless it was agreed that the Committee would constitute itself as a Working Group and meet formally in plenary session to accept the final drafts prepared.

1.5.2 It appeared necessary during the course of the meeting to designate small Working groups to consider specific points, the discussion of which would have delayed too much the work od the Committee or of the main Working Group. The latter was therefore termed "Working Group 1" and the following sub-working groups were formed :

- sub-working group A : to consider any necessary rearrangement of the presently existing control areas and to describe the procedures concerning the changing of altimeter settings when passing from these control areas to domestic control areas.

- sub-working group B : to further consider the procedures concerning the changing of altimeter settings in line with the discussion held on the report of sub-working group A.

- sub-working group C : to consider the question of adding to ATC messages certain addresses on behalf of operating agencies concerned.

- sub-working group D : to prepare examples of a Flight Plan Message to be included in the Regional procedures .

- sub-working group E : to study the existing overlap between the Azores Control area of the North Atlantic region and the Casablanca Sal Flight Information Region of the South Atlantic Region.

1.5.3 A drafting group was also established to help in the preparation of the final report.

1.6 Action by council and by the RAC Division at its third session.

At the first plenary meeting of the Committee, the secretary, representative for the RAC Section of ICAO, gave a summary of the latest action of the Council and of the findings of the RAC Division at its third session held in Montreal from the 20th of April to the 10th of May, with respect to those points

which could be of concern to the Committee. This statement is contained in the minutes of the 1st meeting;Doc NA/6 ATC NA/14.

Appropriate excerpts of the Rules of the Air, recently published by ICAO as Annex 2 to the Convention on International Civil Aviation, and of that part of the RAC 3rd session Final Report concerning amendments to the ATC PANS 3rd edition (Procedures for Air Navigation Services-Air Trafic Control) were reproduced as ATC drafts for information of the members of the Committee.

It was pointed out by the secretary that these matters were not raised for discussion by the Committee, but were brought to its attention as being the basis for supplementary regional procedures.

1.7 Coordination with other Committees of the meeting.

Coordination with the COM, MET and SAR Committees and Sub-Committee 1 of the General Committee was attained through letters or joint working groups, espeially on the subject of :

- Communication requirements for Air Traffic Control Service (COM)
- Information regarding the Ocean Weather stations (MET and Manual working group of Sub-Committee 1.)
- The use of the "Q" groups "QDM" or "QFU" to indicate the direction of a runway (Manual working group of Sub-Committee 1.)
- Altimeter setting (Sub-Committee 1.)
- Provision of in-flight MET information in the Shannon Prestwick Control area (MET)
- Definition of the expression "Uncertainty, Alert and Distress phases" of Search and Rescue (SAR).

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PART II - REPORT ON THE AGENDA

1.8 Agenda item No.1 : Election of officers and determination of a quorum.

1.8.1 The election of officers was deferred until the second meeting, held on the 19th of May, at which Mr. P.J.C. Rombouts, Delegate for Netherlands, was elected unanimously as Chairman.

Mr. K.G. Price, delegate for the United Kingdom, was elected Vice-Chairman.

1.8.2 In accordance with the decision of the general committee at its first meeting, there was no quorum decided, with the proviso that each meeting of the committee should have to be posted on the board before 19.00 the day before the date proposed.

1.9 Agenda item no.2 : Area Control Facilities - Determination of any changes necessary in the present boundaries of control areas, and in the sites of area controls.

1.9.1 The recommendation of the Committee concerning a revision of the boundaries of the North Atlantic control area is contained in section 2 of this report. It should be noted that :

a) the control areas in the North Atlantic situated between the western and eastern boundaries adjacent to the North American and European continents have been described as "Oceanic control areas". In this report, other control areas have been referred to as "Domestic control areas" and for the purpose of change in altimeter setting circular areas have been established around the main trans-atlantic aerodromes located within the Oceanic control area (see Section 2.)

b) the Lisbon-Madrid-Casablanca control area has been abolished. That area has been divided between the "Azores control area" and the "Lisbon Flight Information Region" the latter to be considered as pertaining to the EUMED Region.

c) The proposal by the French Delegation to modify the boundaries of the Paris Flight Information Region

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has been approved by the Committee and recommended to be transmitted to Council for appropriate action.

d) Changes have also been recommended to the boundaries of the Control Area and Flight Information Regions in the south east part of the North Atlantic Region, also the north east part of the South Atlantic Region, in order to eliminate overlaps between these two regions and to rearrange the Lisbon - Madrid and Casablanca control boundaries west of Tangiers.

1.9.2 The Committee also considered the request made by the Iceland Government for financial aid through ICAO. The recommendations of the Committee were transmitted to the General Committee and are contained in Section 4 of this report.

1.9.3 The ATC Committee considered a recommendation by IATA for the establishment of a control area between Goose Bay and Seven Islands. The recommendation is contained in para. 4.3 of this report.

1.10 Agenda item 3 - Regional Procedures - Determination of any changes necessary in the present regional procedures :

1.10.1 The ATC Committee considered the ATC part of the Regional Manual for the North Atlantic (Doc 4500) of the Regional Manual for the European Mediterranean Region (Doc 4600) and the appropriate excerpts of the Final Report of the RAC Division at its third session.

1.10.2 Recommendations for the review of the North Atlantic Regional Procedure for Air Traffic Control are contained in Section 3 of this report.

1.10.3 Basis of the Regional Procedures. - The Regional procedures were developed on the basis of Doc 4444 RAC 501 which was accepted by the Committee to take effect from October 1st 1948 (see Section 3) and it was further agreed that such future amendments as may be approved by the Council,

should automatically come into force within the North Atlantic Region on the date specified by the Council.

1.10.4 Extent of Application of Regional Procedures. The recommendations of the Committee concerning the limits of application of the North Atlantic Regional Procedures are contained in Section 3 of the report.

1.10.5 Sub-item 3.1 - Altitudes to be flown by aircraft when the efficiency of a control service is impaired by difficulty in establishing communication.

1.10.5.1 The recommendations of the Committee on this subject are contained in the review of the Regional Procedures in Section 3 of this report.

1.10.5.1.1 The Delegate for France referred to the reservation made by France at the 3rd RAC Division in Montreal concerning this subject. This reservation is contained in the Final Report of the RAC Division.

I.IO.5.2 A proposal of the United States (Doc NA/85 ATC NA 17) was also considered by the Committee. This document contained a proposed table of altitude in tens of metres to be used in relation with altitudes expressed in thousends of feet. This question was closely discussed by the Committee and it was finally decided by a vote that the altitudes in meters which would be used to correspond to altitudes expressed in thousand of feet should be as indicated in para.2.1.2 page 1-2-2 of the EUMED Regional Procedures.

The Delegate for United States stated that he would file a reservation on the subject and that altitudes in feet should continue to be issued in the New York Oceanic Control area and that it should be the responsibility of the pilots to make the appropriate conversion to the nearest tens of metres.

After statements from the representative of Ireland and the representative of Canada, the

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representative of/United States requested that it be noted that altitudes would be issued in feet in the three largest control areas in the North Atlantic.

The reservation by the representative of the United States is contained in Section 5 of the report.

1.10.6 Sub-item 3.2 - Procedures for reporting position.

The recommendation of the Committee is contained in Section 3 of the report. It should be noted that the POMAR code has been recommended for use in the North Atlantic (This code is already in use in the EUMED Region).

1.10.7 Sub-item 3.3 - Transmission of messages on behalf of operating agencies.

The appropriate recommendations are contained in Section 3 of the report.

1.11 Agenda item 4 - Communications for ATC

1.11.1 Agenda item 4.1 - Adequacy of telecommunications facilities available to ATC services.

The recommendations of the Committee are contained in section 2 of the report.

1.11.2 Agenda item 4.2 - Standardisation of message forms

1.11.2.1 The recommendations of the Committee are contained in Section 3 of the report.

1.11.2.2 It should be noted that some provisions which were not detailed in the recommendations of the RAC Division at its 3rd Session have been introduced to indicate clearly the measure in which abbreviated Flight Plans messages and combined departure Flight Plan messages should be filed.

1.11.3 Agenda item 4.3 - Standardisation of notification to operating agencies.

1.11.3.1 The recommendation of the Committee is contained in Section 3 of the report.

1.11.3.2 The Committee also reviewed certain Air Traffic Control messages that had been transmitted in accordance with the procedures specified in paragraph 3 of Doc 4500 (COM Procedures) and found that in certain instances the privilege of operating agencies to specify addressees had been used to excess. For example, on one day, one station handled nine aircraft movements for one company involving 18 messages, 71addresses and 46 transmissions. The Committee therefore strongly recommended that all operating agencies review their requirements for the transmission of aircraft movement messages and that they take corrective action to comply with the above procedures.

1.12 Agenda item 5 - Preparation of Final Report for presentation to the General Committee.

1.12.1 The Final Report was presented to the Committee in draft form at its 5th meeting on May 26th.

1.12.2 The Chairman was delegated authority by the Committee to complete the Final Report in accordance with the decision taken by the Committee at the 5th meeting. He was also given authority to approve the minutes of that meeting.

1.13 Miscellaneous

1.13.1 Inter centre coordination

The Committee considered a proposal by the United States for establishing close contact between Air Traffic Control personnel. This recommendation is contained in Section 4 of the report.

1.13.2 Information on Ocean Weather Stations.

Recommendations on this subject are contained in Section 4.

- END -

(Second part of ATC Draft NA/21)

SECTION 2

Report and recommendations or facilities

2.1. Description of North Atlantic Control Areas and location of Control Centres.

2.1.1. The boundaries of the North Atlantic Control Areas are hereby redefined as follows :

2.1.1.1. The Northern limit of the control areas is the Arctic Circle.

2.1.1.2. The Eastern limit of the control areas is determined by a line beginning on the Arctic Circle at longitude 11°00'E and passing through the following points :

62°00'N	04°00'E	;	61°00'N	01°00'W	;
61°00'N	08°00'W	;	59°00'N	08°00'W	;
56°00'N	13°00'W	;	50°00'N	13°00'W	;
48°50'N	08°00'W	;	45°00'N	08°00'W	;
43°00'N	13°00'W	;	30°00'N	13°00'W	;

2.1.1.3. The Western limit of the control areas is determined by a line beginning on the Arctic Circle at longitude 60°00'W and passing through the following points :

60°00'N	60°00'W	;	50°00'N	51°00'W	;
45°00'N	51°00'W	;	45°00'N	58°00'W	;
40°00'N	68°00'W	;	30°00'N	79°00'W	;

2.1.1.4. The Southern limit of the control areas is the parallel of latitude 30° North.

2.1.1.5. Within these limits there shall be six Oceanic control areas, separated by :

2.1.1.5.1. The parallel of 43°00'N from the meridian of 13°00'W to the meridian of 45°00'W thence a line to the point 45°00'N 51°00'W ;

2.1.1.5.2. The parallel of 61°00'N from the meridian of 08°00'W to the meridian of 30°00'W, thence through the points 59°00'N 30°00'W and 59°00'N ; 43°00'W to the point 60°00'N 43°00'W ;

2.1.1.5.3. The meridian of 30°00'W from the parallel of 61°00'N to parallel of 43°00'N ;

2.1.1.5.4. The meridian of 01°00'W from the Arctic Circle to the parallel of 61°00'N ;

2.1.1.5.5. The east coast of Greenland from the Arctic Circle to the point 60°00'N 43°00'W ;

2.1.1.5.6. The meridian of 45°00'W from the parallel of 43°00'N to the parallel of 30°00'N.

2.1.1.6. For the purpose of determining the altimeter setting, the areas within circles of approximately 100 nautical miles radius from Kindley Field, Bermuda, Santa Maria, Azores, Keflavik, Iceland and B.W.I., Greenland shall be excluded from the Oceanic Control Areas.

2.1.1.7. The lower limit of Oceanic control areas is 600 metres (2000 feet) above the surface of the water.

2.1.2. The six control areas described above and the appropriate area control centre should be designated as follows :

Control Areas	Location of Area Control centres
Iceland	Reykjavik
Stavanger	Sola
Shannon-Prestwick	Shannon Prestwick
Azores	Santa Maria
New York	New York
Moncton	Moncton

2.1.3. All other areas within the formerly defined North Atlantic Area shall be considered as Flight Information Regions, in which local control areas may be established as necessary, and within which domestic flight rules shall apply. The lower limit of these local control areas shall be 200 metres (700 feet) above the water, or the lower limit established for the adjacent domestic control areas.

2.1.4. Approach control and aerodrome control should be established to serve all regular international airports serving or within the North Atlantic control areas.

Control zones should also be established at those locations, the designation of which should be left to States concerned.

2.1.5. It is recommended that the air space below the lower limit of the Oceanic control areas should be considered as Flight Information Regions in which the area control responsible for the control area above shall provide flight information service.

2.1.6. The Committee recognizes that, although full air traffic control service may in some cases be difficult to + in the provide+Oceanic Control areas, it is an objective towards which all efforts should be directed. It is considered that Air Traffic Control Personnel and Operating Agencies should maintain the closest liaison and cooperation for their own mutual interests, and that the review of the Regional Procedures made at this meeting will contribute generally towards a more efficient ATC Service.

2.1.7. The Western and eastern boundaries of the Oceanic con- + having trol areas+been established at a distance of about 100 nautical miles from coastline, the Committee accordingly recommends that :

2.1.7.1. Control areas should be designated for the purpose of linking up the Oceanic Control Areas with the domestic control areas and that their designation be left to the States concerned, taking into account the requirements of North Atlantic operations in that area. The lower and upper limits of such control areas will be the same as those of the domestic control areas existing at present.

2.1.8. The Committee considered a proposal made by the French Delegation that the boundaries of the Paris Flight Information Region be modified to avoid North Atlantic Flights to Paris crossing the Gloucester and Madrid Flight Information Regions respectively. As this proposal concerned both the North Atlantic and European Mediterranean Regions, it was felt that the Committee was entitled to make appropriate recommendations.

2.1.8.1. The Delegate for United Kingdom indicated that he agreed with the proposal and the Committee therefore recommends that the relevant modification be included in the Final Report for appropriate action by Council.

Section 2

2.1.8.2. The proposal was as follows :

(1) The French Government requests that the boundaries of the Paris Flight Information Region be amended as follows :

(1.1.) Northern Boundary

- from the Belgium frontier to Meridian 02°00' following parallel 51°00' North
- from the above position to position 50°00' North/02°00' West.
- from the above position to position 48°50' North/08°00' West.

(1.2.) Western Boundary

- Meridian 08°00' West, latitude 48°50' North to latitude 45°00' North.

(1.3.) Southern Boundary.

- from position 45°00' North/08°00' West to position 44°20' North/04°00' West.

(2) The above changes entail the following alterations :

(2.1.) Gloucester Flight Information Region

(2.1.1.) Southern Boundary
Merging with North/West boundary of Paris

(2.1.2.) Western Boundary
The Western meridian 08°00', latitude 48°50' North, to latitude 50°00' North.

(2.2?) Madrid Flight Information Region

(2.2.1.) Northern Boundary
-From the Pyrenean frontier to position 44°20' North/04°00' West merging with the Southern Boundary of the Bordeaux Flight Information Region.

Section 2

- From the above stated point to point 45°00'N/08°00'West : merging with the Southern Boundary of the Paris Flight Information Region.

(2.2.2.) Western Boundary
-From point 45°00'N/08°00'W to point 43°00'N I0°00'W.

(3) Channels Isles

(3.1.) The control area of the Channel Isles extends between sea level and an altitude of 1000 metres and is bounded as follow :

(3.1.1.) To the North :
-by the Southern limit of the Glou cester Glight Information Region

(3.1.2.) To the East :
-by the meridian 02°00' West, from latitude 50°00' North to latitude 49°02' West.

(3.1.3.) To the South
-by parallel 49°02' North from the meridian of 02°00' West to the meridian of 02°20' West.

(3.1.4.) To the West :
-from the point previously defined to position 49°25' N/03°00' W then from the meridian of 03°00'W to the Southern limit of the Gloucester Flight Information Region.

2.1.9. The ATC Committee further recommends the following amendments to the boundaries of control areas and flight information region in the south east part and north part of the North Atlantic and South Atlantic regions respectively to avoid overlaps between the Azores control area. and the Casablanca SAL Flight Information Region.

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

AIR TRAFFIC CONTROL COMMITTEE

2.2.
Communication requirements for Air Traffic Control Services

2.2.1.
The ATC Committee confirmed that the communication requirements for Air Traffic Control Services, were as described in Appendix E of the Final Report of the Second Session of the RAC Division (Doc 2601 RAC 135).

2.2.2.
The Air Traffic Control Committee recognized that these requirements may be considered optimistic at the present time. Nevertheless, every effort should be made to improve ATC Communications to the standards outlined in para. 2.2.1. It was therefore recommended to the COM Committee that these requirements be kept in mind when discussing the means by which Air Traffic Control messages will be transmitted.

2.2.3.
Point to point Communications

2.2.3.1.
Appreciating the difficulties which are now experienced for the operation of telecommunications, the ATC Committee recognized that point to point telecommunications within the North Atlantic Control Areas proper are considered to be generally satisfactory at the present time. However, the COM Committee was requested to consider the practicability of improving as soon as possible the following telecommunications where delays actually experienced in the transmission of Air Traffic Control messages have materially affected the efficiency of Air Traffic Control Service:

(a)
- Moncton to Gander
- Moncton to Goose Bay
- Goose Bay to Seven Islands
- B W 1. (Greenland) to Reykjavik (The circuit presently in operation between Reykjavik and B W 1. should be kept in operation)
- Shannon to Paris
- Lisbon to Casablanca
- Lisbon to Santa Maria
- Santa Maria to Casablanca
- Bermuda to Santa Maria

(b) The following were added at the request of the IATA observer, to be called to the attention of the COM Committee :

- Stephensville to Moncton
- Goose Bay to Iceland
- Iceland to Gander
- Iceland to Prestwick

2.2.3.2.
The ATC Committee also recommended that the COM Committee take appropriate action to implement communications by teletype, either radio or landline, between the North Atlantic Area Control Centres and other Area Control Centres of Control Areas within which international airports used by North Atlantic flights are situated.

2.2.4.
Air Ground Communications. The ATC Committee recognised that air ground communications within the North Atlantic Control Areas are satisfactory for air traffic control purposes at the present time. However, the committee recommended to the COM Committee that:

2.2.4.1.
whenever possible radiotelephony should be used for ATC Air/Ground communications serving flights within North Atlantic Control Areas.

2.2.4.2.
It is desirable that all Area Control centres serving North Atlantic Control areas be equipped for radiotelephone communication between aircraft and air traffic control. In respect to radiotelephone air/ground communications, it should be noted that radiotelephone facilities are presently being used for air/ground communications in the Shannon-Prestwick and the New York Control Areas.

2.2.5.
Transmission of messages on behalf of the operating agencies.

2.2.5.1.
The ATC Committee recognized that it is necessary to handle certain operational messages on air traffic control channels.

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Section 3
(continued)

2.2.5.2.
In this connection, the ATC Committee recommended to the COM Committee that an additionnal class of messages i.e. OPN CTL (Operation Control) be established by ICAO. Such class of messages to be used by the Operating Agency, and the aircraft of such agency, for the exercise of operational control. The priority of such messages should follow that of CTL messages.

2.2.5.3.
The exact term OPN CTL, was used merely for purposes of demonstration, and it might be the desire of COM to use another group of letters or term in order that there be absolutely no chance of confusing an air traffic control message with that of an operating agency.

2.2.5.4.
Appropriate action on this Item, i.e. reference to the COM Division, was left to the COM Committee.

(ATC NA Draft 21 - 3rd part)

Section 4

Resolutions and additionnal requirements

4.1. Request from the government of Iceland for financial aid.

1. The ATC Committee considered Doc 5122-JS/520, Doc NA 20-ATC-NA 14 and Doc NA 67 - GC-NA/14 concerning a request from the Government of Iceland to obtain financial aid through ICAO for the maintenance of certain Air Navigation facilities and services.

2. The ATC Committee confined consideration of this question to a review of the Air Traffic Control services in Iceland which are considered to be necessary to ensure safety and regularity of international Air Navigation in the North Atlantic Region.

3. The ATC Committee recommends that :

3.1. The Area Control in Iceland should be maintained in continuous operation as it is required to protect and safeguard North Atlantic international air operations through the Iceland control area;

3.2. the location of the Area Control in Iceland should be changed from Reykjavik to Keflavik when appropriate facilities and accommodation are available at the latter, in order to improve Air Traffic Control Service by the closer coordination between Area Control Personnel, MET personnel, operating agencies and pilots.

3.3. approach Control and aerodrome Control at Keflavik should be retained as they are required for North Atlantic international air operations.

3.4. approach Control at Reykjavik is not necessary for North Atlantic international operations.

Note. It was noted that Aerodrome Control at Reykjavik is provided by Iceland as it is justified predominantly for domestic services (see Note, page 34 of Doc 5122 JS 520).

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4. The delegates for Canada and France were convinced that the Control Area of Iceland was not required for trans North Atlantic operations and requested that this be recorded in the report. They were, however, in agreement with the recommendations of the Committee that Approach Control Service at Keflavik was necessary for such operations and should be retained.

4.2 Inter-Center Coordination

The Committee recommends that operational level informal meetings, consisting of representatives of each control center and communication station serving the control center, be held preferably semi-annually, but not less than annually, for the purpose of effecting necessary inter-center coordination and development of recommendations for the improvement of the services provided. Representatives at these meetings should forward such recommendations to their respective States.

4.3. Control Area between Goose Bay and Seven Island

The Committee noted the recommendation of the IATA delegate that a control area be established from Goose Bay to Seven Island, north of the present Canadian domestic control areas boundary, and recommends that Canada investigate the possibility of meeting this requirement.

4.4. Information on Ocean Weather Stations.

4.4.1. The ATC Committee recommends that the movements of ocean weather stations, when they are off station, should be the subject of information issued through class 1 NOTAMS and made available to ATC on both sides of the Atlantic as this information is of interest to operating agencies.

4.4.2. The ATC Committee also requested the MET Committee to investigate the possibility of inserting in this route forecast the correct position of ocean weather stations.

END

ATC Draft NA/22
26/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Minutes of the Fourth Meeting

(Salon Louis XV, Palais d'Orsay on Monday 25th at 0945 hours)

Present:

DELEGATES

Mr. E.J. Kungler	France
Mr. K.G. Price (Vice-Chairman)	United Kingdom
Mr. J.P. Saul	Ireland
Mr. W.B. Swanson	United States
Mr. Aa. Mortensen	Denmark
Mr. P.J.C. Rombouts (Chairman)	Netherlands

ALTERNATES AND ADVISERS

Mr. T.M. Mc Grath (Newfoundland)	United Kingdom
Mr. E.M. Ware	United Kingdom (Bermuda)
Mr. E.S. Lee	United States
Mr. L.L. Lansalot	France
Mr. Q.J. Mitchell	United States
Mr. B.O. Prowse	United Kingdom
Mr. E.L. Lesage	France

INTERNATIONAL ORGANIZATIONS

Mr. C. Williams	IATA
Mr. R.G. Flynn	IATA
Mr. J. Edwards	IATA
Mr. J.M. Meline	IATA

ICAO

Mr. J. de Vienne	ICAO Representative for RAC
Miss L. Bouchê	Interpreter
Miss J. Guegan	Stenographer

1. The meeting was called to order at 0945 by Mr. Rombouts Chairman.

2. The Delegate for United Kingdom proposed that a recess be allowed for about one hour in order to enable the members of the Committee to read the documents presented. He hoped that this would speed up their acceptation by the Committee.

3. There being no objection to this course of action, the Chairman declared the meeting adjourned until 1045.

4. The meeting resumed its work at 1045.

5. Approval of the minutes of Third Meeting.
The minutes of the Third Meeting were adopted without amendment.

6. Air space reservations -
The Committee considered a proposal by the United States. On a motion by the Delegate for United Kingdom, seconded by the Delegate for Ireland the proposal was adopted.

7. Use of the expression QDM and QFU in the Manual.
To answer a question by the Manual working group of Sub-Committee 1, the Delegate for United Kingdom moved that the terms "QFU" be used in place of the term "QDM" in the North Atlantic Manual, pages 3.3.1. to 3.3.7. to indicate the magnetic direction of the runways of an aerodrome. This was seconded by the Delegate for France. There being no comments to the contrary, the Chairman declared the proposal adopted and that the Manual working group should be informed.

8. Reports from Working Group 1 -

8.1. Recommendations for the amendment of the North Atlantic Control area were accepted with the following modifications:

8.1.1. In paragraph 1.2., 7th line read "48°50'" instead of "50°00'" North.

8.1.2. In paragraph 1.5. read "six" Oceanic control areas instead of "seven" control areas.

8.1.3. Delete paragraph 1.5.6.

8.1.4. Paragraph 1.6. read: "For the purpose of determining the altimeter setting, the areas within circles of approximately 100 nautical miles radius from Kindley Field, Bermuda; Santa Maria, Azores; Keflavik, Iceland and B.W.I., Greenland, shall be excluded from the Oceanic control areas.

8.1.5. Paragraph 1.7. insert "2,000 feet" between "is" and "above".

8.1.6. Paragraph 2; at the end of the third line add the following: "and within which domestic flight rules shall apply".

8.1.7. Paragraph 5, replace "redefined North Atlantic" by "Oceanic".

8.1.8. Throughout the whole document replace "North Atlantic Control Areas" by "Oceanic Control Areas".

8.2. The Delegate for United States said that the Delegate for Iceland had requested him to inform the Committee of his desire to extend the circle proposed in para. 1.6. of Draft 13 to include all the area within 100 miles of the coast of Iceland. There being no support for the proposal, it failed.

8.3. The Delegate for IATA objected to the change of altimeter setting being considered independently of exercise of air traffic control. IATA maintain the position that a change in altimeter setting would be made during ascent to or descent from cruising altitude when aircraft are operating under the terms of a definite clearance from air traffic control. He considered that para. 1.6. and 2. of Draft 13 inferred that altimeter setting transition could take place within flight information region. It was further the position of IATA that aircraft should not operate over land areas on a standard altimeter setting.

9. Addressing of ATC Messages -
A draft was accepted after minor amendment.

10. The Committee considered recommendations from Working Group N° 1.

11. It was noted that the proposed change to the boundary of the Shannon-Prestwick control area as originally proposed by Sub-Working group A had already been taken care of.

11.1. After amendments, the proposals were adopted.

12. The meeting recesses at 1 o'clock for lunch.

13. The meeting resumed its work at 1435.

14. Establishment of a control area from Gooso Bay to Seven Island
The Committee recommended the following for inclusion in the final report:

"The Committee noted the recommendation of the IATA Delegate that a control area be established from Goose Bay to Seven Island, north of the present Canadian domestic control areas boundary, and recommends that Canada inverstigate the possibility of meeting this requirement."

15. Implementation of the findings of the meeting.
It was moved by the Delegate for United Kingdom, and seconded by the Delegate for Ireland, that the recommendations of this Committee concerning the "new control area boundaries" and the "Regional Procedures" be implemented October 1st 1948. There being no comments to the contrary, this motion was carried.

16. Conversion table "feet to metres"

16.1. The Committee considered a table proposed by the Delegate for United States for the conversion of altitude assignments from feet to metres, or vice-versa, contained in Doc NA 85 ATC NA/17.

16.2. A motion was made by the Delegate for France that in place of this table, the altitudes shown in Paragraph 2.1.2. page 1.2.2. of the Regional Procedures for EUROPE MEDITERRANEAN Region be used to allocate altitude in metric units. This was seconded by the Delegate for Norway and supported by the Delegate for Denmark.

16.3. The Delegate for United States withdrew his proposal as contained in Doc NA/85 ATC NA/17 and suggested that the following wording be inserted in the regionalprocedures: "The States should use their prerogative to issue altitude assignments in feet or metres. The conversion should be made by the pilot to the nearest 10 metres or 100 feet".

16.4. The Delegate for Ireland indicated that he would support the use in the North Atlantic of the altitudes shown in the European-Mediterranean Regional Procedures, to avoid use of two different tables by air traffic control units in charge of both EUMED and North Atlantic traffic.

16.5. The Delegate for IATA stated that the EUMED Procedures were satisfactory for use in the North Atlantic, but he stated that in order to permit standardisation on a world wide basis and have only one procedure followed by pilots he was of the opinion that the proposal by the Delegate for United States should be accepted.

16.6. The Chairman asked the Committee to take position on the motion which had been tabled by France and had to be disposed of, since the Delegate for France maintained his motion. A vote was taken as follows:

- to apply metric equivalents as shown in the EUMED regional procedures: France, Denmark, Iceland, Norway,
- against: Canada, United Kingdom, United States,
- abstaining: Iceland.

16.7. The Chairman therefore declared that the motion was carried.

16.8. The Delegate for Norway having indicated that he was empowered by the Swedish Delegation to vote in their name, this was not accepted by the Committee because it had been decided by the General Committee that the ATC Committee did not require a quorum. The Delegate for Norway therefore requested that it be investigated by the Secretary General if this ruling was correct. He did not question the issue of the vote in which the motion that he favoured has been carried, but indicated his desire to be informed about this question of procedure.

16.9. The Delegate for United States indicated that he would reserve his position on this decision as:

16.9.1. The altitude in metres decided to be used as equivalent to altitude in feet expressed in round numbers could not be implemented in Western Atlantic.

16.9.2. These altitudes were downgrading the vertical separation of aircraft.

16.9.3. He further stated that aircraft flying in the New York Control Area would continue to be assigned altitudes in thousands of feet and it would be the responsibility of the pilots to convert these altitudes into metres to the nearest 10 metres.

16.10. The Delegate for Canada associated himself with the last remarks of the United States Delegate. He stated that, in a control area, altitudes are at present given in feet and will continue to be, but that Canada will do its best to abide by the decision taken by a majority vote although it was not thought the decision just carried would be possible of implementation.

16.11. The Delegate for United Kingdom indicated that he had also to associate himself with the reservations made by the Delegate for United States and Canada as far as Newfoundland was concerned.

16.

16.12. In reply to a question by the Delegate for United States, the Delegate for Ireland indicated that Ireland will assign altitude in feet in the Shannon-Prestwick control area and the Delegate for Iceland stated that he was not in a position to answer that question.

16.13. The Delegate for United States stated that it be recorded that the previous discussion had shown that altitudes in thousand of feet would continue to be issued in the three largest control areas of the North Atlantic Region.

17. The Chairman was obliged to leave the chair due to other duties and Mr. Price, the Vice-Chairman took place.

18. Inter center coordination -

The Committee considered Doc NA/86 ATC NA/18 and decided to insert it in the final report as a recommendation of the Committee.

19. Information on Ocean weather stations -

19.1 The Committee considered Doc NA/65 ATC NA/10. Mr. Haguenau of the French Delegation stated why this paper had been tabled and the action which had recently been taken by the MET Committee.

19.2 The ATC Committee decided to recommend to Sub-Committee 1 that the movements of ocean weather stations, when they are off station, should be the subject of information issued through class 1 NOTAMS and made available to ATC on both sides of the Atlantic as this information is of interest to operating agencies.

19.3 The Delegate for Ireland indicated that it would be necessary to notify the movements of weather ships in class 1 NOTAMS, which should be issued in due time and made available to Air Traffic Control. He added that this should be a recommendation to the Manual Working group of Sub-Committee 1. The Delegate for United States associated himself with the comments of the Delegate for Ireland and suggested that the recommendation should indicate that these NOTAMS be addressed on both sides of the

Atlantic as the information was of interest to Operating Agencies. He proposed that the recommendation refer to the movement of the Ocean weather stations when they were off stations.

19.4 The Delegates for Norway and Canada also indicated their support for the previous recommendations.

19.5 The Delegate for United Kingdom further recommended that a letter be sent to the MET Committee to suggest that the correct position of the Ocean weather stations be inserted in the route forecast. This was accepted by the Committee.

19.6 The Chairman indicated that the letter to the Manual Working Group and the MET Committee would be sent in accordance with the decisions of the ATC Committee.

20. The Secretary at the request of the Chairman pointed out that there remained only the Regional Procedures to be completed to cover the items of the Agenda; and it was decided that the Working Group 1 should meet on the 25th May at 0930 to review these Regional procedures.

21. 5th meeting -

It was decided that the 5th meeting should take place on Wednesday 26th in the afternoon with a view to complete the action of the ATC Committee.

22. Other business -

2..1 The Delegate for France raised the point that there was an overlap between the "Azores Control Area" as accepted by the ATC Committee and the "Casablanca-Sal flight information region" in the south Atlantic region. He further indicated that he had discussed the point with the Delegate for Portugal and that he would be in a position to table a definite proposal on the subject on the 25th.

It was decided that a working group should be composed of Portugal, France, Ireland and the United States to study the necessary re-arrangements of the boundary of the above referred control area and flight information region and that this proposal should be brought up on Wednesday afternoon at the full meeting of the Committee.

22.2 The Secretary called the attention of the meeting to the fact that SAR Committee had studied the proposal contained in Doc NA/17 ATC NA/15 to change the wording of the first paragraph on the "uncertainty alert phases" of Doc NA/69 SAR NA/8 page 2.

It was the desire of the SAR Committee that their original wording Doc NA/69 SAR NA/8 be used as much as possible and that in the third line of each of paragraphs 3.2 and 3.3 the word "if" be changed to read "when" and the words "should have been received" be added after the words "position report". This was considered satisfactory by the ATC Committee and it was decided to accept it.

23. There being no other business the meeting was adjourned at 1815.

- END -

NA/ATC/Draft 23
25.5.48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

Subject : Second Report of Working Group N°1 on Agenda Item 3

1.
In association with the first report this second report presents the agreements reached in the Working Group in respect of the supplementary Regional Procedures considered necessary for application in the North Atlantic Region.

2.
Control Coordination
This item was accepted as contained in Doc 4500 paras 4 & 4.1. Regional Procedures -ATC.

3.
Special Arrangements between Shannon and Prestwick Area Controls
It was agreed that paras 8, 8.1., 8.1.1., 8.1.2. & 8.1.3. as contained in the North Atlantic Regional Manual should be retained with the following addition to para. 8.1.2 :-

> "In the case of other aircraft operating through this control area, the control centre to which the Flight Plan is originally addressed will be the centre in control of the Flight through the area, and meteorological and communications responsibility will follow accordingly. Should difficulties of communication render a change of area control centre unavoidable, the aircraft or centre initiating the change will notify all other parties concerned.

4.
Special Arrangements between Lisbon, Madrid and Casablanca
Paragraphs 8.2, 8.2.1., 8.2.2., and 8.2.3. were agreed to be deleted from the Regional Manual as they do not apply in the absence of the Lisbon/Madrid/Casablanca Control Area which has been abolished.

4.1 Flight altitudes
The flight altitudes to be adopted for separation of aircraft will be based on even thousands of feet for Eastbound aircraft and odd thousands of feet for Westbound aircraft unless otherwise instructed by A.T.C.

.../...

4.2
In the case of inability to estalbish or maintain communication with a Control Centre the aircraft should proceed according to the altitude specified in the Flight Plan.

5.
Approach Control procedure under I.F.R.
Paras 3, 3.1. and 3.2. Regional Procedures ATC as contained in Doc 4600 EUMED Regional Procedures was considered suitable with the following amendments to para 3.1.:

4th line, after the word "practicable", add "and in any event not later than the time of entry into the airspace which is under the jurisdiction of such approach control".

6.
Standard Instrument approach to Landing Procedures
This section was agreed as contained in paras 4, 4.1., 4.2., 4.3., 4.3.1., 4.3.2., 4.3.3., 4.3.4., 4.3.5., 4.3.6., Regional Procedures ATC in Doc 4600 EUMED Regional Procedures.

7.
Definition of Operational Control Service
This was agreed as recommended by the RAC Division at its third session :

Operational Control is that control exercised by the operating agency or its designated representative for the movement of its aircraft with respect to the responsibility for initiating, continuing, diverting or terminating flight, and for decisions as to whether aircraft may or may not land or take off at an aerodrome with regard to weather minima.

The Working Group considers, in respect to operational control, that the State in whose territory the aerodrome is located should have amending authority with regard to weather minima.

8.
Coordination with Operational Control
This section was agreed as recommended by the RAC Division at its third session :

8.1
The Air Traffic Control Service in carrying out its objectives shall have due regard for the requirements of the Operational Control Service provided by the operating agency in accordance with the provisions of the Standards of International Air Service Operations and, if so required by the operating agency, shall make available to the agency or its designated representative full information pertaining to the conduct of flights

.../...

to enable such agency or designated representative to carry out its responsibilities.

8.2.
If so desired by the operating agency concerned, all messages and position reports from scheduled aircraft received by the communications stations shall be made available to the operating agency concerned or its designated representative, simultaneously with their delivery to area control.

8.3
Operational Control instructions involving a change in flight plan shall be coordinated with area control before transmission to the aircraft.

8.4
Air Traffic Control instructions issued by area control shall be routed to the operating agency or its designated representative in accordance with agreed local procedures.

8.4.1
When the delay caused by effecting the coordination described above would prejudice the safe separation of aircraft, Air Traffic Control shall first issue appropriate instructions to alleviate the situation, and then notify the operating agency or its designated representative as soon as practicable.

9.
Weather Information for Landing
This section was agreed as contained in para 6 Provisional Supplementary Air Traffic Procedures - ATC in Doc 4600 EU/ED Regional Procedures.

10.
Emergency Procedures
These are contained in PANS-ATC and also in RAC Standards and were therefore not considered necessary for inclusion in Regional Procedures.

11.
Call up and Answering Procedures
These are contained in COM Doc 501 and were therefore not considered necessary for inclusion in the Regional Procedures.

12.
VFR and IFR
These were not considered necessary for inclusion in Regional Procedures as they are covered by RAC Standards (Annex 2 - Rules of the Air).

.../...

I3.
Avoidance of Collisions
This was also not considered necessary of inclusion in Regional Procedures as it is contained in PANS-ATC Doc 4444 RAC 501.

I4.
Control of VFR Flights
This is also contained in PANS-ATC and is not considered necessary for inclusion in Regional Procedures.

- END -

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26/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

ORDER OF BUSINESS

FIFTH PLENARY MEETING

1. Approval of minutes of Fourth meeting (Draft ATC NA/22)

2. Letter to COM on Doc NA/75 ATC NA.11

3. Consideration of reports of working group N° 1.

   - Report N°1 (NA ATC Draft 20)

   - Report N°2 (NA ATC Draft 23)

   (Note - Some paragraphs already accepted by the Committee have been included in these two reports in order to consolidate the material concerning Regional Procedures)

4. Consideration of Draft Final Report (NA ATC Draft 21)

5. Modification to the boundaries of the Azores control area and the appropriate recommendation for the modification of the Casablanca SAL Flight information region (South Atlantic Region 1)

6. Selection of time and place for the sixth meeting.

7. Any other business.

- END -

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ORGANISATION DE L'AVIATION CIVILE INTERNATIONALE

REUNION REGIONALE DE NAVIGATION AERIENNE POUR L'ATLANTIQUE-NORD

PARIS, MAI 1948

COMITE DU CONTROLE DE LA CIRCULATION AERIENNE

Présenté par les Délégations portugaise et française :

QUESTION N° 2 -

Propositions franco-portugaises concernant les limites maritimes des Régions de Lisbonne, de Madrid, de Casablanca, Sal et Açores.

1.- Les Délégations portugaises et françaises demandent que les limites des Régions précitées soient modifiées comme suit :

1.1.- Région d'information de vol de Lisbonne :
- de la frontière hispano-portugaise au point 35°20'Nord 7°23'Ouest en suivant le méridien 7°23'Ouest.
- du point 35°20'Nord 7°23'Ouest, au point 35°20' Nord 13°00'Ouest en suivant le parallèle 35°20' Nord.

1.2.- Région d'information de vol Casablanca-Sal.
- de la frontière franco-espagnole du Maroc au point 35°20'Nord 7°23'Ouest.
- du point 35°20' Nord 7°23'Ouest au point 35°20' Nord 13°00'Ouest en suivant le parallèle 35°20' Nord.
- du point 35°20'Nord 13°00'Ouest au point 30°00' Nord 20°00'Ouest.
- du point 30°00' Nord 21°00'Ouest au point 30°00' Nord 48°00'Ouest.

1.3.- Région de Contrôle océanique des Açores.
- Limite Est confondue avec la limite ouest de la Région d'information de vol de Lisbonne.
- Limite Sud confondue avec la limite Nord de la Région d'information de vol de Casablanca-Sal.

1.4.- Région d'information de vol de Madrid :
- de la frontière hispano-portugaise au point 35°30'Nord 7°23'Ouest.

- et de ce point à la frontière franco-espagnole du Maroc.

2.- Raisons ayant motivé cette demande :

Harmoniser les régions d'information de vol de Lisbonne et de Casablanca-Sal avec les dispositions des nouvelles Régions de Contrôle océaniques de l'Atlantique-Nord.

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27/5/48

INTERNATIONAL CIVIL AVIATION ORGANIZATION

NORTH ATLANTIC REGIONAL AIR NAVIGATION MEETING

PARIS, MAY 1948

AIR TRAFFIC CONTROL COMMITTEE

ORDER OF BUSINESS

SIXTH PLENARY MEETING

(Salle Louis XV - 15.00 - 27th May 1948)

1.
Approval of minutes of Fifth meeting (Draft ATC NA/26)

2.
Presentation of the Final Report (Doc NA 209-ATC NA 25)

3.
Letter from Chairman of SC.1 on Doc NA 106 GC/Sub 1/NA 5

4.
Definition of an "Oceanic Control Area - A control area established over international waters."

5.
Statement of the action by this COM Committee on the ATC requirements for flight clearance operational messages.

6.
Delegation of authority to the Chairman:

6.1.
to approve outstanding minutes

6.2.
to amend and complete the final report in line with actions taken at the 6th or further meetings -

6.3.
to call a further meeting in case that other business is referred to the ATC Committee by other committees.

6.4.
to declare the session closed when no other business is expected.

7.
Any other business.

- END -