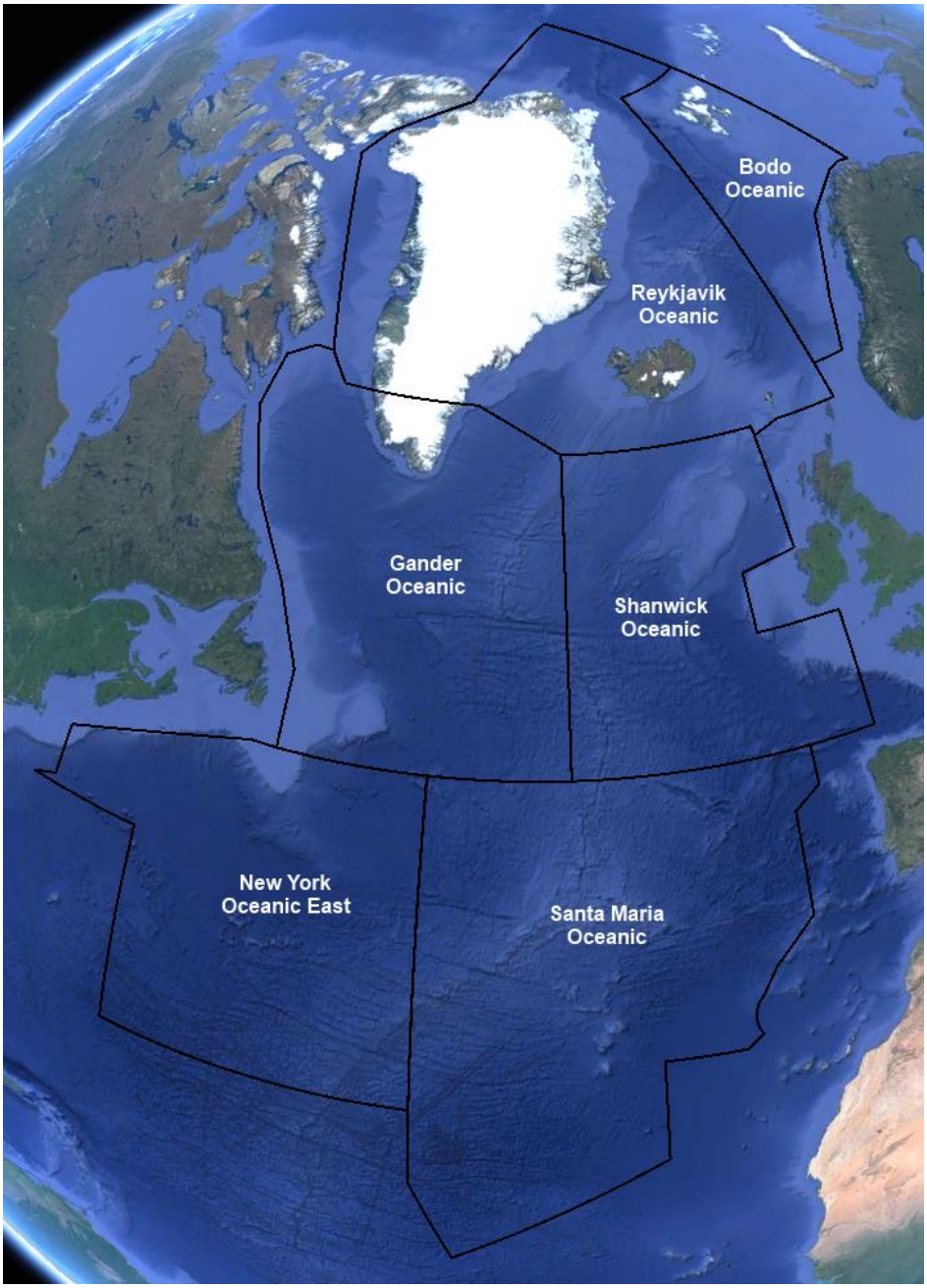
AIR TRAFFIC MANAGEMENT OPERATIONAL CONTINGENCY PLAN

NORTH ATLANTIC REGION



First Edition

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FOREWORD

This Document is for guidance only. Regulatory material relating to North Atlantic aircraft operations is contained in relevant ICAO Annexes, PANS/ATM (Doc.4444), Regional Supplementary Procedures (Doc.7030), State AIPs and current NOTAMs, which should be read in conjunction with the material contained in this Document.

The North Atlantic region is busiest oceanic airspace in the world, extending from the North Pole to 27N and spanning the high seas between Europe and North America. In 2008 in excess of 450,000 flights transited the airspace. The Organised Track Structure accommodates a high concentration of traffic which regularly sees traffic flows in excess of 100 flights per hour. Control of traffic in this vast and complex airspace is delegated to a number of states, with their Oceanic Control facilities geographically dispersed.

The North Atlantic Air Traffic Management Operational Contingency Plan is primarily for the information of operators and pilots planning and conducting operations in North Atlantic region. The intent is to provide a description of the arrangements in place to deal with a range of contingency situations.

The Manual has been produced with the approval and on behalf of the North Atlantic Systems Planning Group (NAT SPG); a North Atlantic regional planning body established under the auspices of the International Civil Aviation Organisation (ICAO). This Group is responsible for developing the required operational procedures; specifying the necessary services and facilities and; defining the aircraft and operator approval standards employed in the NAT Region.

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This Document will be made available to users from a number of web sites including the ICAO EUR/NAT website http://www.icao.int/EURNAT/, following "EUR & NAT Documents", then "NAT Documents", in folder "NAT Doc 006 - NAT Contingency Plan".

To assist with the editing of this Manual and to ensure the currency and accuracy of future editions it would be appreciated if readers would submit their comments/suggestions for possible amendments/additions, to the ICAO EUR/NAT Office at the above Email address.

RECORD OF AMENDMENTS

Amdt. Number	Effective Date	Details
01	01 February 2010	
02	11 March 2010	**Chapter 7 – Detailed procedures – Shannon ACC** To account for amended contingency procedures in Shannon
03	10 January 2011	**Chapter 2 – Detailed procedures – Gander OACC** a) updates to take account of the provision of ADS-B services over Greenland; (2.4.1, 2.4.2, new 2.6.4, 2.8, new 2.9 and new Appendices D, E and F); b) correction of ATSU indicator for Prestwick Centre, for aircraft to manually complete the AFN logon for ADS-C (2.6.2 and 2.6.3); c) correction to the telephone number and SATCOM Imarsat short code for Reykjavik (2.6.2); and d) clarification of flight crew actions to be taken to provide position reports if unable to establish radio contact (2.6.2 and 2.6.3). **Chapter 6 – Detailed procedures – Bodø OACC** a) addition of material related to notification procedures (new 6.3); b) explanations regarding situations that could lead to limited or no service (6.4 and 6.5); c) amended information concerning actions by Bodø OACC in the event that the ability to provide services is disrupted (6.4.2); d) correction to the telephone number and SATCOM Imarsat short code for Reykjavik (6.6.1); e) change of telephone number for Bodø (6.6.1); f) addition of additional guidance concerning use of flight levels (6.5.2 and 6.7.1); g) addition of contact details (new Appendix B); h) addition of example evacuation messages (new Appendix C); and i) editorial changes for consistency and readability. **Chapter 7 – Detailed procedures – Shannon ACC** a) updates to take account of the introduction of new Tango route T213 on 18 November 2010; and b) editorial changes for readability and consistency. **Chapter 8 – Detailed procedures – Brest ACC** a) updated frequencies for Paris, Reims and Bordeaux ACCs; and editorial change for consistency.

Amdt. Number	Effective Date	Details
04	24 June 2011	**Editorial** Correct all instances of "Imarsat" to "Inmarsat" Amend telephone numbers to replace leading "00" with "+" **Chapter 1 – Detailed Procedures – Shanwick OACC** a) Update contact information for Reykjavik OACC (1.6.2) **Chapter 2 – Detailed Procedures – Gander OACC** a) Update contact information for Reykjavik OACC (2.6.2) b) Correct contingency landfall routings for eastbound aircraft (2.7) c) Correct "Søndrestrøm Radio" to "Søndrestrøm FIC" (Appendix C) **Chapter 3 – Detailed Procedures – Reykjavik OACC** a) Delete mention of Montreal Radio, which does not exist (3.4.2 and 3.5.2) b) Add contact information for Iceland Radio (3.6.1) c) Update entry and email for Gannet, which is now Iceland Radio (Appendix B) **Chapter 6 – Detailed Procedures – Bodø OACC** a) Update contact information for Reykjavik OACC (6.2.1) b) Add contact information for Gander Radio (6.2.1)
Corr	07 July 2011	Corrigendum Section 1.7.2 – Shannon FIR chart corrected
05	17 February 2012	**Chapter 2 – Detailed procedures – Gander OACC** a) clarification of the criteria and requirements for routing aircraft to avoid Gander airspace (2.5.1); b) instructions for flight crews which are applicable to westbound and eastbound flights in the Gander OCA moved to the General section (2.6.1, 2.6.2, 2.6.3 and 2.6.4); c) updates to frequencies associated with specific contingency routes (2.7); d) deletion of charts depicting contingency route structures (2.7); e) removal of duplicate telephone numbers for Gander Oceanic and update of telephone number for the NAV Canada Operations Centre (Chapter 2, Appendix B)

Amdt. Number	Effective Date	Details
06	15 May 2012	**Chapter 3 – Detailed procedures – Reykjavik OACC** Updates and corrections to contact information (table at 3.6.1 and Appendix B)
Corr	19 March 2013	**ATM Contingency Plan for Flights operating within the North Atlantic Oceanic Control Area – Objective** *Page 1, 1st paragraph, 4th line : reference to paragraph corrected to read "paragraph 2.30" instead of 2.29*
07	31 July 2013	**Editorial** All instances of "Bodo" and "Bodö" corrected to "Bodø" for consistency All instances of "Söndreström" corrected to "Søndrestrøm" for consistency Amendment number and related date on front page "Part 1" replaced by "Part I", "Part 2" replaced by "Part II" for consistency Mention of Part I moved from footer to header Date in running footer updated Misspelled words corrected Display of appendices in table of content changed for legibility **Chapter 2 – Detailed procedures – Gander OACC** *(NAT SPG Conclusion 49/21 refers)* a) additional clarification on notification of service limitations and traffic management measures (2.5) b) precision on Eastbound fights: how they should proceed depending on their Oceanic Entry Point, and update to table waypoints (2.7) **Chapter 3 – Detailed procedures – Reykjavik OACC** Update to contact details (Appendix B) : Reykjavik Shift Manager Inmarsat Satellite Phone -
Corr	04 December 2013	**PART I – CONTINGENCY SITUATIONS AFFECTING ATC FACILITIES – COMMON PROCEDURES – Traffic Information Broadcast by Aircraft (TIBA) procedures** *Page 4, 1st paragraph after title, 3rd line : reference to Annex corrected to read "Annex 11 – Air Traffic Services, Attachment B" instead of Attachment C*
08	13 November 2014	**Editorial** Footer and header **Chapter 2 – Detailed procedures – Gander OACC** (*NAT IMG/45 Summary of Discussions,* Appendix K – NAT IMG Decision 45/07 refers) a) Update to section 2.7 "Contingency Route Structure" b) Update to first paragraph of section 2.8

Amdt. Number	Effective Date	Details
09	18 December 2015	*approved by NAT SPG by correspondence, silent procedure – EUR/NAT SL 15-0601.TEC refers* **Editorial** Foreword: EUR/NAT website and location of the document **Chapter 1 – Detailed procedures – Shanwick OACC** (*NAT IMG/47 Summary of Discussions*, Appendix N – NAT IMG Decision 47/11 refers) Update to Scottish FIR and Brest FIR maps in section 1.7.2 **Chapter 8 – Detailed procedures – Brest ACC** (*NAT IMG/47 Summary of Discussions*, Appendix N – NAT IMG Decision 47/11 refers) a) in section 8.4, CFMU being renamed NMOC; b) in section 8.4, new Shanwick waypoints; c) in section 8.5, new Brest FIR map as for 1.7.2
10	01 July 2016	*Approved by NAT SPG Conclusion 52/15* Changes to contingency tracks as defined in Chapter 3.7.1. Changes to contact details for Reykjavik Oceanic Area Control Centre (OACC) in Chapter 3, Appendix B Replacement of "Eurocontrol Central Flow Management Unit (CFMU)" by the European Union Network Manager Operations Center (NMOC) throughout the text
11	01 July 2018	*Approved by NAT SPG Conclusion 54/20* Changes to procedures in Reykjavik CTA in Chapter 3.
12	01 July 2019	*Approved by NAT SPG Conclusion 55/20* **Chapter 4 – Detailed procedures – Santa Maria OACC** Paragraphs 4.3 and 4.6: Updates to frequencies used by Santa Maria Radio Station as well as in the surveillance area. **Chapter 7 – Detailed procedures – Shannon ACC** Paragraphs 7.4 and 7.5.1: Changes to contingency tracks as defined in Chapter 7.4, XETBO replaces DOLUL, NASBA replaces NERTU, Note 2 amended to include NASBA and Changes to Shannon ACC contingency route structure. **Chapter 8 – Detailed procedures – Brest ACC** Paragraph 8.5.1: Change of contingency routing chart in view of updates to the frequencies used in the Paris ACC, Reims ACC and Bordeaux ACC.
13	31 January 2020	*Approved by NAT SPG Conclusion 56/03 (by correspondence)* **Chapter 1 – Detailed procedures – Shanwick OACC** Editorial amendments in 1.3, 1.4.1, 1.4.2, 1.5.1 and 1.6.1, change of Shanwick OCA log-on code to "CZQX" and editorial amendments in 1.6.2, 1.6.3 and Appendix A, update of VHF Approach Channels in Table in 1.6.4, editorial amendment in 1.6.5, in 1.7.2 update of contingency routing charts for Scottish FIR, Shannon FIR and Brest FIR, editorial correction in 1.8.

Amdt. Number	Effective Date	Details
14	1 July 2020	*Approved by NAT SPG Conclusion 56/11* **Chapter 1 – Detailed procedures – Shanwick OACC** Update to procedures in 1.6.4, For flights approaching the Shanwick OCA when the contingency is activated in receipt of an acknowledged Oceanic Clearance within Scottish FIR.
15	1 February 2021	*Approved by NAT SPG Conclusion 56-2/8* **Chapter 2 – Detailed procedures – GANDER OACC** Updates to 2.1, 2.3, 2.4.1, 2.4.2, 2.5.1, 2.6.1, 2.6.2, 2.6.3, 2.6.4, 2.6.5, 2.7, 2.8, 2.9, Appendices B, C, D, E & F.
16	January 2022	*Approved by NAT SPG Conclusion 58/1 [CORR]* *Updates to 1.6.2 (p. 8), Chapter 1 Appendices A and B (pp. 14-15), 2.4.1 (p. 18), 2.6.1 (p. 20), 3.6.1 (p. 35), 4.3 (p. 49), 4.6 (p. 52), 6.4.2 (p. 110), 6.6.1 (p. 113)* - *replace the terms "Shannon Radio", "Shannon Aeradio" and "Shanwick Aeradio" with the station identifier: "Shanwick Radio"; and* - *delete the General Office telephone number "+353 61 471199" in the published SATVOICE numbers for Shanwick Radio and replace with "+353 61 368241 Ground/Air Ops" where applicable.*

ATM CONTINGENCY PLAN

FOR FLIGHTS OPERATING

WITHIN THE NORTH ATLANTIC OCEANIC CONTROL AREAS

Objective

The Air Traffic Management (ATM) Contingency Plan contains details of the arrangements in place to ensure, as far as possible, the continued safety of air navigation in the event of partial or total disruption of Air Traffic Services within the NAT region. This document is produced in accordance with the requirement of ICAO Annex 11 – Air Traffic Services, Chapter 2, paragraph 2.30.

This plan details both common procedures throughout the NAT region and the procedures specific to the individual ANSPs within the NAT region. The plan is presented in two parts:

Part I – Contingency Situations Affecting ATC Facilities

ATC services within the NAT region are provided from a number of geographical locations and this plan details the contingency arrangements at each of these facilities. It is considered unlikely that any physical contingency at one particular facility will affect another directly, hence in Part 1 of this document the procedures for each OACC/ACC are considered independently.

Part II – Contingency Situations Affecting Multiple FIRs

This part of the plan considers events which are likely to affect more than one facility within the NAT region. In particular these include the contingency arrangements in place to deal with;

- the airspace suffering contamination by volcanic ash.
- the steps taken to deal with a ‘mass turnback’ of traffic over the NAT region.

States and FIRs affected

This document contains contingency procedures for those Air Navigation Service Providers (ANSPs) who provide an ATC service within the NAT region, and those ANSPs whose airspace has a common boundary with the NAT region for which supporting procedures are published.

The states, FIRs and ACCs affected by this contingency plan and for which procedures are promulgated are as follows:

United Kingdom

- Shanwick Oceanic FIR (OACC)
- Scottish FIR (ACC)

Canada

- Gander Oceanic FIR (OACC)

Iceland

- Reykjavik Oceanic FIR (OACC)

Portugal

- Santa Maria Oceanic FIR (OACC)

United States

- New York Oceanic FIR (OACC)

Norway

- Bodø FIR (OACC)

Ireland

- Shannon FIR (ACC)

France

- Brest FIR (ACC)

PART I

CONTINGENCY SITUATIONS

AFFECTING ATC FACILITIES

SCOPE OF THE PLAN

This part of the Contingency Plan considers:

- Common procedures adopted by ATC facilities in the event of contingency situations.

- Detailed procedures adopted by individual ATC facilities in the event of contingency situations. The plan considers contingency situations which may result in a degradation of the ATC service provided (limited service) as well as situations where there is a total loss of the ability to provide ATC services (no service).

  Where available, information is also provided outlining the steps taken by ANSPs to deal with a long term unavailability of an ATC facility. In particular the procedures detailed by each ATC facility will, insofar as possible, comprise the following:

  - FIRs for which the Contingency Plan applies
  - FIRs with supporting procedures
  - Notification procedures
  - Implementation of the plan
  - Limited service
    - disruption of ground/air communication capability
    - disruption of ability to provide control services
  - No service
    - loss of ground/air communication capability
    - loss of ability to provide control services
  - Contingency Route Structure:
    - for activation within that OCA
    - for activation within adjacent OCA/FIR
  - Long term contingency arrangements
  - Contact details

COMMON PROCEDURES

Implementation of the plan

In the event of adoption of contingency procedures ANSPs will notify all affected agencies and operators appropriately.

In **Limited Service** situations the individual ANSP will decide upon the level of notification necessary and take action as required to cascade the information.

In **No Service** situations it is likely that the ATC facility involved will be subject to evacuation. In this instance the ANSP will issue NOTAMs and broadcast on appropriate frequencies that contingency procedures have been initiated. The notification process employed by individual ANSPs is detailed in their respective entries in this plan, however the general format will be as follows:

Issue a NOTAM advising operators of the evacuation. The following is an example of the type of information which may be promulgated:

"Due to emergency evacuation of (OACC) all ATC services are terminated. Flights within (OCA) FIR should continue as cleared and contact the next ATC agency as soon as possible. Flights not in receipt of an oceanic clearance should land at an appropriate airfield or request clearance to avoid (OAC) FIR. Flights should monitor (defined frequencies)."

Broadcast an evacuation message on appropriate frequencies:

"Emergency evacuation of (OACC) is in progress. No air traffic control service will be provided by (OACC). Use extreme caution and monitor (control frequencies), emergency frequencies and air to air frequencies. Contact the next air traffic control unit as soon as possible".

Traffic Information Broadcast by Aircraft (TIBA) procedures

The following communications procedures have been developed in accordance with the Traffic Information Broadcast by Aircraft (TIBA) procedures recommended by ICAO (Annex 11 – Air Traffic Services, Attachment B). These procedures should be applied when completing an altitude change to comply with the oceanic clearance.

At least 3 minutes prior to the commencement of a climb or descent the flight should broadcast on the last assigned frequency, 121.5, 243.0 and 123.45 the following:

"ALL STATION (callsign) (direction) DIRECT FROM (landfall fix) TO (oceanic entry point)
LEAVING FLIGHT LEVEL (number) FOR FLIGHT LEVEL (number) AT (distance)(direction) FROM (oceanic entry point) AT (time)".

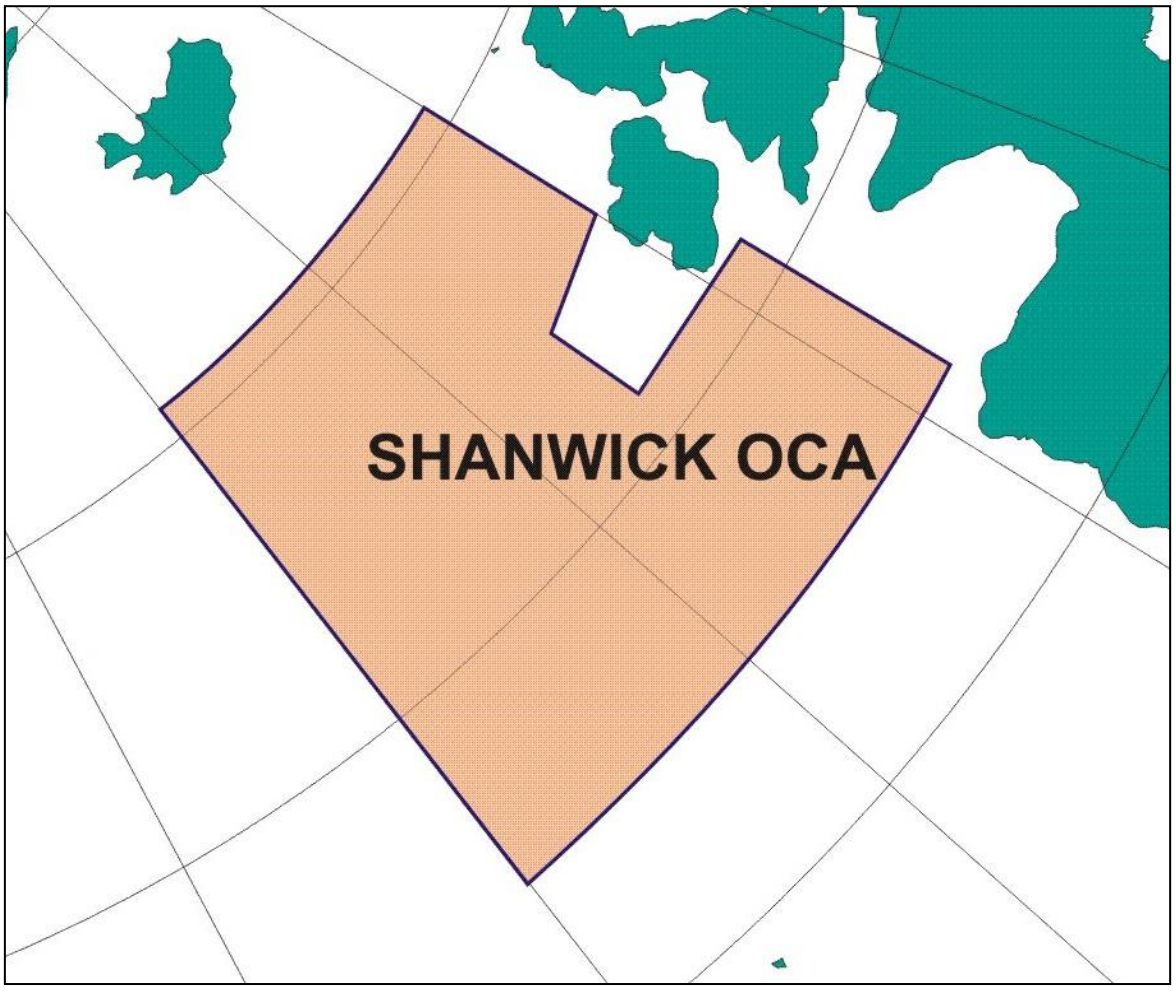
When the level change begins, the flight should make the following broadcast:

"ALL STATIONS (callsign) (direction) DIRECTION FROM (landfall fix) TO (oceanic entry point)
LEAVING FLIGHT LEVEL (number) NOW FOR FLIGHT LEVEL (number)."

When level, the flight should make the following broadcast:

"ALL STATIONS (callsign) MAINTAINING FLIGHT LEVEL (number)."

CHAPTER 1: DETAILED PROCEDURES – SHANWICK OACC



1.1 FIR FOR WHICH THE CONTINGENCY PLAN APPLIES

Shanwick Oceanic FIR

1.2 FIRs WITH SUPPORTING PROCEDURES

Gander Oceanic FIR
Shannon FIR
Scottish FIR
Brest FIR

1.3 NOTIFICATION PROCEDURES

In a limited service situation notification of any service limitations and traffic management measures will be promulgated to operators and adjacent ANSPs via AFTN.

In a no service situation the OACC is likely to have been evacuated. As soon as possible after evacuation a contingency message will be sent to agencies which receive the NAT track message. An evacuation message will be broadcast on appropriate frequencies. Operators in receipt of the contingency message are asked to forward this information to affected flights wherever possible.

1.4 LIMITED SERVICE - PROCEDURES

1.4.1 Disruption of ground/air communication capability

A limited communication service will be maintained with the assistance of adjacent Aeronautical Radio Stations. HF services on the North Atlantic normally provided by Shanwick Radio (EIAA) will be delegated as appropriate to the other Aeronautical Radio Stations namely Iceland Radio, Gander Radio, Santa Maria Radio and New York Radio. Appropriate frequencies will be advised by Shanwick Radio and the assisting stations.

Situations which could result in a Limited Service are:

Equipment Failure

Transmitters (Loss of a number of Transmitters)
Receivers (Loss of a number of Receivers)
Aerials (Loss of a number of Aerials)
Data Lines (Loss of data lines between Shanwick Radio and Shanwick OACC)
ROFDS (Telephone Contact with Prestwick available to assist Aircraft with an emergency)

Propagation

Radio Propagation resulting in partial fade-out can be affected by many factors including Solar Flares and Geomagnetic Storms

Staffing

Reduced Staffing
Illness
Weather (Severe Weather i.e. Storm, Snow, Flooding)
Industrial Relations issues

ADS/CPDLC/ORCA Failure

Resulting in increased HF congestion as flights revert to voice communications.

Security Threat

Depending on the level of the Security threat and if essential staff are allowed to remain on Station

Effect on flights

Shanwick Radio and Iceland Radio provide joint communications for Shanwick and Reykjavik/Søndrestrøm Oceanic Areas resulting in a virtual radio station for the North Atlantic from 45N to the North Pole. Radio Operators work flights in either area, updating both Shanwick and Reykjavik Control Centres.

Joint Operations between Shanwick Radio and Iceland Radio increases the ability to provide a 'normal' service with assistance from adjacent aeronautical stations.

In the event that the operation is degraded substantially, ATFM measures may be imposed as necessary.

In the event of ADS/CPDLC/ORCA failure, flights will revert to HF/VHF/SATVOICE causing frequency congestion which may result in ATFM measures being imposed as necessary.

1.4.2 Disruption of ability to provide control services

Shanwick shall determine, co-ordinate and promulgate any necessary restrictions to meet the service limitation. Traffic in possession of a valid oceanic clearance shall have priority over any other traffic. En-route reclearance of such traffic shall not be permitted except in emergency.

Traffic without a valid oceanic clearance may be subject to tactical traffic management to meet the requirements of the service limitation.

Separation standards

Shanwick will be responsible for ensuring the co-ordination and implementation of any additional separation requirements.

Contingency tracks

Dependant on the nature of the service limitation, Shanwick may promulgate and activate contingency tracks for use in addition to the OTS.

Air Traffic Flow Management

Shanwick shall co-ordinate any necessary traffic management measures where necessary with the London Network Management Cell (NMC) and/or the NMOC. Such measures may include, but are not limited to, temporary capacity restrictions and tactical rerouting measures.

Shanwick shall co-ordinate these restrictions where necessary with adjacent ANSPs where they may affect the flow of traffic through these units airspace.

Responsibilities of adjacent ANSPs

The action required of adjacent ANSPs will vary dependant on the nature of the service limitation. Where such action is not contained within the inter-centre Letters of Agreement (LOAs) the requirement will be promulgated within the initial failure and restrictions message.

1.5 NO SERVICE - PROCEDURES

1.5.1 Loss of ground/air communication capability

Shanwick Radio and Iceland Radio provide joint radio operations for Shanwick and Reykjavik Oceanic Areas resulting in a virtual radio station for the North Atlantic from 45N to the North Pole.

In the event of Shanwick Radio being unable to provide ground/air communications for Shanwick OCA Iceland Radio will coordinate with adjacent aeronautical radio stations of the NAT region to provide ground/communications to the best of their ability.

Situations which could result in No Service being provided are:

Equipment Failure

Transmitters (Loss of all Transmitters)
Receivers (Loss of all Receivers)
Aerials (Loss of all Aerials)
Data Lines (Loss of data lines between Shanwick Radio and Shanwick OACC)
Radio Officer Flight Data System (ROFDS)

Propagation

Radio Propagation resulting in total fade-out which can be caused by many factors including Solar Flares and Geomagnetic Storms

Staffing

No Staff
Illness (Seasonal Influenza)
Weather
Industrial Relations issues

Evacuation of Radio Station

Fire
Bomb threat

Effect on flights

Shanwick Radio and Iceland Radio provide joint communications for Shanwick and Reykjavik/Søndrestrøm Oceanic Areas resulting in a virtual radio station for the North Atlantic from 45N to the North Pole. Radio Operators work flights in either area, updating both Shanwick and Reykjavik Control Centres.

In the event of Shanwick Radio being unable to provide ground/air communications for a sustained period of time Iceland Radio in coordination with adjacent aeronautical stations could provide a limited communications facility to flights in the Shanwick OCA.

ATFM measures may be imposed as necessary.

1.5.2 Loss of ability to provide control services

Scottish and Oceanic Area Control Centre includes both Scottish Radar and Shanwick Oceanic Control. Should Shanwick OACC be evacuated the potential would exist for a major disruption to Air Traffic Control (ATC) within the Shanwick OCA and Scottish Radar units.

The HF radio communications for the Shanwick Oceanic Centre are remotely located, so will not be affected.

In the event that Shanwick OACC is evacuated, Gander Oceanic will assume responsibility for the provision of Air Traffic Services (ATS) within the Shanwick OCA to the best of their ability. The procedures to be adopted by Gander are detailed at 'Shanwick Detailed Procedures - Appendix A.'

As soon as possible after evacuation a contingency message will be sent to the agencies that receive the NAT track message, detailed in 'Shanwick Detailed Procedures - Appendix C.' In turn they are expected to advise the affected traffic.

HF congestion is likely. Communications should be kept to a necessary minimum. Unnecessary routeing changes will not be issued.

Other ATSUs will provide guidance as far as possible in the circumstances.

Contact information that may be used in the event of an emergency evacuation is provided in Appendix B.

1.6 FLIGHT CREW AND OPERATOR PROCEDURES

1.6.1 For flights within the Shanwick OCA – General

The procedures outlined below are to be used as guidance for pilots in the immediate aftermath of a sudden withdrawal of the ATC service as described above.

On receipt of the contingency message pilots are requested to broadcast to other flights on 121.500 and 123.450 MHz and a listening watch on these frequencies must be maintained.

1.6.2 For flights within the Shanwick OCA – Westbound

Gander OACC will endeavour to provide an ATC service throughout the Shanwick OCA as soon as evacuation commences. These procedures are detailed at 'Shanwick Detailed Procedures - Appendix A.'

Flights should establish communication with the next agency at the earliest opportunity stating current position, cleared flight level, next position and estimate and subsequent position. This also applies to flights using automatic position reports (ADS/FMC) as these reports may not have been received by the next agency.

When ADS equipped flights are notified of a Shanwick evacuation they must revert to voice position reporting until clear of Shanwick OCA, or notified otherwise. Pilots should note that they may be asked to log-on to CZQX when within the Shanwick OCA, they should not initiate this action until instructed to do so.

Any flights involved in level changes should complete the manoeuvre as soon as possible in accordance with the clearance.

If unable to establish radio contact, flights may use SATVOICE to provide position reports.

Oceanic Centre	Telephone Number	SATVOICE Short Code
Gander	+1 709 651 5207	431613
Reykjavik, via Iceland Radio	+354 568 4600	425105
Santa Maria	+351 296 820 438 +351 296 886 042 (satellite link)	426305
New York	+1 631 468 1413	436623
Ballygirreen (Shanwick Radio)	+353 61 368241 Ground/Air Ops	425002

Flights may request their flight dispatch offices to forward position reports, if sending position reports to multiple ATS Units or if they are otherwise unable to make position reports.

1.6.3 For flights within the Shanwick OCA – Eastbound

Gander OACC will endeavour to provide an ATC service throughout the Shanwick OCA as soon as evacuation commences. These procedures are detailed at 'Shanwick Detailed Procedures - Appendix A.'

Flights operating with a received and acknowledged oceanic clearance will be expected to continue in accordance with the last clearance issued unless otherwise advised by ATC.

When ADS equipped flights are notified of a Shanwick evacuation they must revert to voice position reporting until clear of Shanwick OCA, or notified otherwise. Pilots should note that they may be asked to log-on to CZQX when within the Shanwick OCA, but they should not initiate this action until instructed to do so.

Any flights involved in level changes should complete the manoeuvre as soon as possible in accordance with the clearance.

If unable to establish radio contact, flights may use SATVOICE to provide position reports using the telephone numbers listed above.

Flights making automatic position reports are required to make voice position reports whilst within the Shanwick OCA, unless advised otherwise.

Communications with the next ATSU should be established at the earliest opportunity. Where no contact with the next agency can be established, Shanwick radio should be contacted on HF for advice.

1.6.4 For flights approaching the Shanwick OCA when the contingency is activated

Not in Receipt of an Oceanic Clearance

In the event that Shanwick OACC must be evacuated, only aircraft with received and acknowledged oceanic clearances shall be permitted to transit Shanwick OCA.

If unable to obtain or acknowledge an oceanic clearance, flights should plan to re-route around the Shanwick OCA or to land at an appropriate airfield.

In receipt of an acknowledged Oceanic Clearance outside Scottish FIR

Aircraft operating with a received and acknowledged oceanic clearance can, at pilot's discretion, continue, but must expect a limited ATC service within the Shanwick FIR. Due to the remote location of the HF service provider communications will be unaffected.

However, due to the uncertainty surrounding a contingency situation pilots are strongly advised to comply with the procedures detailed above for flights not in receipt of an oceanic clearance even if they are in receipt of an acknowledged Oceanic clearance.

In receipt of an acknowledged Oceanic Clearance within Scottish FIR

Within the Scottish FIR, if the pilot elects to continue, the flight must be operated in accordance with the last received and acknowledged Oceanic clearance from eastern boundary until last specified route point, normally landfall.

It is probable that the Scottish ACC will have been evacuated along with Shanwick OACC. In this event, whilst operating within the Scottish FIR, all flights are requested to make position reports on the last assigned frequency, stating position, level and next fix.

1.6.5 Entering from another OCA

Flights within Reykjavik or Santa Maria oceanic airspace, can anticipate a large re-route to avoid the Shanwick OCA and Scottish FIR. Reykjavik and Santa Maria will issue advice on procedures to be followed.

1.7 SHANWICK OACC – CONTINGENCY ROUTE STRUCTURE

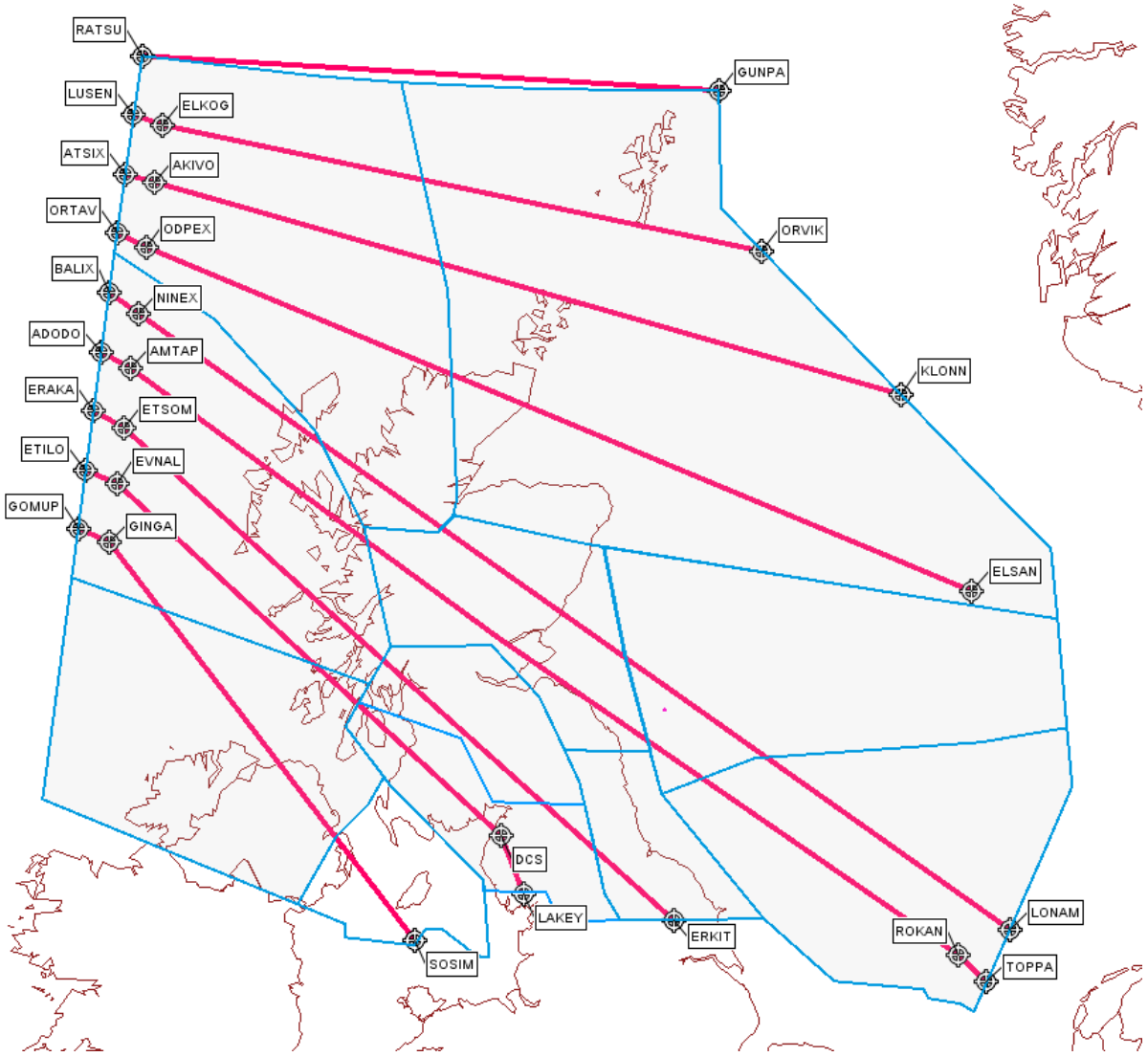
1.7.1 For activation within Shanwick OCA

In a **limited service** contingency situation Shanwick OACC may promulgate additional contingency tracks in addition to the published OTS. Due to the dynamic nature of the NAT OTS it is not possible to publish such tracks in advance. Any contingency track design within the Shanwick OCA will be effected at the time of the event and be dependent on the nature of the service limitation. Promulgation will be via AFTN.

1.7.2 For activation within adjacent OCA/FIR

Scottish FIR

Unless instructed otherwise, flights entering the Scottish FIR should use the following contingency routes:

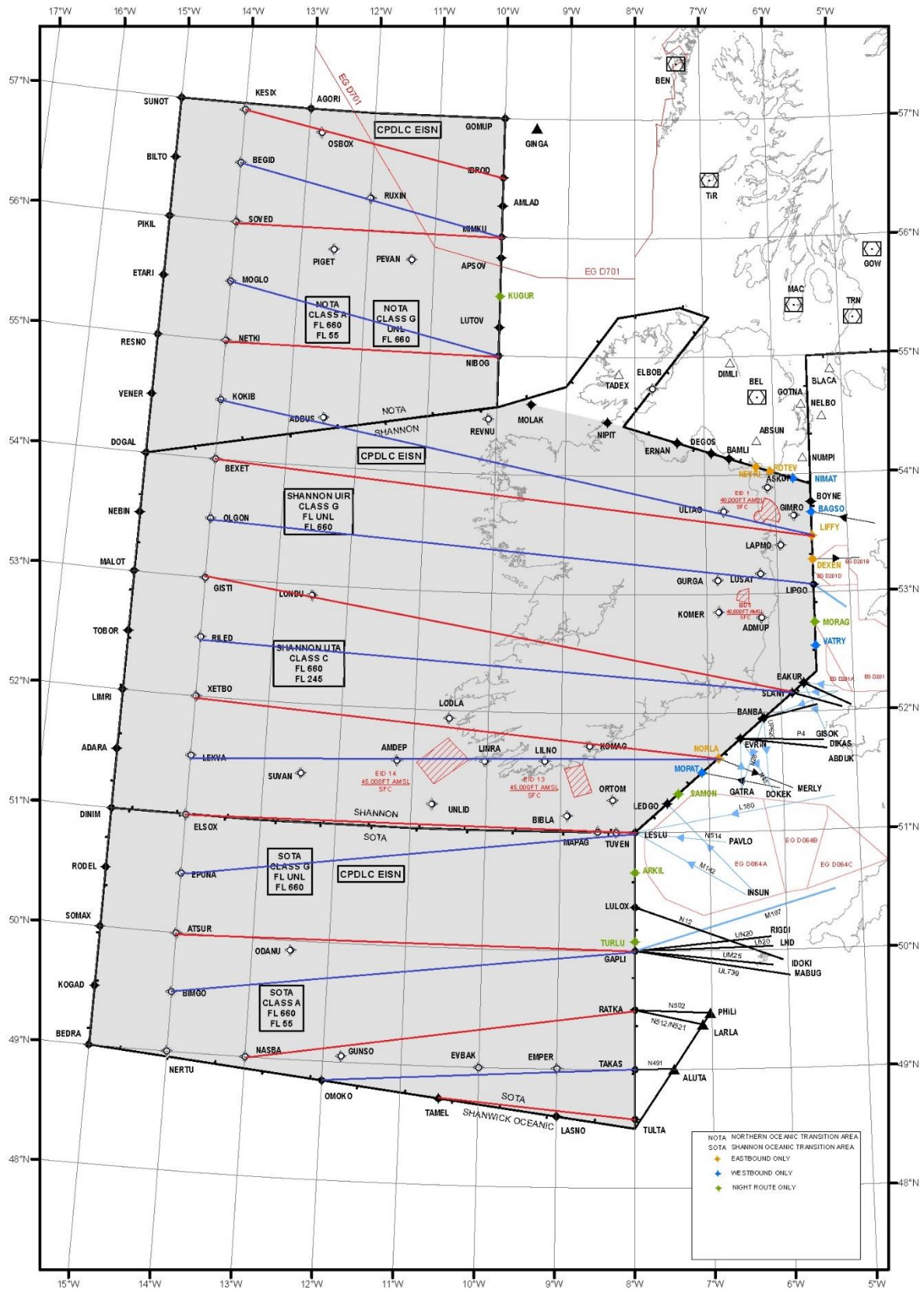


Communications with the next ATSU should be established at the earliest opportunity.

Flights operating close to the Reykjavik or Shannon northern boundaries should, where possible, establish communications with those units in order to negotiate a reroute to avoid the Scottish FIR.

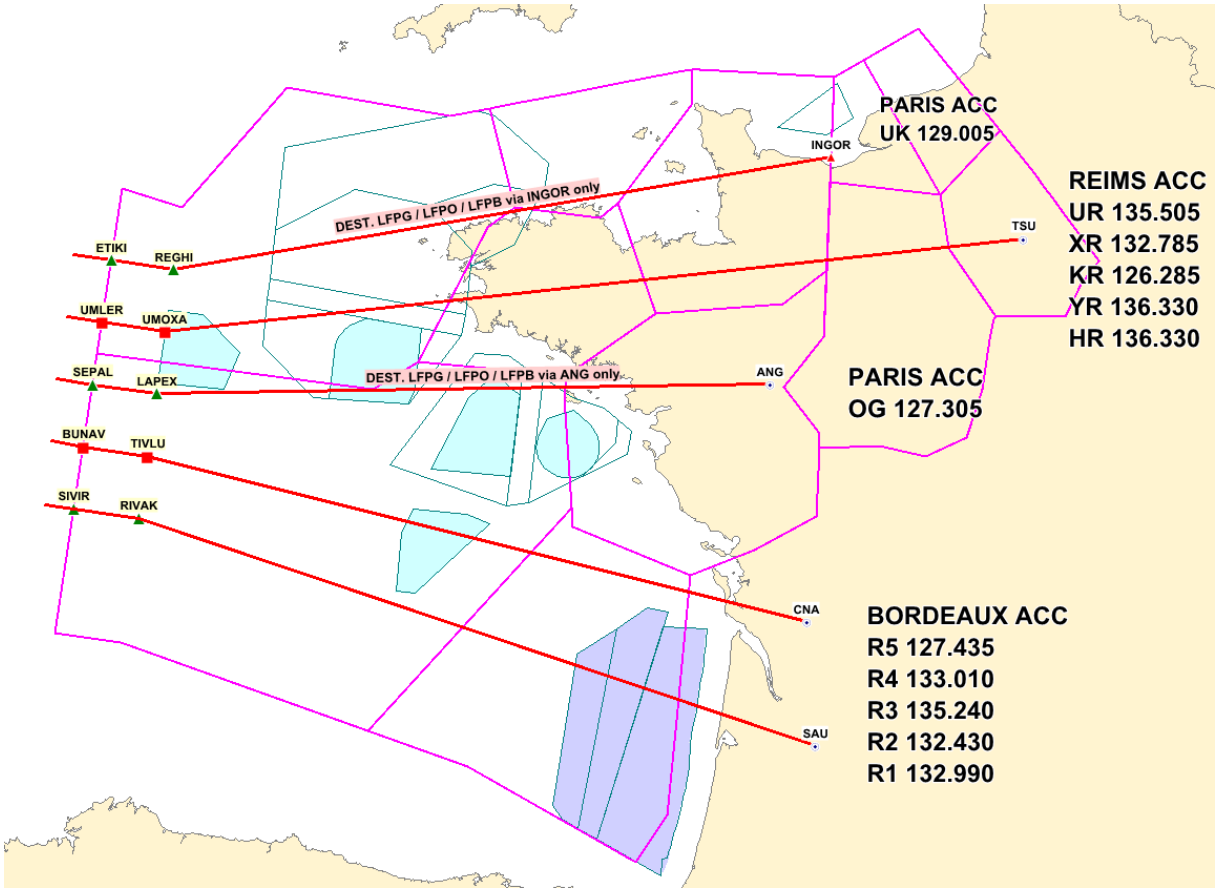
Shannon FIR

Unless instructed otherwise, flights entering the Shannon FIR should use the following contingency routes:



Brest FIR

Unless instructed otherwise, flights entering the Brest FIR should use the following contingency routes:



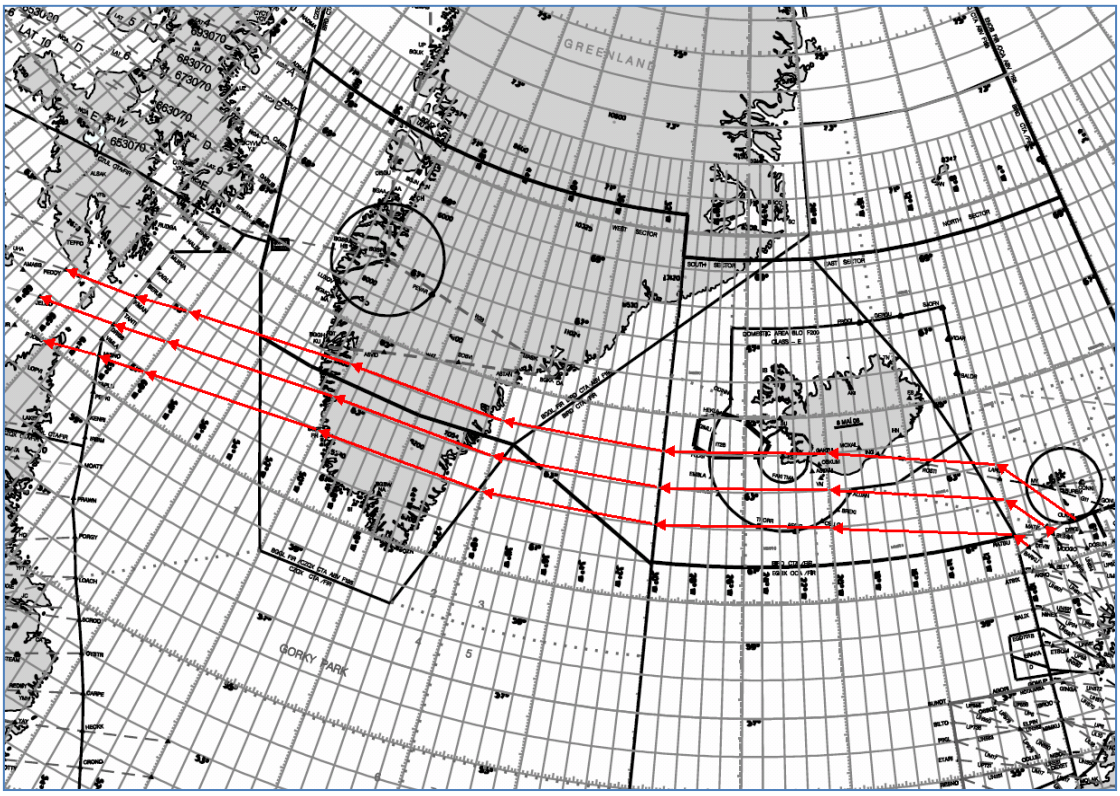
Reykjavik OCA/FIR

In limited- and no service contingency situations in Shanwick the following contingency tracks may be activated in Reykjavik OCA/FIR. Any NAT tracks that conflict with those contingency tracks would at the same time be cancelled. The contingency tracks must be flight planned as if they were random route tracks (detailing each waypoint in the flight plan).

OLKER – 63N010W – 64N020W – 64N030W – 64N040W – 64N050W – 63N060W – IKMAN – FEDDY

BESGA – MATIK – 62N010W – 63N020W – 63N030W – 63N040W – 63N050W – 62N060W – GRIBS – JELCO

BARKU – RATSU – 62N020W – 62N030W – 62N040W – 62N050W – 61N060W – MIBNO RODBO



1.8 LONG TERM CONTINGENCY ARRANGEMENTS

In the event that Shanwick loses the ability to provide an ATC service from the OACC at Prestwick for an extended period, contingency plans are in place to provide the service from an alternate location.

The facility will be established at another NATS location but will take some time to put in place as equipment and communication links have to be brought into operation and staff relocated. The nature of the loss of the Prestwick facility may influence the time required to bring the contingency facility into service, but it expected that under most circumstances an ATC service will be available in the Shanwick OCA within 48 hours. In the interim period no ATC service will be available and all flights will be required to route clear of the Shanwick OCA.

When established, the contingency facility will comprise a slightly reduced complement of control and support workstations, but with the existing range of communication facilities including VHF clearance delivery, OCL, ADS, CPDLC and AFTN.

Operators can expect that ATFM regulations will be in place throughout the period of the transition, with a gradual buildup to near normal operating levels. The facility is designed to meet 95% of demand and is sustainable in the long term.

Appendix A –

Gander procedures in event of Shanwick evacuation

Gander OAC shall endeavor to provide an ATC service throughout the Shanwick ACC as soon as evacuation commences.

Gander OAC will send a signal to all NAT track collective addresses advising of the Shanwick evacuation:

"EMERGENCY Evacuation of Shanwick Oceanic Control Centre is in progress. No IFR control will be provided by Shanwick. Gander OAC shall endeavor to monitor traffic within the Shanwick OAC. HF communication is unaffected. Instruct all flights to monitor VOLMET, emergency and air to air frequencies. Flights not in receipt of an oceanic clearance must land at an appropriate aerodrome, or request appropriate re-clearance to avoid Shanwick OCA. Flights within Shanwick OCA should contact the next agency as soon as possible. Refer to contingency documentation for advice"

Gander shall ensure and verify that information on all cleared aircraft proceeding eastbound from Gander's area, through Gander's Oceanic Airspace is passed to the next affected unit. The following telephone numbers may be used.

Area Control Centre	Telephone Number
Stavanger	+47 51 658042 +47 51 658048
Copenhagen	+453 248 1000
Amsterdam	+31 20 4062 197
Maastricht	+31 43 3661 283
London	North +44 1489 612414 West +44 1489 612413
Scottish (may also be subject to evacuation)	+44 1292 692763
Shannon	ATC WM/Ops Room +353 617 70700 Switchboard +353 614 72284

In coordination with Shanwick Radio, Gander may request that ADS flights log-on to CZQX in order to transmit automatic position reports and reduce frequency congestion.

Gander will co-ordinate with other Oceanic service providers (New York, Santa Maria, Reykjavik) to ensure that information on flights proceeding from their airspace directly into Shanwick OCA is coordinated with en-route agencies.

———————————

Appendix B –

Contact Details - Shanwick OACC

Shanwick Watch Supervisor	+44 1294 655141
ScOACC Watch Manager	+44 1292 692469
Shanwick ATC Sectors	+44 1294 655100
Shanwick Fax	+44 1292 692042
Ballygirreen (Shanwick Radio)	+353 61 368241 Ground/Air Ops

Appendix C –

Evacuation Messages - Shanwick OACC

Gander OAC will send a signal to all NAT track collective addresses advising of the Shanwick evacuation:

"*EMERGENCY Evacuation of Shanwick Oceanic Control Centre is in progress. No IFR control will be provided by Shanwick. Gander OAC shall endeavor to monitor traffic within the Shanwick OAC. HF communication is unaffected. Instruct all flights to monitor VOLMET, emergency and air to air frequencies. Flights not in receipt of an oceanic clearance must land at an appropriate aerodrome, or request appropriate re-clearance to avoid Shanwick OCA. Flights within Shanwick OCA should contact the next agency as soon as possible. Refer to contingency documentation for advice"*

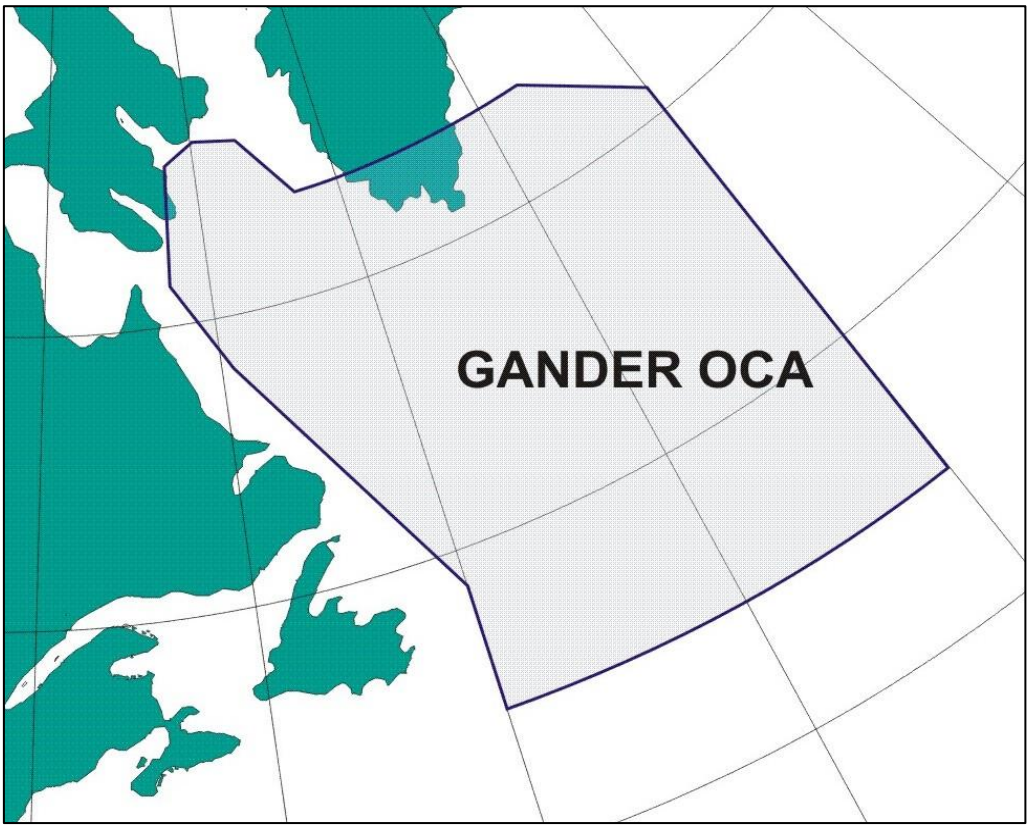
In addition Shanwick will issue the following NOTAM:

"Due to evacuation of the Prestwick Oceanic Area Control Centre, operations have been suspended. Contingency plans have been activated and a contingency service will commence shortly.
Oceanic clearance for westbound aircraft will not be issued until the commencement of a contingency service and adjacent ATS providers will not permit aircraft without an Oceanic clearance to enter the Shanwick OCA.
Aircraft operators are advised that the NMOC have implemented stringent ATFM plans for this airspace and slot tolerance is essential in order to obtain the maximum capacity from the contingency service.
Further information on the services available will be issued prior to the commencement of operations."

Shanwick Radio will broadcast the following message on HF VOLMET:

"Emergency evacuation of Shanwick OACC is in progress. No air traffic control service will be provided by Shanwick. Use extreme caution and monitor Shanwick Radio, emergency frequencies and air to air frequencies. Contact the next air traffic control unit as soon as possible".

CHAPTER 2: DETAILED PROCEDURES – GANDER OACC



2.1 FIR FOR WHICH THE CONTINGENCY PLAN APPLIES

Gander Oceanic FIR

2.2 FIRs WITH SUPPORTING PROCEDURES

Shanwick Oceanic FIR

Reykjavik Oceanic FIR

2.3 NOTIFICATION PROCEDURES

In a **limited service** situation notification of any service limitations and traffic management measures will be promulgated to operators and adjacent ANSPs via AFTN and through NAV CANADA National Operations Centre.

In a **no service** situation the OACC is likely to have been evacuated. As soon as possible after evacuation a contingency message will be sent to agencies which receive the NAT track message. In turn they are expected to advise the affected traffic.

2.4 LIMITED SERVICE - PROCEDURES

2.4.1 Disruption of ground/air communication capability

Communication services will be maintained using available equipment supplemented with the assistance of adjacent facilities. HF services on the North Atlantic ordinarily provided by CYQX International Flight Service Station will be delegated to the other International radio stations; New York AIRNC, Iceland Radio, Santa Maria Radio and Shanwick Radio. Appropriate frequency will be published in the daily ATFM messages (NOTAM, Advisory).

2.4.2 Disruption of ability to provide control services

Gander shall determine, co-ordinate and promulgate any necessary restrictions to meet the service limitation. Traffic in possession of a valid oceanic clearance shall have priority over any other traffic. En-route reclearance of such traffic shall not be permitted except in emergency.

Traffic without a valid oceanic clearance may be subject to tactical traffic management measurements to meet the requirements of the service limitation.

Separation standards

Gander will be responsible for ensuring the co-ordination and implementation of any additional separation requirements.

ADS-B Airspace

Gander will be responsible for re-establishing procedural separation standards for aircraft within ADS-B airspace as practicable.

Contingency tracks

Dependent on the nature of the service limitation, Gander may promulgate and activate contingency tracks for use in addition to the OTS.

Air Traffic Flow Management

Gander shall co-ordinate any necessary traffic management measures where necessary with the NAV Canada National Operations Centre. Such measures may include, but are not limited to, temporary capacity restrictions and tactical rerouting measures.

Gander shall co-ordinate these restrictions where necessary with adjacent ANSPs where they may affect the flow of traffic through these units airspace.

Responsibilities of adjacent ANSPs

The action required of adjacent ANSPs will vary dependent on the nature of the service limitation. Where such action is not contained within the inter-centre Letters of Agreement (LOAs) the requirement will be promulgated within the initial failure and restrictions message.

2.5 NO SERVICE - PROCEDURES

2.5.1 Loss of ability to provide control services and ground/air communication capability

Gander ACC includes Gander Domestic Control and Gander Oceanic Control Units, and Gander International Flight Service Station (Gander Radio). Should Gander ACC be evacuated, the potential exists for a major disruption to Air Traffic Control (ATC) services extending from the western boundary of the Gander Flight Information Region (FIR) to 30 degrees west longitude

In the event Gander ACC is evacuated, an agreement between UK NATS and NAV Canada will have Shanwick Oceanic assume responsibility for the provision of Air Traffic Services (ATS) within the Gander OCA to the best of their ability. Shanwick will not normally issue re-clearances to aircraft within the Gander Oceanic CTA. Moncton and Montreal ACCs will assume responsibility for the provision of en-route ATS within the Gander FIR to the best of their abilities.

As soon as possible after evacuation a contingency message will be forwarded to all concerned agencies, either directly or through the NAV Canada National Operations Centre.

Until these contingency plans can be implemented, it is possible that the Gander Oceanic CTA may contain unexpected (non-OTS) traffic en-route to adjacent facility airspace. It is suggested that facilities adjacent to Gander take the following action:

- Increase or extend HF communication position report monitoring to include aircraft in Gander airspace;
- Pass traffic information on known Gander traffic to the next en-route facility after Gander; and:
- Prohibit profile changes (altitude and route) for aircraft exiting the Gander area until it can be safely assumed that there is no unknown traffic in that aircraft's vicinity.

All traffic en-route to transition Gander airspace without Gander approval shall be routed to remain clear of Gander airspace. **Exception:** Facilities responsible for loading a valid OTS commencing in their area of responsibility that transits the Gander OCA may elect to continue transitioning traffic in accordance with that track structure provided it is ensured that traffic information is passed to the next en-route facility after Gander.

2.6 FLIGHT CREW AND OPERATOR PROCEDURES

2.6.1 For flights within the Gander OCA – General

The procedures outlined below are to be used as guidance for pilots in the immediate aftermath of a sudden withdrawal of the ATC service as described above.

On receipt of the contingency message pilots are requested to re-broadcast the message to other flights on 121.5 and 123.45. A listening watch on these frequencies must be maintained.

When ADS-C equipped flights are notified of a Gander evacuation they must revert to voice position reporting until clear of Gander OCA, or notified otherwise. Pilots may be asked to log-on to an adjacent OACC when within the Gander OCA. Pilots should not initiate this action until instructed to do so.

Any flights involved in level changes should complete the maneuver as soon as possible in accordance with the clearance.

If unable to establish radio contact, flights may use any communication means necessary to provide position reports.

Oceanic Centre	Telephone Number	SATCOM Inmarsat Short Code
Reykjavik, via Iceland Radio	+354 568 4600	425105
Santa Maria	+351 296 820 438 +351 296 886 042 (satellite link)	426305
New York	+1 631 468 1413	436623
Ballygirreen (Shanwick Radio)	+353 61 368241 Ground/Air Ops	425002

2.6.2 For flights within the Gander OCA – Westbound

Shanwick OACC will endeavor to provide an ATC service throughout the Gander OCA as soon as evacuation commences.

Flights are expected to continue in accordance with the last clearance issued and acknowledged.

Flights should establish communication with the next agency at the earliest opportunity stating current position, cleared flight level, next position and estimate and subsequent position. This also applies to flights using automatic position reports (ADS/FMC) as these reports may not have been received by the next agency.

Flights may request their flight dispatch offices to forward position reports, if sending position reports to multiple ATS Units or if otherwise unable to forward position reports.

2.6.3 For flights within the Gander OCA – Eastbound

Shanwick OACC will endeavor to provide an ATC service throughout the Gander OCA as soon as evacuation commences.

Flights operating with a received and acknowledged oceanic clearance will be expected to continue in accordance with the last clearance issued unless otherwise advised by ATC.

Communications with the next ATSU should be established at the earliest opportunity. Where no contact with the next agency can be established, Shanwick radio should be contacted on HF for advice.

2.6.4 For flights approaching the Gander OCA when the contingency is activated

Not in Receipt of an Oceanic Clearance

In the event that Gander OACC must be evacuated, only aircraft with received and acknowledged oceanic clearances shall be permitted to transit Gander OCA.

If aircraft are unable to obtain or acknowledge an oceanic clearance, flights must plan to re-route around the Gander OCA or to land at an appropriate aerodrome. Request the appropriate re-clearance on the current frequency. Frequency congestion is likely.

In receipt of an acknowledged Oceanic Clearance

Aircraft operating with a received and acknowledged ocean clearance should proceed in accordance with the clearance. Flights should not request changes in altitude, speed or route except for reasons of flight safety or to comply with the oceanic clearance.

However, due to the uncertainty surrounding the contingency situation pilots are strongly advised to comply with the procedures detailed above for flights not in receipt of an oceanic clearance even if they are in receipt of an acknowledged Oceanic clearance.

Entering from another OCA

While flights with an acknowledged oceanic clearance may transit Gander's oceanic airspace, flights not yet within Gander OCA are strongly advised not to enter the airspace.

Flights operating with an acknowledged oceanic/ATC clearance that continue under pilot's discretion are expected to proceed in accordance with the last oceanic/ATC clearance issued.

Enroute requests for changes to route, level or speed should be limited to those required for flight safety.

2.7 GANDER OACC – CONTINGENCY ROUTE STRUCTURE

An Organized Track Structure (OTS) will remain valid for the time period published.

Westbound flights

Laterally spaced routes extending into the next agency will be utilized. Westbound flights shall proceed in accordance with the following table, until communication is established with, and a re-clearance issued by the next agency.

Flights operating FL290 and above.

FLIGHT IS ROUTED OVER	THE FLIGHT SHALL PROCEED:	Next control agency and frequency:
AVPUT	NALDI DUTUM	Montreal ACC 134.85
CLAVY	KAGLY TEFFO	Montreal ACC 134.85
EMBOK	IKMAN FEDDY	Montreal ACC 134.85
KETLA	GRIBS JELCO	Montreal ACC 134.800
LIBOR	6101N 06241W	Montreal ACC 133.200
MAXAR	MIBNO RODBO	Montreal ACC 133.200
NIFTY	MUSLO	Montreal ACC 133.200
PIDSO	PEPKI LOPVI	Montreal ACC 135.800
RADUN	SINGA	Montreal ACC 135.800
SAVRY	LAKES MCKEE	Montreal ACC 132.450

FLIGHT IS ROUTED OVER	THE FLIGHT SHALL PROCEED:	Next control agency and frequency:
TOXIT	UDMAR	Montreal ACC 132.450
URTAK	TEALS VANSI	Montreal ACC 119.400
VESMI	ALSOP	Montreal ACC 119.400
AVUTI	YKL ROUND	Montreal ACC 119.400
BOKTO	VOKET DUVBI	Montreal ACC 119.400
CUDDY	YWK MT	Montreal ACC 132.90 @ 63W
DORYY	YBC ANCER	Moncton ACC 132.95
HOIST	YRI	Moncton ACC 118.875
IRLOK	5031N 06500W	Moncton ACC 118.875
JANJO	CEFOU	Moncton ACC 118.875
KODIK	4941N 06500W	Moncton ACC 132.52
LOMSI	QUBIS	Moncton ACC 132.52
MELDI	4853N 06500W	Moncton ACC 132.52
NEEKO	TAFFY	Moncton ACC 124.975
PELTU	4813N 06500W	Moncton ACC 135.77
RIKAL	MIILS	Moncton ACC 135.77
SAXAN	4718N 06500W	Moncton ACC 133.55
TUDEP	TOPPS	Moncton ACC 133.55
UMESI	4618N 06500W	Moncton ACC 133.55
ALLRY	EBONY	Moncton ACC 132.8
BUDAR	4536N 06500W	Moncton ACC 132.8
ELSIR	ALLEX	Moncton ACC 132.8
IBERG	4451N 06500W	Moncton ACC 132.75
JOOPY	TUSKY	Moncton ACC 132.75
MUSAK	4409N 06500W	Moncton ACC 132.75
NICSO	BRADD	Moncton ACC 132.75
OMSAT	4336N 06500W	Moncton ACC 133.3
PORTI	KANNI	Moncton ACC 133.3
RELIC	4303N 06500W	Moncton ACC 133.7
SUPRY	WHALE	Moncton ACC 133.7
VODOR	NANSO VITOL	Moncton ACC 125.25
BOBTU	JAROM GAYBL	Moncton ACC 125.25

Flights operating FL280 and below. Routes HOIST and south are the same as for flights operating FL290 and above.

FLIGHT IS ROUTED OVER	THE FLIGHT SHALL PROCEED:	Next control agency and frequency
NALDI	DUTUM	Montreal ACC 134.55
KAGLY	TEFFO	Montreal ACC 134.55
IKMAN	FEDDY	Montreal ACC 134.55
GRIBS	JELCO	Montreal ACC 128.25
MIBNO	RODBO	Montreal ACC 128.25
PEPKI	LOPVI	Montreal ACC 135.1
5900N 06000W	LAKES MCKEE	Montreal ACC 135.1
MOATT	LOMTA TEALS VANSI	Montreal ACC 132.9
PRAWN	YDP YKL ROUND	Montreal ACC 132.25@65W
PORGY	YWK MT	Montreal ACC132.25@ 63W

Eastbound flights

Laterally spaced routes beginning on or near the western boundary between Gander FIR and Moncton and Montreal's FIRs and connecting to oceanic exit points shall be utilized. Eastbound flights shall proceed in accordance with the following table:

INLAND CONTINGENCY FIX	INTERMEDIATE FIX	OCEANIC ENTRY POINT
KENKI		AVPUT
MUSVA		CLAVY
BERUS		EMBOK
GRIBS		KETLA
6101N 06241W		LIBOR
MIBNO		MAXAR
MUSLO		NIFTY
PEPKI		PIDSO
SINGA		RADUN
LAKES	5900N 06000W	SAVRY
UDMAR		TOXIT
YKL	LOMTA	URTAK
ALSOP		VESMI
YWK	YDP	AVUTI
DUVBI	VOKET	BOKTO
MUNBO		CUDDY
BORUB		DORYY
TEXUN		ENNSO
TASTI	YYR	HOIST
5222N 06106W		IRLOK
SERBO		JANJO
KONCH		KODIK
VERTU		LOMSI
5111N 05929W		MELDI
PIKNA		NEEKO
5052N 05859W		PELTU
NAPLO	YAY	RIKAL
4950N 05828W		SAXAN
MIGLI		TUDEP
4904N 05754W		UMESI
LOPRO		ALLRY
4818N 05730W		BUDAR
VINSI	YQX	ELSIR
4734N 05712W		IBERG
TAGRA		JOOPY
4649N 05654W		MUSAK
SUTKO	YYT	NICSO
4610N 05639W		OMSAT
RUBDA		PORTI
4521N 05621W		RELIC
PEPRA		SUPRY
NANSO		RAFIN
LOMPI	JAROM	

2.8 LONG TERM CONTINGENCY ARRANGEMENTS

Should Gander lose the ability to provide ATC services from the ACC for an extended period, contingency plans are in place to provide the service from an alternate Nav Canada location.

While the nature of the evacuation may impact time frames as equipment and communication links must be established and staff relocated to another Nav Canada facility, it is expected that under most circumstances an ATC service would be available within 48-72 hours.

In the interim, limited or no ATC services may be available, and flights may be required to continue to route outside of Gander OCA.

Once established, the contingency facility will provide ATC services that may include VHF Clearance Delivery, OCL, OTS design and promulgation, ADS-C, CPDLC, HF communications, AFTN flight planning and PRM filing, Altitude Reservations and ADS-B surveillance.

Operators can expect emphasis to be placed on the immediate, or near immediate resumption of services to emergency, humanitarian and critical military flights. All other operations will be resumed in a phased approach with flow control expected.

Nav Canada's National Operations Center will coordinate details of resumption plans with operators and adjacent units as the situation unfolds.

Appendix A –

Shanwick procedures in event of Gander evacuation

Shanwick Oceanic will endeavor to provide an ATC service throughout the Gander OCA as soon as evacuation commences.

Shanwick will ensure and verify that information on all cleared aircraft proceeding westbound from Shanwick's area, through Gander's Oceanic Airspace is passed to the next affected unit.

Moncton	Telephone 506-867-7173 or 7175
Montreal	Telephone 514-633-3365 or 3278
Edmonton	Telephone 780-890-8397 or 8306

Shanwick will co-ordinate with other Oceanic service providers (New York, Santa Maria, Reykjavik) to ensure that information on flights proceeding from their airspace directly into Gander OCA is coordinated with enroute agencies.

Appendix B –

Contact Details - Gander OACC

Gander Shift Manager	+1 709 651 5207 +1 709 651 5203
Gander Oceanic	+1 709 651 5324 SATVOICE 431603 or +1 709 651 5260
Gander Domestic	+1 709 651 5315 SATVOICE 431602 or +1 709 651 5297
Gander IFSS	+1 709 651 5222 SATVOICE 431613 or +1 709 651 5298
Gander Control Tower	+1 709 651 5329
Gander Airport Duty Manager	+1 709 424 1235
NAV Canada Operations Centre	+1 613 563 5626
Moncton ACC	+1 506 867 7173
Montreal ACC	+1 514 633 3365

Appendix C –

Evacuation Messages - Gander OACC

"Emergency evacuation of Gander Centre and Gander Radio in progress. No IFR control or HF communication service will be provided by Gander, I repeat, no IFR Control or HF communication service will be provided by Gander. Use extreme caution and monitor this frequency, emergency frequencies and air to air frequencies. Westbound flights west of 50 west contact Moncton Centre or Montréal Centre as soon as possible. Eastbound flights west of 50 west not in receipt of an oceanic clearance must land at an appropriate aerodrome, or request appropriate re-clearance to avoid Gander OCA/FIR. All other flights contact Shanwick radio, New York ARINC, Nuuk FIC, Iceland Radio or Santa Maria Radio as soon as possible. Please broadcast this information on 123.45, 121.5 and 243.0"

Appendix D –

Common NAT NOTAM example

DUE TO EMERGENCY EVACUATION OF [OACC] DUE [REASON, e.g. COVID19] AIR TRAFFIC CONTROL SERVICES ARE UNAVAILABLE IN THE [NAME] OCA.

FLIGHTS NOT IN RECEIPT OF AN OCEANIC CLEARANCE SHOULD REQUEST CLEARANCE TO AVOID [NAME] OAC/FIR OR LAND AT AN APPROPRIATE AERODROME.
ONLY FLIGHTS OPERATING WITH AN ACKNOWLEDGED OCEANIC/ATC CLEARANCE ARE PERMITTED TO OPERATE WITHIN [NAME] OCA.

FLIGHTS NOT YET OPERATING WITHIN THE [AIRSPACE NAME] OCA BUT IN RECEIPT OF AN [OCEANIC] OR [ATC] CLEARANCE ARE STRONGLY ADVISED NOT TO ENTER THE AIRSPACE.

FLIGHTS OPERATING WITH AN ACKNOWLEDGED OCEANIC/ATC CLEARANCE THAT CONTINUE UNDER PILOTS DISCRETION ARE EXPECTED TO PROCEED IN ACCORDANCE WITH THE LAST OCEANIC/ATC CLEARANCE ISSUED AND MUST CONTACT NEXT ATC AGENCY AS SOON AS POSSIBLE AND REPORT CURRENT POSITION, CLEARED FLIGHT LEVEL, NEXT POSITION AND ESTIMATE, AND SUBSEQUENT POSITION(S). FLIGHTS MUST REVERT TO VOICE POSITION REPORTING PROCEDURES. DATALINK EQUIPPED AIRCRAFT ARE EXPECTED TO CONNECT TO/REMAIN CONNECTED TO CURRENT CENTRE UNTIL OTHERWISE INSTRUCTED.

FLIGHTS MUST MONITOR 121.5 / 123.45MHZ AND VOLMET AND USE ALL AVAILABLE MEANS TO DETECT ANY CONFLICTING TRAFFIC.

FURTHER DETAILS WILL BE PROVIDED VIA NOTAM IN DUE COURSE.

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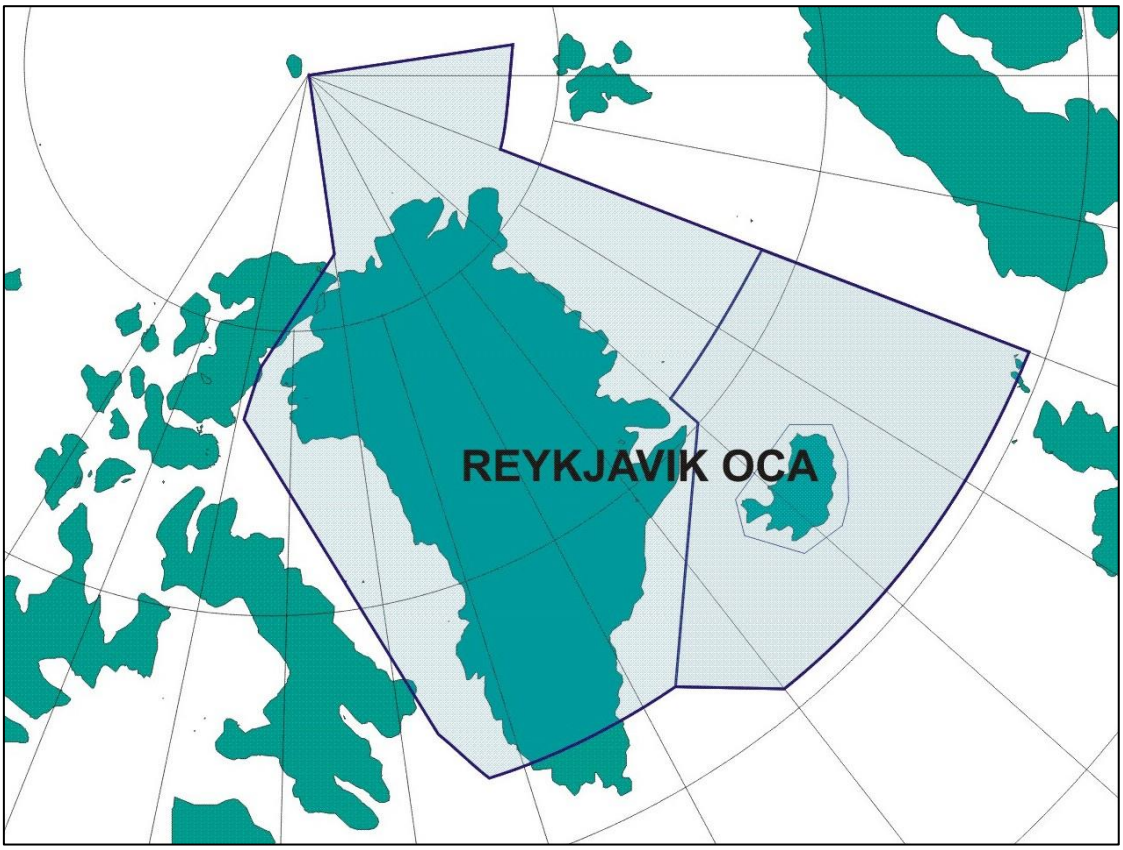
CHAPTER 3: DETAILED PROCEDURES – REYKJAVIK OACC



3.1 FIR FOR WHICH THE CONTINGENCY PLAN APPLIES

Reykjavik Oceanic FIR/CTA

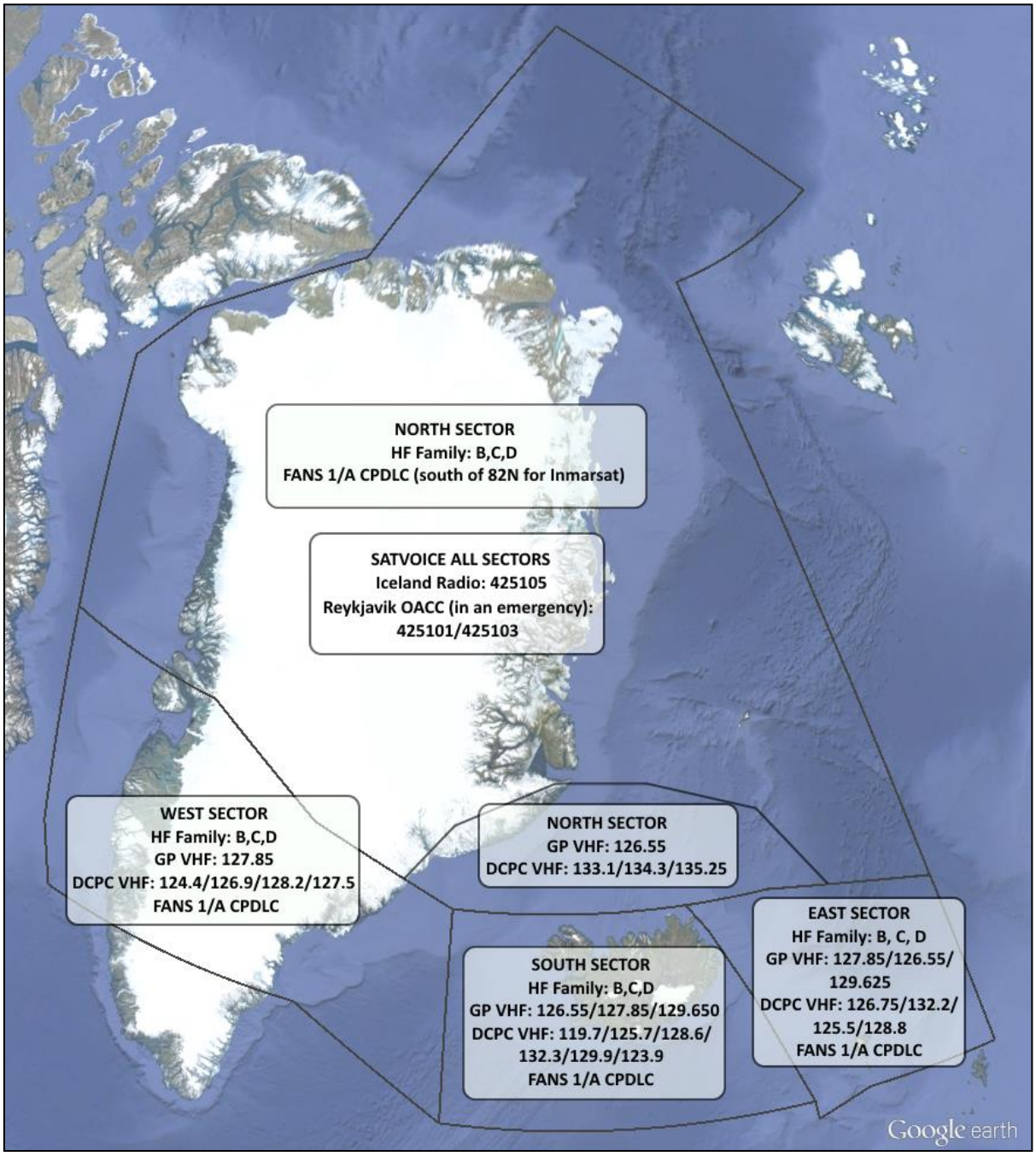


Figure: Reykjavik CTA sectorization and communication possibilities
(VHF frequencies are listed in order of priority)

3.2 FIRs WITH SUPPORTING PROCEDURES

None

3.3 NOTIFICATION PROCEDURES

In a **limited service** situation, notification of any service limitations and traffic management measures will be promulgated to operators and adjacent ANSPs by NOTAM normally not later than 12 hours prior to activation or as soon as practicable in case of an unexpected service interruption.

In a **no service** situation, the OACC is likely to have been evacuated. As soon as possible after evacuation a contingency message will be sent by NOTAM and Iceland radio will advise aircraft within Reykjavik FIR/CTA. Adjacent centres will be advised by phone.

3.4 LIMITED SERVICE - PROCEDURES

3.4.1 Disruption of ground/air communication capability

Iceland Radio and Shanwick Radio jointly provide voice communications in the Reykjavik and Shanwick Oceanic Control Areas.

Radio Operators work flights in either area on an as-needed basis, serving both Reykjavik and Shanwick Control Centres.

Joint Operations between Iceland Radio and Shanwick Radio enhance redundancy in the provision of the general purpose voice communications service.

Iceland radio provides communication services using HF and general purpose VHF. Reykjavik OACC provides DCPC VHF communications in the South sector, East sector, West sector and the southernmost part of North sector. Reykjavik OACC and Iceland radio are located in separate buildings several kilometers apart. Disruption at one facility is therefore unlikely to affect the other and each will therefore serve as a backup for the other in cases of limited disruption of ground/air communication capability.

In case of failure of Iceland radio HF services, the HF service will be delegated to Gander Radio and Bodø Radio.

3.4.2 Disruption of ability to provide control services

Reykjavik will determine, co-ordinate and promulgate any necessary restrictions to meet the service limitation. Traffic in possession of a valid oceanic clearance will have priority over any other traffic. Enroute re-clearance of such traffic will not be permitted except in emergency.

Traffic without a valid oceanic clearance may be subject to tactical traffic management measurements to meet the requirements of the service limitation.

Flight planning

Flight plans shall be filed and addressed to Reykjavik Oceanic Area Control Centre as well as to the appropriate adjacent ATS Units and IFPS, where applicable, in accordance with normal procedures (see AIP Iceland ENR 1.11).

Separation standards

Reykjavik will be responsible for ensuring the co-ordination and implementation of any additional separation requirements. In case of contingency track activation, there shall be at least 20 minutes separation between aircraft upon entry on the same contingency track and level (see chapter 3.7 for contingency route structure).

Contingency tracks

Dependant on the nature of the service limitation, Reykjavik may promulgate and activate contingency tracks for use in addition to the NAT OTS. The contingency route structure detailed in this section will in most cases be implemented.

Air Traffic Flow Management

Reykjavik will co-ordinate any necessary traffic management measures where necessary with the NMOC. Such measures may include, but are not limited to, temporary capacity restrictions and tactical re-routeing measures.

Reykjavik will co-ordinate these restrictions where necessary with adjacent ANSPs where they may affect the flow of traffic through these units airspace.

Communications

Aircraft shall not communicate directly with Reykjavik Oceanic Control on DCPC VHF except when instructed to do so or if in emergency. Position reporting within Reykjavik CTA will be with Iceland Radio or via ADS-C in accordance with normal procedures. Aircraft unable to contact Iceland Radio on HF Frequency shall call either Bodø Radio or Gander Radio.

Aircraft shall maintain continuous listening watch on the assigned frequencies.

ATS surveillance service

An ATS surveillance service will be provided at ATS discretion. Aircraft are required to maintain their assigned discrete SSR Code while within Reykjavik FIR/CTA. West of 030W the ATS surveillance service is provided with ADS-B only.

Responsibilities of adjacent ANSPs

The action required of adjacent ANSPs will vary dependant on the nature of the service limitation. Where such action is not contained within the inter-centre Letters of Agreement (LOAs) the requirement will be promulgated within the initial failure and restrictions message.

3.5 NO SERVICE - PROCEDURES

3.5.1 Loss of ground/air communication capability

Iceland Radio and Shanwick Radio jointly provide voice communications in Reykjavik and Shanwick Oceanic Control Areas.

Radio Operators work flights in either area, updating both Reykjavik and Shanwick Control Centres.

Joint Operations between Iceland Radio and Shanwick Radio increases the ability to provide a 'normal' service with assistance from adjacent aeronautical stations.

Iceland Radio provides communication services using HF and general purpose VHF. Reykjavik OACC provides DCPC VHF communications in the South sector, East sector, West sector and the southern most part of North sector. Reykjavik OACC and Iceland Radio are in separate buildings located several kilometers apart. Disruption at one facility is therefore unlikely to affect the other facility and each will therefore serve as a backup for the other in cases of limited disruption of ground/air communication capability.

In case of failure of Iceland radio HF services, the HF service will be delegated to Gander Radio and Bodø Radio.

3.5.2 Loss of ability to provide control services

Should Reykjavik OACC be evacuated the potential exists for a major disruption to Air Traffic Control service within the Reykjavik OCA.

The HF and general purpose VHF radio communications facilities for the Reykjavik Oceanic Centre are remotely located at the Iceland radio facilities in another part of Reykjavik city, and will therefore unlikely be affected.

In the event that Reykjavik ATCC is evacuated, the operations will be moved to Iceland radio and the provision of Air Traffic Services (ATS) within the Reykjavik FIR/OCA will be continued at that location as far as practicable.

As soon as possible after evacuation a contingency message will be sent by NOTAM and Iceland Radio will advise aircraft within Reykjavik FIR/CTA. Adjacent centers will be advised by phone.

Contact information that may be used in the event of an emergency evacuation is provided in Appendix B.

Flight planning

Flight plans shall be filed and addressed to Reykjavik Oceanic Area Control as well as to the appropriate adjacent ATS Units and IFPS, where applicable, in accordance with normal procedures.

Separation standards

Reykjavik will be responsible for ensuring the co-ordination and implementation of any additional separation requirements. In case of contingency track activation, there shall be at least 20 minutes separation between aircraft upon entry on the same contingency track and level.

Contingency tracks

The contingency route structure detailed in this section will be implemented.

Air Traffic Flow Management

Reykjavik will co-ordinate any necessary traffic management measures where necessary with the NMOC. Such measures may include, but are not limited to, complete closure of the airspace, temporary capacity restrictions and tactical re-routeing measures.

Reykjavik will co-ordinate these restrictions where necessary with adjacent ANSPs where they may affect the flow of traffic through these units airspace.

Communications

HF congestion is likely. Communications should be kept to a necessary minimum. Unnecessary routeing-, flight level- and speed changes will not be issued.

Communications and Position reporting within Reykjavik FIR/CTA will be with Iceland Radio or via ADS-C. Aircraft unable to contact Iceland Radio on general purpose VHF or HF Frequency shall call either Gander Radio or Bodø Radio. Aircraft shall maintain continuous listening watch on the assigned frequencies.

ATS surveillance service

An ATS surveillance service will not be provided. Aircraft are nevertheless required to maintain their assigned discrete SSR Code while within Reykjavik FIR/CTA.

Responsibilities of adjacent ANSPs

Other ATSUs will provide guidance as far as possible in the circumstances.

3.6 FLIGHT CREW AND OPERATOR PROCEDURES

3.6.1 For flights within the Reykjavik OCA

The procedures outlined below are to be used as guidance for pilots in the immediate aftermath of a sudden withdrawal of the ATC service as described above.

On receipt of the contingency message pilots are requested to broadcast to other flights on 121.5 and 123.45. A listening watch on these frequencies must be maintained.

Reykjavik OACC will endeavor to provide a limited ATC service through Iceland radio as soon as possible after evacuation commences.

Flights operating with a received and acknowledged oceanic clearance will be expected to continue in accordance with the last clearance issued unless otherwise advised by ATC. Aircrew shall use extreme caution and use all available means to detect any conflicting traffic.

Flights should remain in/establish communications with Iceland Radio. Flights unable to contact Iceland Radio should establish communication with the next agency at the earliest opportunity stating current position, cleared flight level, next position and estimate and subsequent position. This also applies to flights using automatic position reports (ADS-C) as these reports may not have been received by the next agency.

When flights making automatic position reports are notified of a Reykjavik evacuation they must revert to voice position reporting until clear of Reykjavik OCA, or notified otherwise. Pilots of FANS1/A equipped flights should note that they may be asked to log-on to the next agency while within the Reykjavik OCA, they should not initiate this action until instructed to do so.

If unable to establish radio contact, flights may use SATCOM voice or satellite telephone to provide position reports.

Oceanic Centre	Telephone Number	SATCOM Inmarsat Short Code
Gander	+1 709 651 5207	431613
Santa Maria	+351 296 820 438 +351 296 886 042 (satellite link)	426305
New York	+1 631 468 1413	436623
Ballygirreen (Shanwick Radio)	+353 61 368241 Ground/Air Ops	425002
Reykjavik, via Iceland Radio	+354 568 4600	425105

Flights may request their flight dispatch offices to forward position reports, if sending position reports to multiple ATS Units or if otherwise unable to forward position reports.

3.6.2 For flights approaching the Reykjavik OCA when the contingency is activated

Not in Receipt of an Oceanic Clearance

In the event that Reykjavik OACC must be evacuated, only aircraft with received and acknowledged oceanic clearances are permitted to enter Reykjavik OCA.

If unable to obtain or acknowledge an oceanic clearance, flights shall re-route around the Reykjavik OCA or land at an appropriate airfield. The adjacent areas will issue advice on procedures to be followed.

In receipt of an acknowledged Oceanic Clearance

Aircraft operating with a received and acknowledged oceanic clearance can, at pilot's discretion, continue, but must expect a limited ATC service within the Reykjavik OCA. Aircrew shall use extreme caution and use all available means to detect any conflicting traffic. HF communications will be available through Iceland radio.

However, due to the uncertainty surrounding the contingency situation pilots are strongly advised to comply with the procedures detailed above for flights not in receipt of an oceanic clearance even if they are in receipt of an acknowledged Oceanic clearance.

3.7 REYKJAVIK OACC – CONTINGENCY ROUTE STRUCTURE

3.7.1 For activation within Reykjavik OCA

In a **limited service** contingency situation Reykjavik OACC may promulgate contingency tracks in addition to the published OTS. A set of routes, titled ICECON Tracks, have been established for this purpose. Promulgation of the tracks will be via AFTN.

It is mandatory to flight plan on the ICECON tracks during the periods detailed below. The contingency tracks must be flight planned as if they were random route tracks (detailing each waypoint in the flight plan).

IT IS ESSENTIAL FOR AVIATION SAFETY THAT ALL PILOTS UNDERSTAND AND COMPLY WITH THE PROVISIONS OF THIS CONTINGENCY PLAN.

Flight level changes for en-route aircraft should not be expected within Reykjavik CTA.

Random flights at directional levels will be accepted at FL 290 and below as well as FL 410 and above, however, flow restrictions may be imposed.

An ATS Surveillance service will be provided at ATS discretion.

Ambulance and SAR flights will be dealt with on individual bases.

Day Tracks

The following DAY TRACKS will be effective on entry into Reykjavik FIR/CTA from 0930 to 1800 except A, B and C, which will be activated as part of the NAT OTS.

A BARKU - RATSU - 63N020W - 64N030W - 64N040W - 63N050W - LIBOR
Westbound FL340/350/360
Eastbound FL380

B ATSIX - 62N020W - 63N030W - 63N040W - 62N050W - PIDSO
Westbound FL340/350/360/370/380/390
Eastbound NIL

C BALIX - 61N020W - 62N030W - 62N040W -61N050W – SAVRY
Westbound FL340/350/360/370/380/390
Eastbound NIL

ICECON 8 BESGA - MATIK - 62N010W - 64N020W - 66N030W - 67N040W - 67N050W - DARUB
Westbound FL340/350/360
Eastbound FL390

ICECON 10 OSBON - 63N010W - 65N020W - 67N030W - 69N040W - 70N050W - 70N060W - ADSAM
Westbound FL340/350/360
Eastbound FL370/380/390

ICECON 14 SOSAR - 66N005W - 71N010W - 7630N020W - 81N040W - ALERT
Westbound FL340/350/360
Eastbound NIL

ICECON 16 73N00W - 79N010W – 82N020W - PELRI
Westbound FL340/350/360
Eastbound FL310

ICECON 18 80N00W - 85N020W - OVBES
Westbound FL340/350/360
Eastbound FL310

ICECON 20 76N000W - 78N020W - 7830N040W - THT - LENIM
Westbound FL320/330
Eastbound FL370/380

ICECON 22 IPTON - 63N010W - 63N020W - 64N030W - 64N040W - 63N050W - LIBOR
Westbound FL330
Eastbound NIL

ICECON 24 GUNPA - 62N010W - 62N020W - 63N030W - 63N040W - 62N050W - PIDSO
Westbound FL330
Eastbound NIL

ICECON 24A GUNPA - 62N010W - 62N020W - 62N030W - 62N040W - 61N050W – SAVRY
Westbound FL330
Eastbound NIL

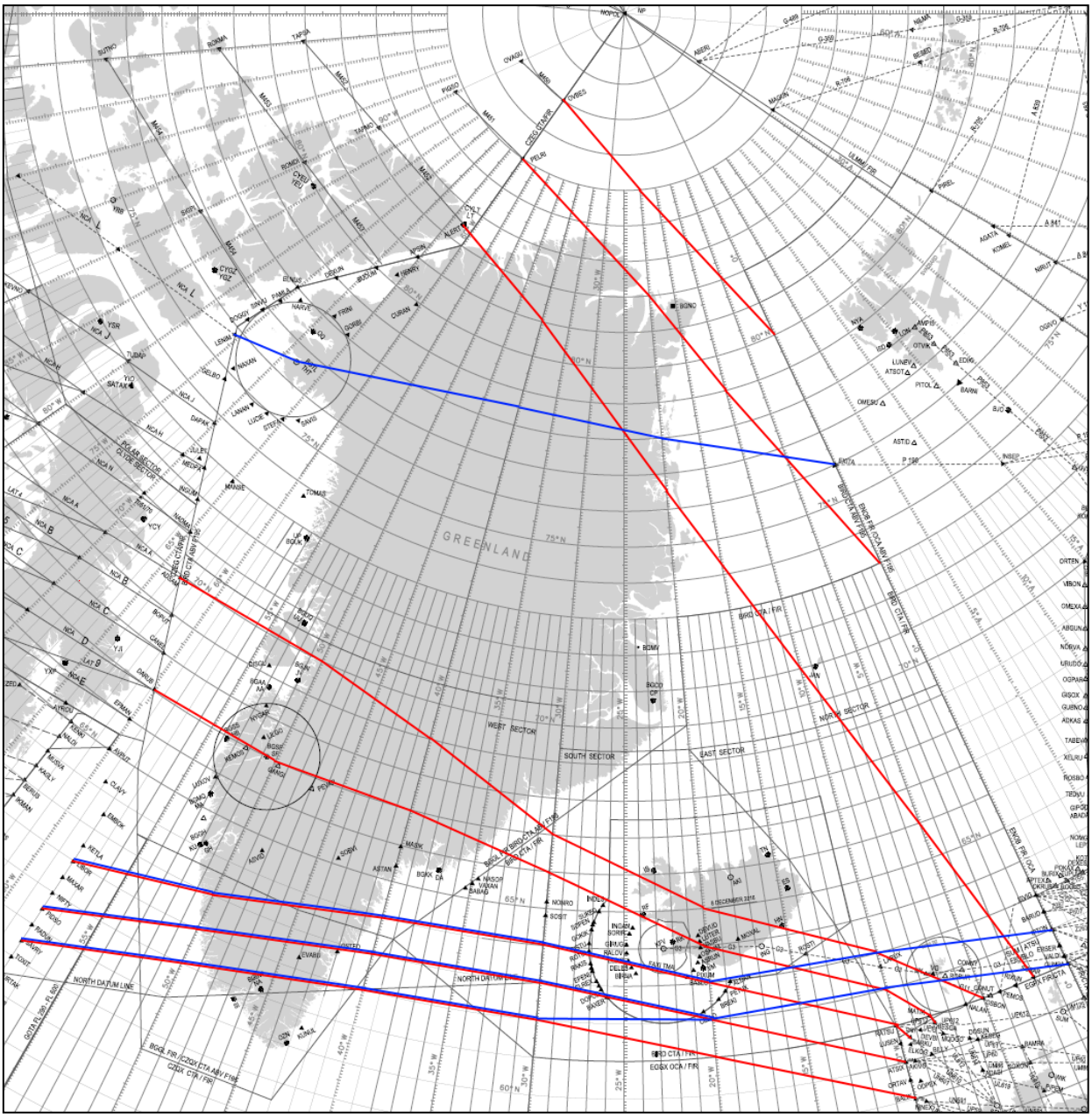


Figure: Contingency day tracks effective on entry into Reykjavik FIR/CTA from 0930 to 1800 except A, B and C, which will be activated as part of the NAT OTS.
Refer to the text above for flight level allocation on the tracks.

Night Tracks

NIGHT TRACKS will be effective on entry into Reykjavik FIR/CTA from 2300 to 0600 except ICECON 11 and 13 which will become effective from 0100 until 0600 at 30W.

ICECON 7 ADSAM - 70N060W - 70N050W - 69N040W - 67N030W - 65N020W - 63N010W - OSBON
Eastbound FL340/350
Westbound FL330

ICECON 9 DARUB - 67N050W - 66N040W - 65N030W - 64N020W - 62N010W – MATIK - BESGA
Eastbound FL340/350
Westbound FL330

ICECON 11 62N040W - 63N030W - KFV - 64N020W - 63N010W -IPTON
Eastbound FL360/370/380
Westbound NIL

ICECON 13 61N040W - 62N030W - 62N020W - 62N010W - GUNPA
Eastbound FL360/370/380
Westbound NIL

ICECON 13A 61N040W - 62N030W - 62N020W - RATSU - BARKU
Eastbound FL360/370/380
Westbound NIL

ICECON 15 ALERT- 81N040W - 7630N020W - 71N010W - 66N005W - SOSAR
Eastbound FL350/390
Westbound FL340

ICECON 17 PELRI - 82N020W - 79N010W – 73N000W
Eastbound FL350/360/370
Westbound FL310/340

ICECON 19 OVBES - 85N020W – 80N000W
Eastbound FL350/360/370
Westbound FL310/340

ICECON 21 LENIM - THT - 7830N040W - 78N020W – 76N000W
Eastbound FL330/380
Westbound FL320

Eastbound traffic will not be permitted to route from Shanwick or Scottish airspace into Reykjavik airspace unless at FL 270 and below or FL 390 and above.

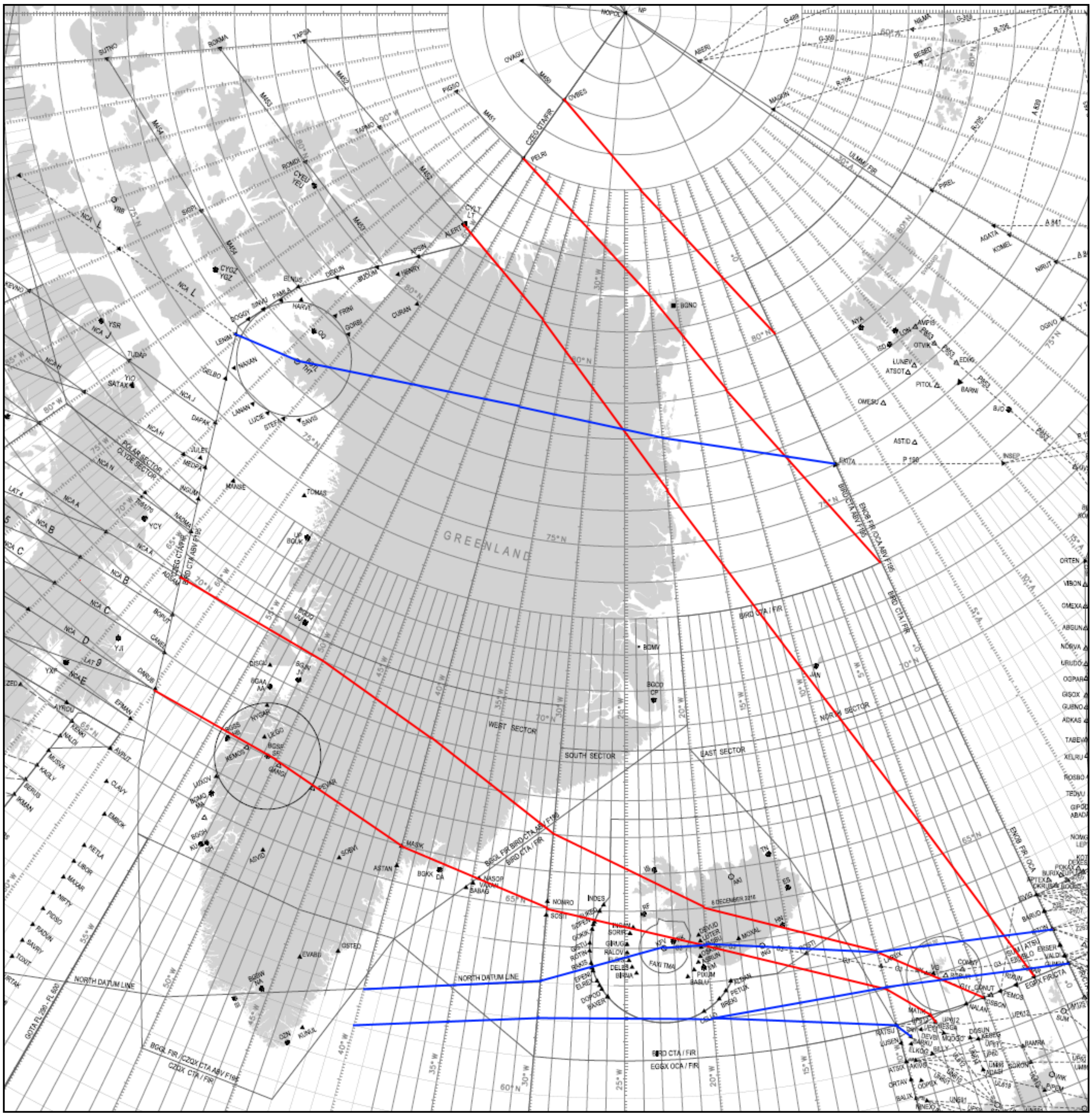


Figure: Contingency night tracks effective on entry into Reykjavik FIR/CTA from 2300 to 0600 except ICECON 11 and 13 which will become effective from 0100 until 0600 at 30W. Refer to the text above for flight level allocation on the tracks.

Tracks available 24 hours

Iceland - inbound and outbound

INBOUND

RATSU - ALDAN - ASRUN - KFV
Westbound FL320

GUNPA - 63N010W - ING - NASBU - KFV
Westbound FL 310

61N040W - 62N030W – ELREX – ELDIS - KFV
Eastbound FL 290/310

BIAR – IPTON 64N010W ES AKI
BIEG – IPTON 64N010W ES
Westbound FL300

OUTBOUND

BIKF - PIXUM PETUX - RATSU - BARKU
Eastbound FL 310

BIKF - OSKUM - 63N010W - GUNPA

Eastbound FL 320

BIKF - RALOV - RAKIS - 63N030W - 62N040W
Westbound FL 320

BIAR – AKI ES 64N010W IPTON
BIEG – ES 64N010W IPTON
Eastbound FL290

Faeroes Islands - inbound and outbound

INBOUND

VALDI - ROBUR
Westbound FL 280

OUTBOUND

G11 - PEMOS
Eastbound FL 290

Søndrestrøm - inbound and outbound

INBOUND

ICECON 12 IPTON - 64N010W - 66N020W - 67N030W - 67N040W - 67N050W - SF
Westbound FL 310

EPMAN - SF
Eastbound FL 300

MAXAR - KU - SF
Northbound FL 320

SAVIS - TOMAS - UP - DISGU - SF
Southbound FL 320

OUTBOUND

ICECON 12 67N050W - 67N040W - 67N030W - 66N020W - 64N010W - IPTON
Eastbound FL 320

EPMAN
Westbound FL 320

KU - MAXAR
Southbound FL 310

DISGU - UP - TOMAS - SAVIS - THT
Northbound FL 310

An ATS Surveillance service will be provided by ATC Søndrestrøm.

Thule - inbound and outbound

INBOUND

DISGU - UP - TOMAS - SAVIS - THT
Northbound FL 310

JULET - LANAN - THT
ALL LEVELS to LANAN, after LANAN FL290 at or below

OUTBOUND

SAVIS - TOMAS - UP - DISGU - SF
Southbound FL 320, not ABV FL 310 until after SAVIS

LANAN - JULET
ALL LEVELS, not ABV FL 310 until after LANAN

Radar service will be provided by Thule-TRACAB.

Traffic via Murmansk

CANEL 73N060W 79N055W 84N040W ABERI
Eastbound FL300
Westbound NIL

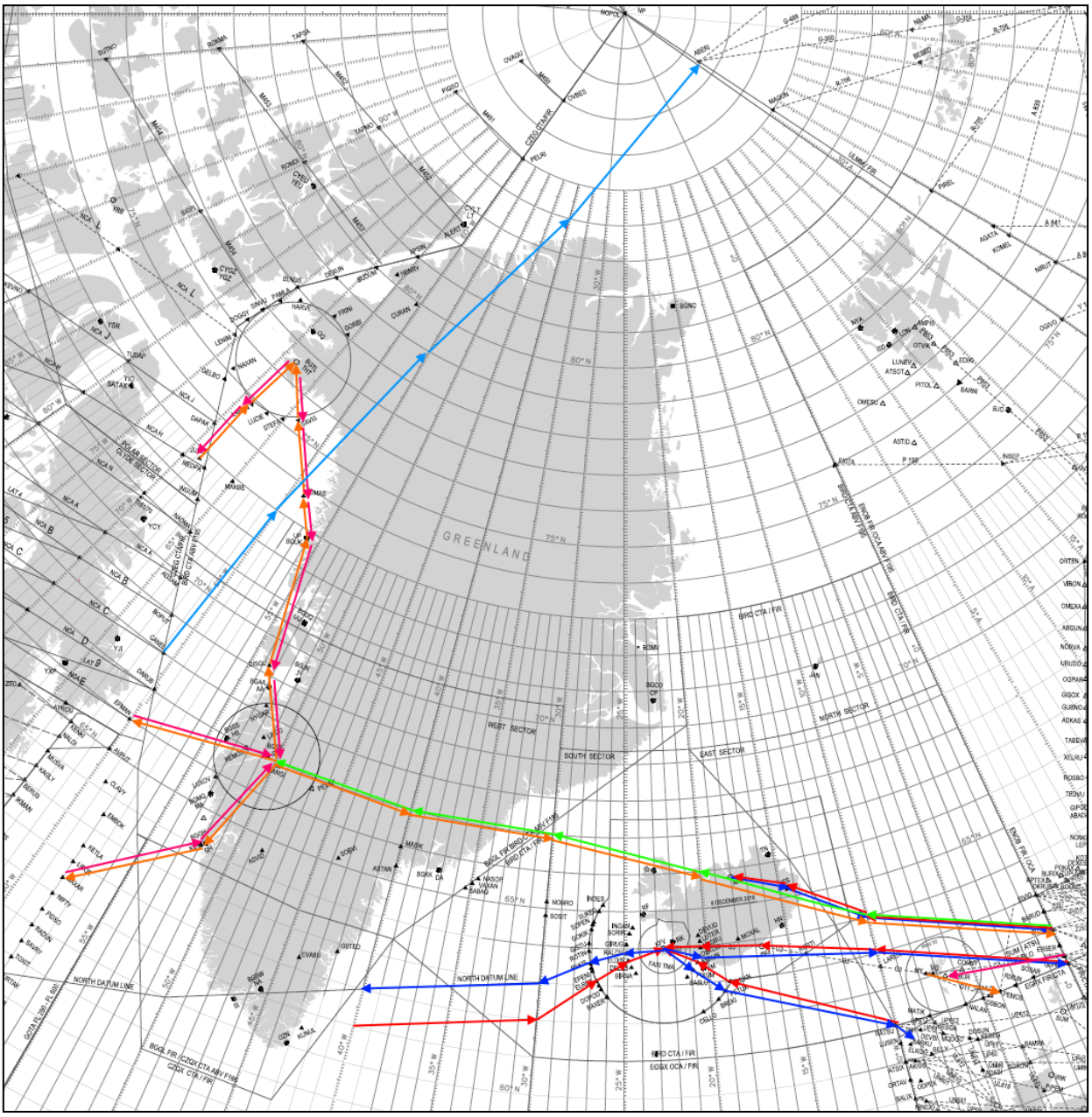


Figure: Contingency tracks available 24 hours.
Refer to the text above for flight level allocation on the tracks.

3.8 LONG TERM CONTINGENCY ARRANGEMENTS

In development.

Appendix A –

Procedures by Adjacent Areas in Event of Reykjavik Evacuation

NONE

Appendix B –

Contact Details - Reykjavik OACC

Reykjavik OACC		
Reykjavik Shift Manager (07:00-23:00)	+354 424 4343	acc@isavia.is
Reykjavik Shift Manager Iridium Satellite Phone (07:00-23:00)	+881 631 450 347	
Shift Manager (23:00-07:00)	+354 424 4141	
Reykjavik OACC Telefax	+354 424 4200	
North Sector primary commercial/ 1st backup	+354 424 4264	
West Sector primary commercial/ 1st backup	+354 424 4264	
East Sector primary commercial/ 1st backup	+354 424 4263	
South Sector primary commercial/ 1st backup	+354 424 4262	
South Sector domestic operations commercial/ 1st backup	+354 424 4261	
All Sectors 2nd backup	+354 568 3033	
All Sectors 3rd backup	+354 568 3035	
JRCC Iceland	+354 545 2100	
System Operators and Flight Data Specialists	+354 424 4265	
System Operators and Flight Data Specialists, Iridium Satellite Phone	+881 621 434 042	
ATM Systems Department	+354 424 4328	
ATM Systems Department, Mobile	+354 897 8483	
Manager Reykjavik OACC Ms. Þórdís Sigurðardóttir	+354 424 5140 +354 699 8504 (mobile)	thordis.sigurdardottir@isavia.is
Deputy Manager Reykjavik OACC Mr. Árni Baldursson	+354 424 5141 +354 615 2565 (mobile)	arni.baldursson@isavia.is
Senior ATM expert Mr. Sigurleifur Kristjánsson	+354 424 5106 +354 897 0336 (mobile)	sigurleifur.kristjansson@isavia.is
Supervisor Iceland Radio	+354 424 4100	supervisor.iceland.radio@isavia.is
Radio operator Iceland Radio	+354 568 4600	

Appendix C –

Evacuation Messages - Reykjavik OACC

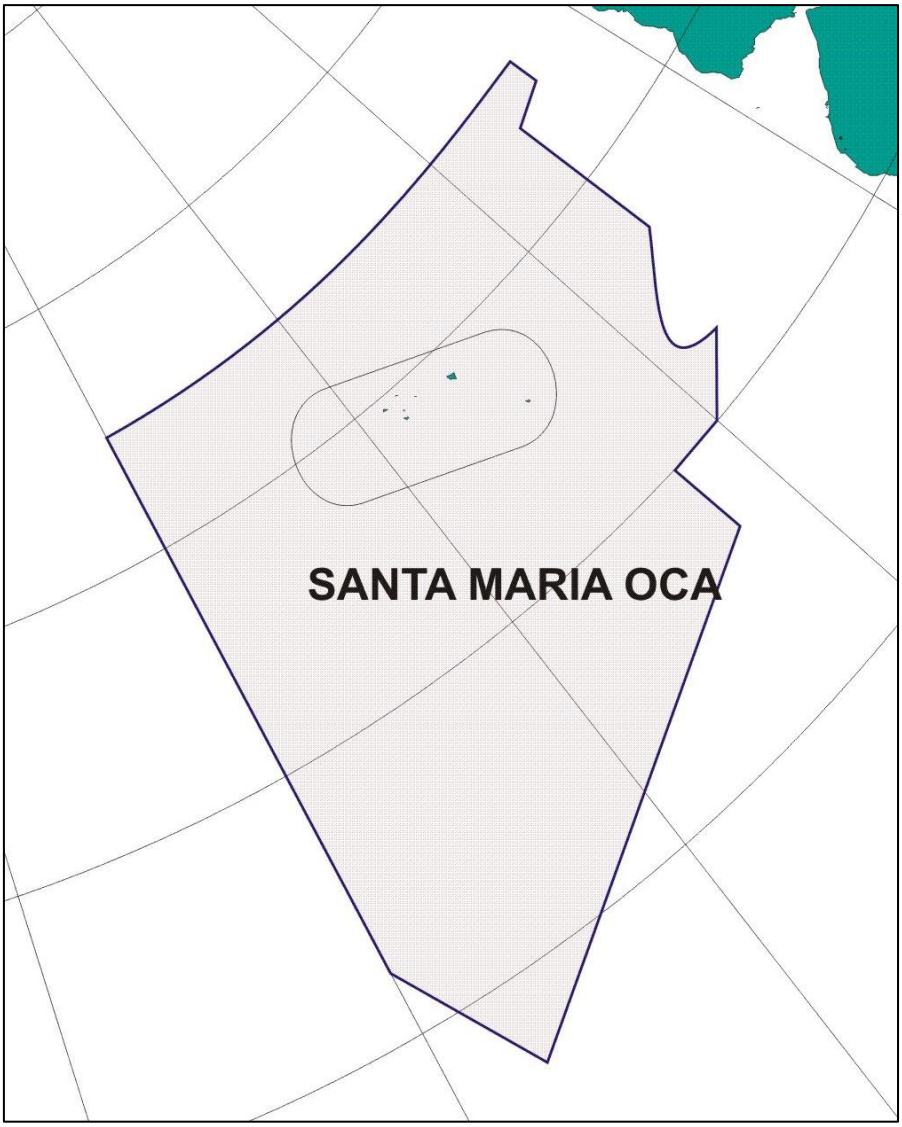
AFTN

DD BGGLZQZX BGSFYFYX CYQXYFYX CZEGZQZI CZQXZQZX
EGGXZQZX EGPXZQZX EIAAYFYX ENOBZQZX
XXXXXX BICCYFYX
SVC
Reykjavík Centre has been evacuated, personnel is on its way to BICC.
Telephone numbers: +354 568 4600, +354 568 4601.

ICELAND RADIO ON VOICE

Emergency evacuation of Reykjavik Centre is in progress. No air traffic control service will be provided by Reykjavik. Use extreme caution and monitor this frequency, emergency frequencies and air to air frequencies.

CHAPTER 4: DETAILED PROCEDURES – SANTA MARIA OACC



4.1 FIR FOR WHICH THE CONTINGENCY PLAN APPLIES

Santa Maria Oceanic FIR

4.2 FIRs WITH SUPPORTING PROCEDURES

Nil

4.3 NOTIFICATION PROCEDURES

General Provisions

The traffic in Santa Maria FIR is massively random, which causes problems for the routine implementation of OTS systems, in order to create an orderly flow.

Santa Maria OACC's communications are mainly provided by Santa Maria Radio Station, which uses three families of HF frequencies (NAT A, NAT E and NAT H) and VHF 132.075 Mhz:

Family A – 3016 Khz ; 5598 Khz ; 8906 Khz ; 13306 Khz ; 17946 Khz.
Family E – 2962 Khz ; 6628 Khz ; 8825 Khz ; 11309 Khz ; 13354 Khz ; 17946 Khz.
Family H – 3491 Khz; 6667 Khz.

Family A is also used by Shanwick Radio Station, Gander Radio Station and New York ARINC, usually for flights with reporting points between 43N and 47N.

Family E is also used by New York ARINC and Canarias, usually for flights with reporting points south of 43N.

Family H is also used by Shanwick Radio Station.

VHF 132.075 Mhz is available over Portugal's mainland, usually used for oceanic clearance request and delivery.

Within surveillance area (SSR / MLAT/ ADS-B) VHF DCP Communications is (are) assured on (VHF)132.150 Mhz , 129.400 Mhz and 121.500 Mhz.

Surveillance and Communications are also provided in Santa Maria FIR through the following data link services:

ADS-C,
CPDLC and
Data Link Oceanic Clearance Delivery

Military aircraft shall follow the same procedures as civilian. If an airspace reservation is in progress the military headquarters at EUCARF will take the suitable decision, according to the type of contingency.

Levels of service

Limited Service; A limited service may result from:

Staff shortage
partial loss of facilities
minor equipment failure
external traffic restrictions

No Service; no service situation may result from:

No staff
loss of Santa Maria facility
major equipment failure.

4.4 LIMITED SERVICE

Dispersal of traffic

Santa Maria OAC shall determine and coordinate necessary oceanic restrictions.
Traffic with oceanic clearance or already approved to enter Santa Maria FIR shall have priority over the remaining services. Traffic without oceanic clearances or not coordinated with Santa Maria OAC may be subject to restrictions to meet the limited oceanic service capability.

Communications

Communications services will be maintained using available equipment and with the assistance of adjacent facilities.

SATCOM equipped flights using INMARSAT network may contact Santa Maria Radio through published short codes 426302 and 426305.

SATCOM equipped flights using other satellite network than INMARSAT may contact Santa Maria Radio dialling directly +351 296 886 655.

Flights reporting via ADS and using CPDLC communications may maintain data link services until otherwise instructed by a ground facility.

Notification

Santa Maria OAC shall be responsible for notification of oceanic service changes. Notification will be through typical channels.

Santa Maria Radio Supervisor shall coordinate with adjacent Aero-radio facilities the required level of assistance.

Roles and responsibilities of adjacent facilities

The action required of adjacent service providers will vary depending of the nature of the service limitation. After notification by Santa Maria OAC, the adjacent facilities shall be responsible to implement the necessary procedures to meet the Santa Maria Oceanic restrictions.

Adjacent Aero-radio facilities shall be responsible to implement the necessary procedures to meet the Santa Maria Radio requirements.

Separation Minima

Santa Maria shall determine and co-ordinate additional separation requirements according to the level of service available.

Contingency Tracks

Santa Maria shall be responsible to organize contingency tracks if necessary. These will be published through typical channels.

Air Traffic Management

Santa Maria shall coordinate traffic restrictions with the adjacent units. Restrictions may be applied to the following: Traffic volume (flow rate, slots); Oceanic routings; En-route clearance change requests; Separation to be applied. Network Manager Operations Center (NMOC) can be requested to assist with establishing and co-ordinating service levels in Santa Maria OAC for the westbound flow.

4.5 NO SERVICE

Santa Maria OAC contains the following operations: Santa Maria Oceanic, Santa Maria Terminal Area, Santa Maria Approach, Santa Maria Tower and Santa Maria Radio Station. A catastrophic event would destroy both Control and Communications for Santa Maria Oceanic, Santa Maria Terminal Area, Approach and Aerodrome Control for Santa Maria Airport and Santa Maria Radio.

Dispersal of traffic

Traffic within Santa Maria FIR or already coordinated with Santa Maria OAC, shall comply with their Oceanic clearance. All other traffic that has not been approved by Santa Maria Oceanic Control shall remain clear of Santa Maria FIR.

Communications

Lisboa ACC will monitor aircraft as far as possible by VHF coverage. Shanwick Radio Station will monitor aircraft until 030W on HF (family A). Gander Radio Station will monitor aircraft between 45N and 40N on HF (family A). New York will monitor aircraft below 40N until 30W on HF (family E).

Flights reporting via ADS and using CPDLC communications must revert to voice procedures unless so instructed by Shanwick Radio, Gander Radio or New York Radio.

Notification

In the event of no service situation Santa Maria Oceanic shall be responsible for notification to Lisboa ACC, Shanwick OAC, New York OAC and Sal ACC. This may not be possible in the event of an unexpected catastrophic situation. Any Control unit that is unable to establish communications with Santa Maria OAC shall request assistance in determining the status of Santa Maria OAC from other units adjacent to Santa Maria FIR.

4.6 Roles and Responsibilities of Adjacent OAC's and ACC's

Until Contingency tracks can be implemented adjacent units will take immediate actions for necessary traffic management procedures in accordance with this plan. The adjacent units will not issue re-clearances within Santa Maria FIR after notification of the no service situation, unless any loss of separation minima between aircraft is detected. Madrid ACC, Piarco ACC, Dakar OAC and Sal OAC shall not clear any aircraft into Santa Maria FIR after notification of the loss of service.

Lisboa ACC will ensure that Lisboa RCC, Madrid ACC and Canarias ACC are advised of the situation, and will assist any emergencies between 015W and 020W when possible by VHF coverage. Lisboa ACC will change the cleared traffic to Shanwick Radio Station.

Shanwick OAC will ensure that Gander OAC is advised of the situation. Shanwick Radio Station will change the cleared traffic to New York ARINC or to Gander Radio Station after 30W as appropriate.

New York OAC will ensure that Piarco is advised of the situation. New York executive controllers shall verify if Eastbound traffic coordinated before the notification of the loss of the Santa Maria facility, are separated at least until 20W. New York OAC will assist any emergencies between 30W and 40W, and will change the cleared traffic to Shanwick Radio Station or Gander Radio Station as appropriate.

Ponta Delgada and Horta approach will monitor all traffic within surveillance coverage (230 NM) and will assist any emergencies between 020W and 030W.

Lajes Rapcon will monitor all aircraft within radar coverage (200 NM) and will assist any emergencies between 020W and 030W. Lajes airport will be available H24 for any distress situation for landing purposes without prior military authorization.

Sal OAC will ensure that Dakar OAC is advised of the situation.

Separation

All separation standards shall be increased by 10 minutes.

4.7 Contingency Tracks

When no service situation occurs within Santa Maria FIR the contingency tracks listed below shall be implemented. The tracks will be effective after coordination between adjacent units.

Period 2300 UTC - 0630 UTC

Eastbound tracks

EAST1101	29N040W 33N 030W 36N020W LUTAK ESP - FL 310,330,350,370,390
EAST1102	43N040W 42N030W 41N020W DETOX DIRMA - FL 290,320,350,390
EAST1103	45N030W 44N020W ARMED PRT - FL 290,320,350,390
EAST1104	34N040W 40N030W 45N020W 47N 008W - FL 330, 340, 360, 370, 380, 400
EAST1105	40N040W 45N030W 47N 020W - FL 330,340,360,370,380,400
EAST1108	28N040W ULTEM FL 340,380

Westbound tracks

WEST1106	GUNTI 39N020W 39N030W 38N040W - FL 280
WEST1107	45N020W 40N030W 34N040W - FL 310
WEST1109	ULTEM 28N040W FL 320,360

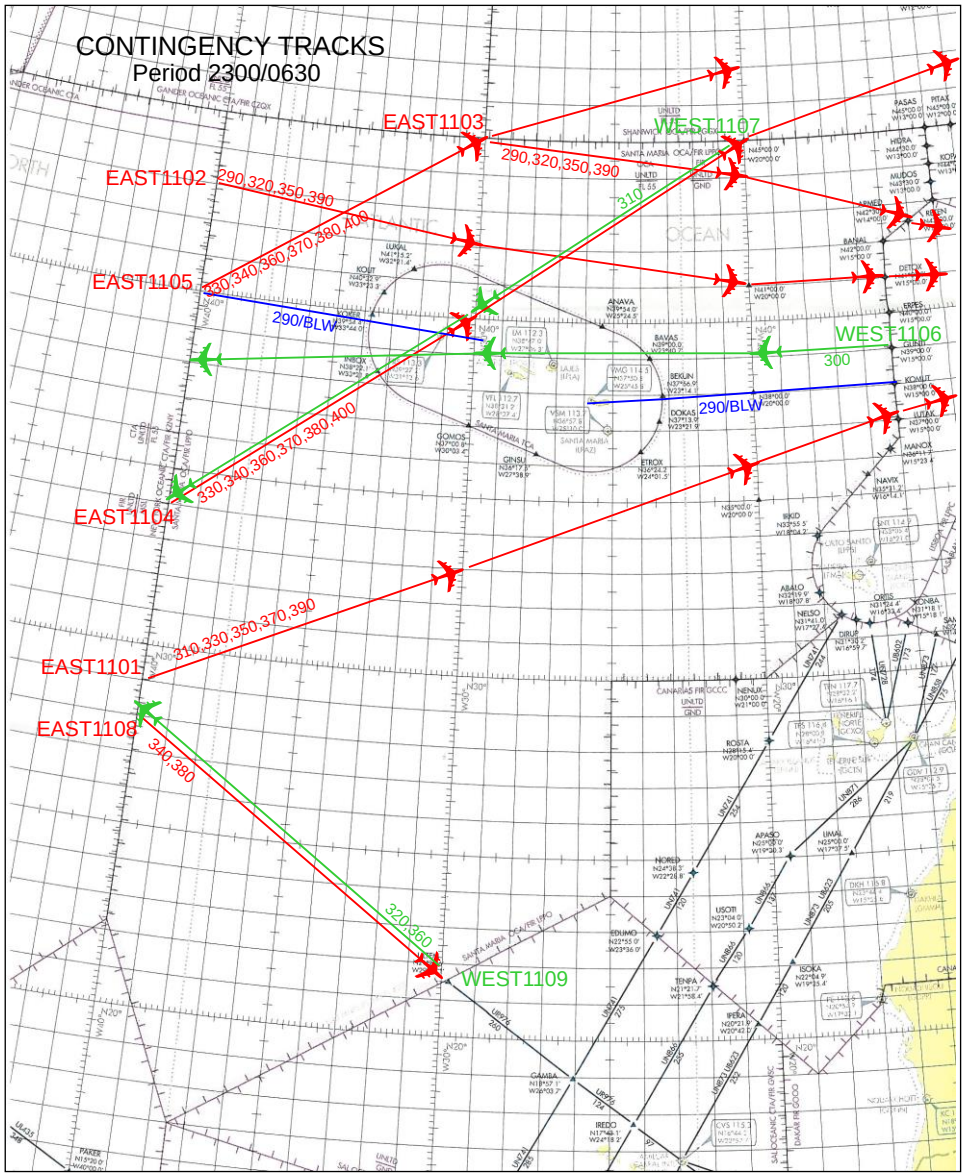


Figure: Contingency night tracks for Santa Maria CTA/FIR during the period 2300/0630 except AZOCON tracks which are effective 24 hours a day.
See text above.

Period 1000 UTC - 1800 UTC

Westbound tracks

WEST2201	DETOX 41N020W 42N030W 43N040W - FL 310, 350,370,390
WEST2202	GUNTI 39N020W 39N030W 38N040W - FL 330, 350,370,390
WEST2203	LUTAK 36N020W 33N030W 29N040W - FL 310, 330, 350,370,390
WEST2204	45N015W 42N020W 37N030W 32N040W - FL 300, 320, 340,360, 380, 400
WEST2205	45N020W 40N030W 35N040W - FL 300,320,340,360,380,400
WEST2209	ULTEM 28N040W – FL320,360

Eastbound tracks

EAST2206	40N040W 45N030W 47N020W - FL 330
EAST2207	38N040W 39N030W 39N020W GUNTI - FL310
EAST2208	28N040W ULTEM – F340,380

Flights between Santa Maria Radar and Lisboa FIR

AZOCON01 KOMUT 38N020W BEKUN VMG - FL 290 and below (according to direction of flight).

Flights between Santa Maria Radar and New York FIR

AZOCON02 40N040W FRS LADOX - FL 290 and below (according to direction of flight)

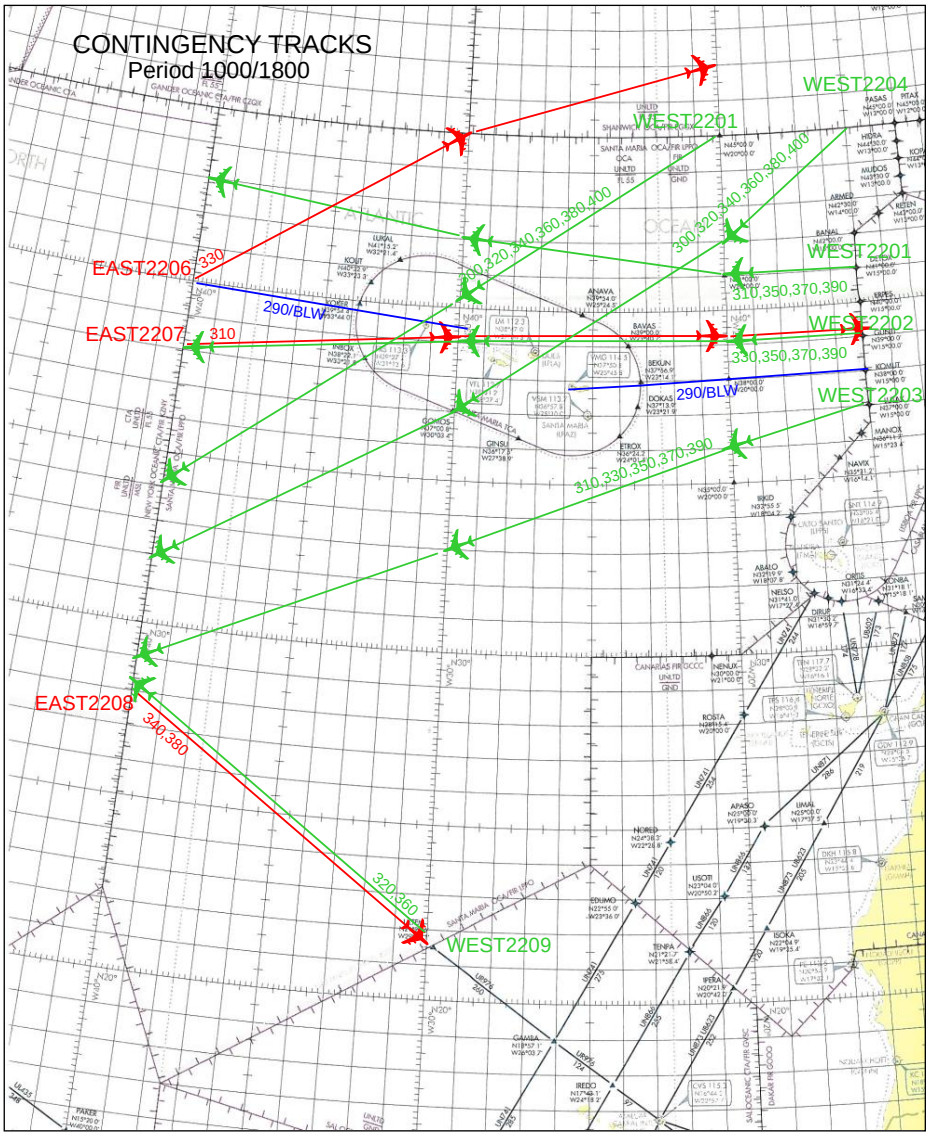


Figure: Contingency day tracks for Santa Maria CTA/FIR during the period 1000/1800, except AZOCON tracks which are effective 24 hours a day. See text above.

Appendix A –

Procedures by Adjacent Areas in Event of Santa Maria Evacuation

NONE

_____

Appendix B –

Contact Details – Santa Maria OACC

Air Traffic Flow Management, Recovery Team and Contacts List

The recovery team will carry out the appropriate management and coordination with the adjacent units and facilities in order to establish an air traffic flow as the Contingency Plan and the recovery actions allow a limited service to be restored.

Santa Maria OACC	Telephone Number	AFTN
Atlantic Operations Director	+351 296 820 501	
Operations Division Manager	+351 296 820 504	
Operations Division Manager	+351 296 820 508	
Radio Station Manager	+351 296 820 509	
Maintenance Manager	+351 296 820 512	
ACC Watch Manager	+351 296 820 400 +351 296 886 299 +351 296 820 422 (fax)	LPAZZOZX
Radio Station Watch Manager	+351 296 820 401	
Lajes RCC	+351 295 513 686 +351 295 540 792 (fax)	

CHAPTER 5: DETAILED PROCEDURES – NEW YORK OACC

New York ARTCC (NY OAC)

The procedures outlined below are to be used as guidance for pilots/operators/adjacent ANSPs following a sudden withdrawal or reduction of ATC service.

5.1 FIR FOR WHICH THE CONTINGENCY PLAN APPLIES

NY OAC

5.2 FIRs WITH SUPPORTING PROCEDURES*

FACILITY	APPENDIX
*Boston ARTCC	Appendix 1/1A
*Moncton ACC	Appendix 2/2A
*Gander ACC	Appendix 3/3A
*Santa Maria ACC	Appendix 4/4A
*Piarco ACC	Appendix 5/5A
*San Juan CERAP	Appendix 6/6A
*Miami ARTCC	Appendix 7/7A
*Jacksonville ARTCC	Appendix 8/8A
Fleet Area Control and Surveillance Facility, Virginia Capes	Appendix 9/9A
NY OAC FIR Contingency Routes	Appendix 10
FAA Air Traffic Control System Command Center	Appendix 11
Evacuation Message	Appendix 12
Adjacent Agencies	Appendix 13
Adjacent Agencies Communications	Appendix 14
Consolidated New York Center Contact Details	Appendix 15
VOLMET International Broadcast Information	Appendix 16

5.3 NOTIFICATION PROCEDURES

In a limited service situation

Notification of any service limitations and traffic management measures will be issued to operators and adjacent facilities via AFTN messages, NOTAMs, FAA Command Center advisories or by telephone.

In a no service situation

NY Oceanic Area of Control (OAC) may have to be evacuated and/or relocated. The oceanic portion of the ARTCC will endeavour to provide a limited ATC service through Aeronautical Radio Inc. (ARINC) as soon as possible after evacuation commences, in Ronkonkoma, New York, USA, or to the National Aviation Facilities Experimental Center (NAFEC) in Atlantic City, New Jersey, USA. Appropriate messages will be sent to all affected air traffic control facilities and aircraft operators.

Air Traffic Flow Management

New York Center shall coordinate any necessary traffic management initiatives with the FAA Air Traffic Control System Command Center (ATCSCC). Such measures may include, but are not limited to, temporary capacity limitations and associated restrictions, airway usage and altitude availability procedures, separation standard modifications and tactical rerouting measures.

Responsibilities of Adjacent ANSPs

The action of adjacent ANSPs will vary depending on the nature of the service limitation. Where such action is not contained within the Inter-Center Letters of Agreement (LOAs) the requirement will be promulgated at the time of the initial failure and will include any FAA Air Traffic System Command Center advisories/restrictions.

5.4 LIMITED SERVICE - PROCEDURES

5.4.1 Disruption of ground/air communication capability

If communication services cannot be adequately maintained by Aeronautical Radio Inc. HF communications services on the North Atlantic will be delegated to the other International radio stations; Gander International Flight Service Station (Gander Radio) and/or Santa Maria Radio. Appropriate frequencies will be published in a NOTAM.

5.4.2 Disruption of ability to provide control services

NY OAC shall determine, co-ordinate, and issue any necessary restrictions to meet the service limitation. Aircraft having valid oceanic clearances shall have priority over any other traffic. En route re-clearances of traffic shall be limited to aircraft in emergency situations. Traffic without an oceanic clearance may be subject to tactical traffic management procedures/restrictions to meet the requirements of the service limitation.

The route structure included in this contingency plan is intended to provide adjacent ANSPs and aircraft operator's information as to what can be expected during limited service operation. However, real-time operations affected by meteorological conditions, restricted airspace, etc., may necessitate the use of alternative routes, designation of single direction routes, and/or altitudes.

5.5 NO SERVICE – PROCEDURES

5.5.1 Loss of ground/air communication capability

If communication services cannot be conducted by any radio station throughout the entire NY OAC, no traffic will be permitted to enter NY OAC airspace. Limited service may be provided in those identified airspace areas where reliable communications are still possible.

5.5.2 Loss of ability to provide control services

If the loss of ability to provide control services is due to communications failure at the NYARTCC, NY OAC area will endeavour to relocate to the Aeronautical Radio Inc. (ARINC) communications facility in Ronkonkoma, New York, USA, and provide limited ATC services from there.

If ARINC is also non-operational, or if NYARTCC is not expected to become operational within a reasonable period of time, the Oceanic section is expected to be relocated to the National Aviation Facilities Experimental Center (NAFEC) located in Atlantic City, New Jersey, USA. After the relocation, appropriate contingency messages will be sent to all the affected ANSPs and operators and limited air traffic services will be provided thereafter as soon as possible.

5.6 FLIGHT CREW AND OPERATOR PROCEDURES

5.6.1 Airborne flights within the NY OAC

ARINC, the HF communication service provider for the New York OAC is remotely located, and will therefore unlikely be affected, however, HF frequency congestion is likely. Communications should be kept to a minimum.

Flights operating with an oceanic clearance will be expected to continue in accordance with the last clearance issued unless otherwise advised by ATC. Aircrew shall use extreme caution and use all available means to detect any conflicting traffic.

Flights should remain in/establish communications with ARINC, even if logged on to CPDLC. Flights unable to contact ARINC should establish communication with the next agency (see Appendices 13 and 14 ‘Adjacent Agencies’, ‘Adjacent Agencies Communications’) at the earliest opportunity stating current position, cleared flight level, next position and estimate and subsequent position. When ADS equipped flights are notified of a New York OAC evacuation they must revert to voice position reporting until clear of New York OAC, or otherwise notified (ADS/CPDLC reports may not have been received by the next agency). Pilots should note that they may be asked to log-on to Santa Maria “LPPO” or Gander “CZQX” when within the New York OAC, they should not initiate this action until instructed to do so, or upon exiting New York OAC.

Any flights involved in altitude changes should complete the maneuver as soon as possible in accordance with the clearance.

Flight crews should also continuously monitor VHF frequency 121.5 and 123.45 in order to exchange position information with other flights in the event they’re unable to communicate on HF.

Aircraft equipped with satellite telephone that are unable to communicate with ATC on HF and/or VHF, or via CPDLC, should contact ARINC (INMARSAT short code for NYC is 436623)

5.6.2 For flights approaching the New York OAC when the contingency is activated

Not in Receipt of an Oceanic Clearance

In the event that New York OAC must be evacuated, only aircraft with received and acknowledged oceanic clearances are permitted to transit New York OAC.

If unable to obtain or acknowledge an oceanic clearance, flights shall re-route around the New York OAC or land at an appropriate airfield. The adjacent areas will issue advice on procedures to be followed.

In receipt of an acknowledged Oceanic Clearance

Aircraft operating with a received and acknowledged oceanic clearance can, at pilot's discretion, continue, but must expect a limited ATC service within the New York OAC. Aircrews shall use extreme caution and use all available means to detect any conflicting traffic.

However, due to the uncertainty surrounding the contingency situation, pilots are strongly advised to consider rerouting around the New York OAC airspace.

5.7 CONTINGENCY ROUTE STRUCTURE

NYARTCC has developed and will activate fixed routes to be used in conjunction with, or in lieu of, the Organized Track System (OTS). The enclosed named and fixed routes in the NY OAC will be implemented. The implementation may include all or a portion of the route options depicted in this document based on the nature of the contingency. Further guidance will be published at the time of the contingency.

New York Center will be implementing a contingency plan whose main philosophy will be separating routes by altitude stratification based on direction and distance of flight.

Stratification Category	*Altitude Range*
Low Altitude	FL 290 and below
Mid Altitude	FL 300 – FL 350
High Altitude	FL 360 and above

Stratification categories and their associated altitude bands have been developed based upon the expected flight distance that will be flown. The shorter distances between the U.S. mainland, Canada to/from the Bermuda Area will receive the low altitude routing band, the mid distance between North America and the Caribbean and South America will receive the mid altitude routing band, and flight between the Americas and the Caribbean to/from Europe will receive the high altitude routing.

5.7.1 For activation within NY OAC.

See Appendices 1 through 16.

5.8 GENERAL PROVISIONS

Military Operators

Military aircraft shall follow the same procedures as civilian aircraft. If an airspace reservation is in progress or a critical mission is scheduled the Central Altitude Reservation Facility (CARF) at the FAA ATCSCC will make a suitable decision regarding the continuation of the airspace reservation, according to the mission requirements and the type of contingency.

Separation Standards

New York OAC will be responsible for ensuring through the FAA ATCSCC the coordination and implementation of any additional separation requirements.

Long Term Contingency Arrangements

The NY OAC section of the NYARTCC would possibly be relocated to the National Aviation Facilities Experimental Center (NAFEC) located in Atlantic City, New Jersey, USA.

Appendix 1 –

Contingency Procedures between NY OAC and Boston ARTCC

Upon notification that NY OAC has lost its ability to provide air traffic control service, Boston ARTCC (ZBW) will reroute all airborne eastbound flights that are flight planned into NY OAC (and are still west of longitude 67 west) into Moncton ACC airspace. ZBW will coordinate with Moncton ACC as to the routes and altitudes required for these flights to remain clear of airspace within the NY OAC.

Any eastbound aircraft that is east of longitude 67 west, and is in communication and radar contact with ZBW, may be rerouted (with the concurrence of Moncton ACC) northward into Moncton ACC airspace without prior coordination with ZNY. ZBW or Moncton will subsequently advise ZNY of the reroute.

Any westbound aircraft, east of longitude 67 west, that is in communication and radar contact with ZBW may be rerouted by ZBW (into their own airspace) without coordinating with ZNY in order to facilitate rerouting eastbound aircraft to exit or remain clear of NY OAC airspace.

If ZNY has adequate VHF/UHF radio and radar service capability, flights with destinations in the western Caribbean or the Florida peninsula may be rerouted by ZBW through the ZNY offshore Sectors 65 (JOBOC), 86 (ATLANTIC), then via routing LEXAD M201 HANRI, through Sectors 82 (PAEPR), and 83 (HANRI) into Jacksonville Center.

Implementation of Limited Service

When NY OAC becomes capable of providing limited ATC service, it will be provided to aircraft on the following routes.

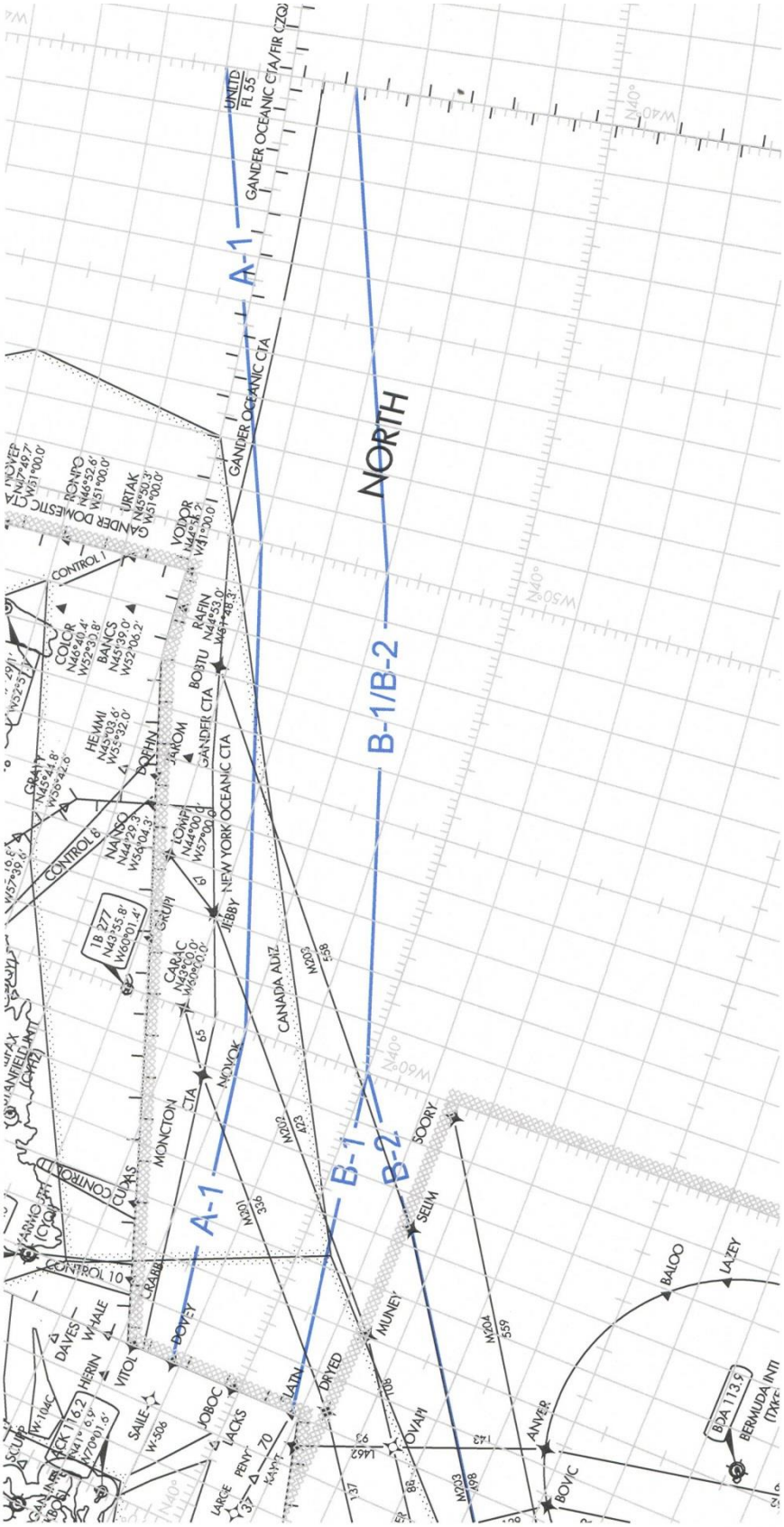
Rte Name	Route Definition (See Pictorial - Appendix 1A-1/2)	Altitudes
A-1	DOVEY 4200N/06000W 4400N/05000W 4600N/04000W FPR (and the reverse)	FL350 and below
B-1/B-2	SLATN 4000N/06000W 4200N/05000W 4400N/04000W FPR (and the reverse)	FL350 and below

If, during the provision of limited service, NY OAC becomes capable of increasing air traffic services, more routes and/or increased capacity will be made available to operators.

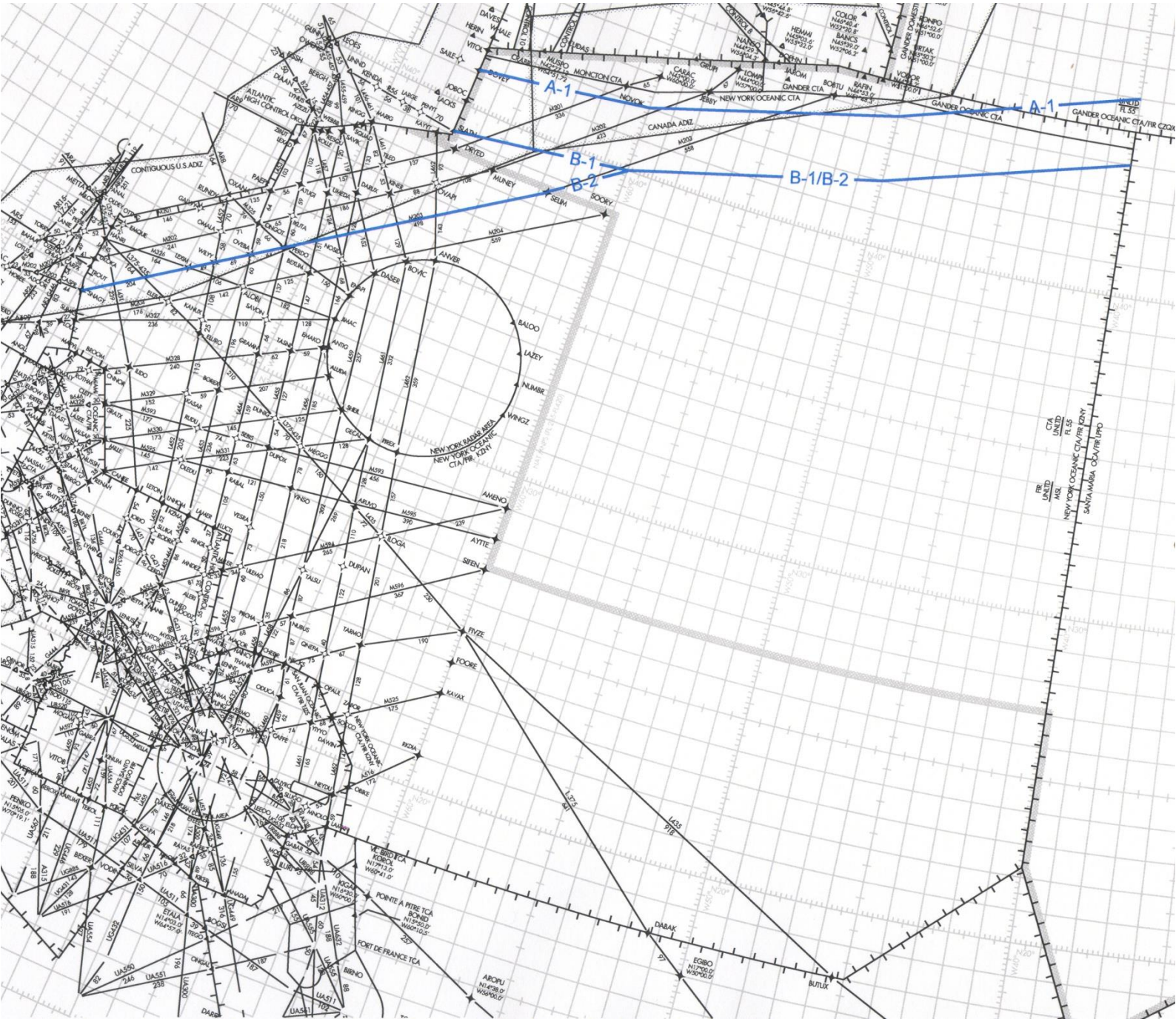
New York (ZNY) OAC Telephone/Facsimile Numbers:		
ZNY Watch Desk	+1-631-468-5959	Fax: +1-631-468-4224
ZNY Traffic Management Unit	+1-631-468-1080	Fax: +1-631-468-4224
ZNY North Atlantic Operating Area Supvr	+1-631-468-1496/1413	Fax: +1-631-468-4224
ZNY WATRS Operating Area Supvr	+1-631-468-1495	Fax: +1-631-468-4224
ZNY Procedures Office	+1-631-468-1018	Fax: +1-631-468-4229
ZNY Traffic Management Officer	+1-631-468-1010	Fax: +1-631-468-4211
ZNY Technical Operations Area	+1-631-468-1293	Fax: +1-631-468-1289
ARINC Operation Team Leader	+1-631-589-7272	Fax: +1-631-563-2412
ARINC Shift Manager	+1-631-244-2483	Fax: +1-631-563-2412

Boston Center (ZBW) Telephone/Facsimile Numbers:		
ZBW Watch Desk	+1-603-879-6655	Fax: +1-603-879-6717
ZBW Traffic Management Unit	+1-603-879-6666	Fax: +1-603-879-6717
ZBW Procedures Office	+1-603-879-6858	Fax: +1-603-879-6410
ZBW Traffic Management Officer	+1-603-879-6644	Fax: +1-603-879-6717
ZBW Technical Operations Area	+1-603-879-6729	Fax: +1-603-879-6934

Appendix 1A-1 - Routes (A-1, B-1, B-2) pictorial



Appendix 1A-2 - Routes (A-1, B-1, B-2) pictorial



Appendix 2 –

Contingency Procedures between NY OAC and Moncton ACC

Upon notification that NY OAC has lost its ability to provide air traffic control service, Moncton ACC will reroute all westbound traffic that is flight planned to enter NY OAC through the Boston ARTCC, and all eastbound traffic through the Gander ACC.

Implementation of Limited Service

When NY OAC becomes capable of providing limited ATC service, it will be provided to aircraft on the following routes.

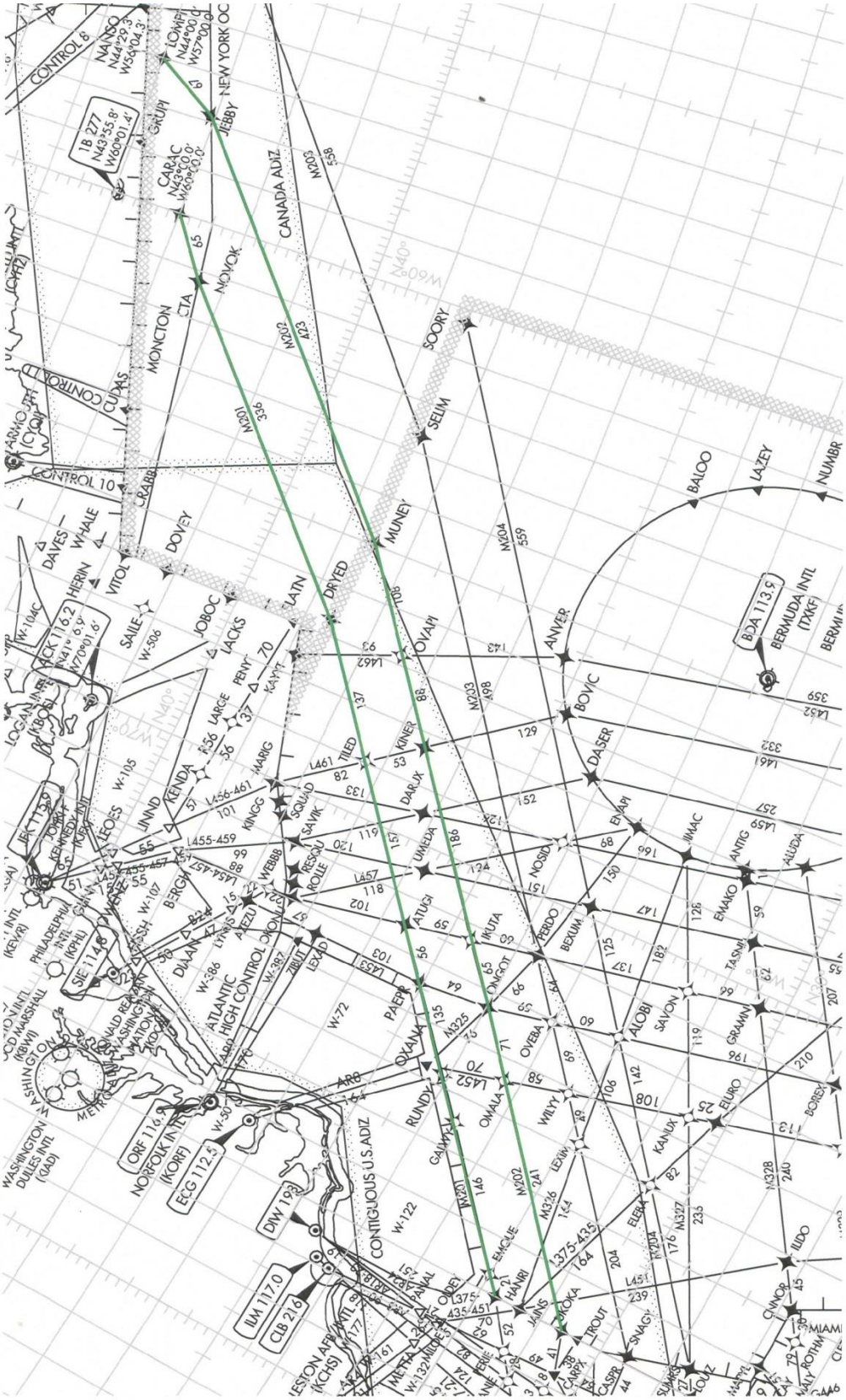
Rte Name	Route Definition (See Pictorial - Appendix 2A-1/2)	Altitudes
M201	HANRI M201 NOVOK CARAC FPR (and the reverse)	FL360 and above
M202	UKOKA M202 JEBBY LOMPI FPR (and the reverse)	FL360 and above

If, during the provision of limited service, NY OAC becomes capable of increasing air traffic services, more routes and/or increased capacity will be made available to operators.

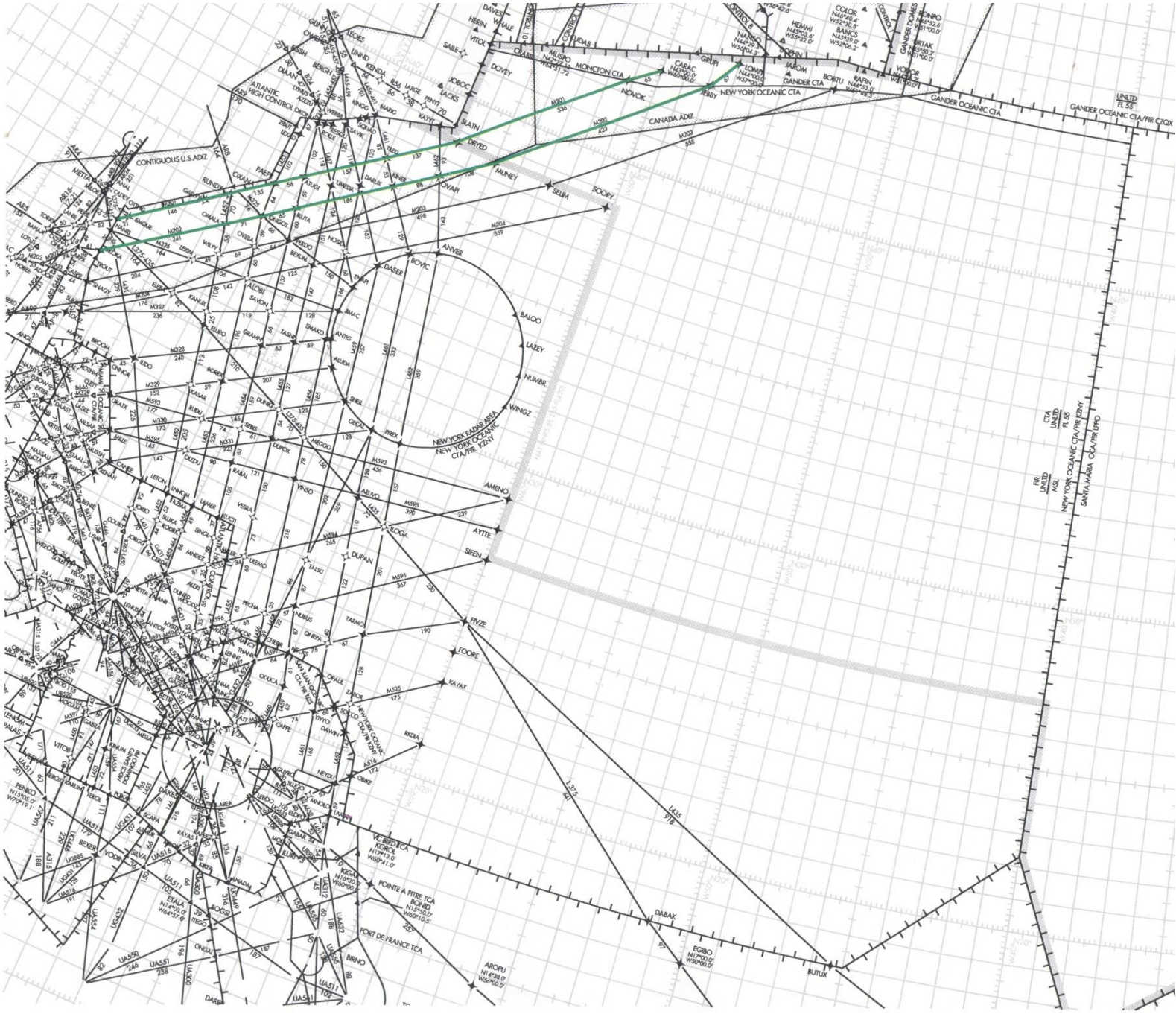
New York (ZNY) OAC Telephone/Facsimile Numbers:		
ZNY Watch Desk	+1-631-468-5959	Fax: +1-631-468-4224
ZNY Traffic Management Unit	+1-631-468-1080	Fax: +1-631-468-4224
ZNY North Atlantic Operating Area Supvr	+1-631-468-1496/1413	Fax: +1-631-468-4224
ZNY WATRS Operating Area Supvr	+1-631-468-1495	Fax: +1-631-468-4224
ZNY Procedures Office	+1-631-468-1018	Fax: +1-631-468-4229
ZNY Traffic Management Officer	+1-631-468-1010	Fax: +1-631-468-4211
ZNY Technical Operations Area	+1-631-468-1293	Fax: +1-631-468-1289
ARINC Operation Team Leader	+1-631-589-7272	Fax: +1-631-563-2412
ARINC Shift Manager	+1-631-244-2483	Fax: +1-631-563-2412

Moncton ACC (YQM) Telephone/Facsimile Numbers:		
Nav Canada National Operations Center	+1-613-248-4087	Fax: +1-613-248-3983
YQM Moncton ACC (at NOVOK or JEBBY)	+1-506-867-7175	Fax: +1-506-867-7180
YQM Moncton ACC (at NOVOK or JEBBY)	+1-506-867-7173	Fax: +1-506-867-7180

Appendix 2A-1 - Routes (M201, M202) pictorial



Appendix 2A-2 - Routes (M201, M202) pictorial



Appendix 3 –

Contingency Procedures between NY OAC and Gander ACC

Upon notification that NY OAC has lost its ability to provide air traffic control service, Gander ACC will reroute all westbound traffic that is flight planned to enter NY OAC through the Moncton ACC, and will retain all eastbound traffic within their airspace.

Implementation of Limited Service

When NY OAC becomes capable of providing limited ATC service, it will be provided to aircraft on the following routes.

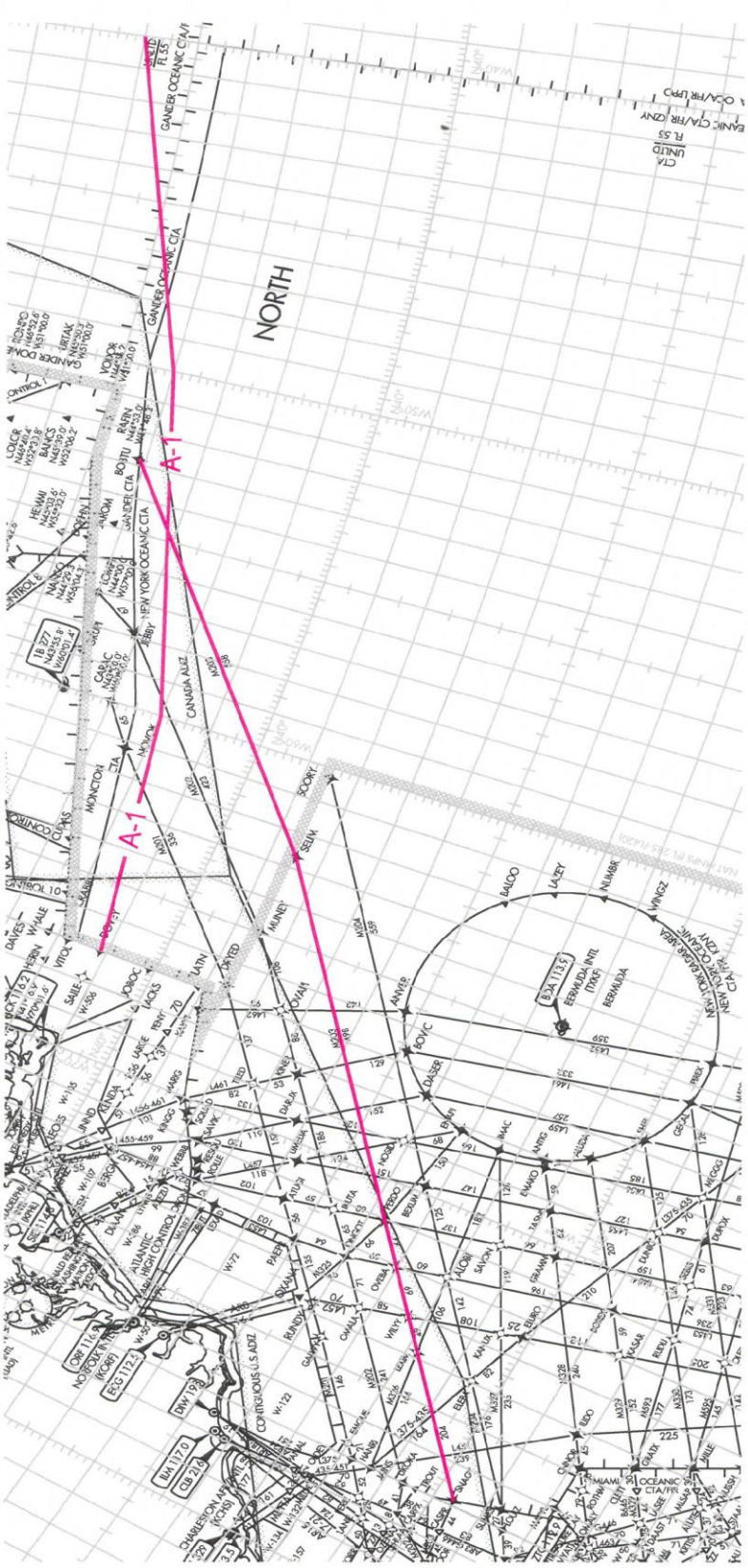
Rte Name	Route Definition (See Pictorial - Appendix 3A-1/2)	Altitudes
A-1	DOVEY 4200N/06000W 4400N/05000W 4600N/04000W FPR (and the reverse)	FL350 and below
M203	SNAGY M203 BOBTU FPR (and the reverse)	FL360 and above

If, during the provision of limited service, NY OAC becomes capable of increasing air traffic services, more routes and/or increased capacity will be made available to operators.

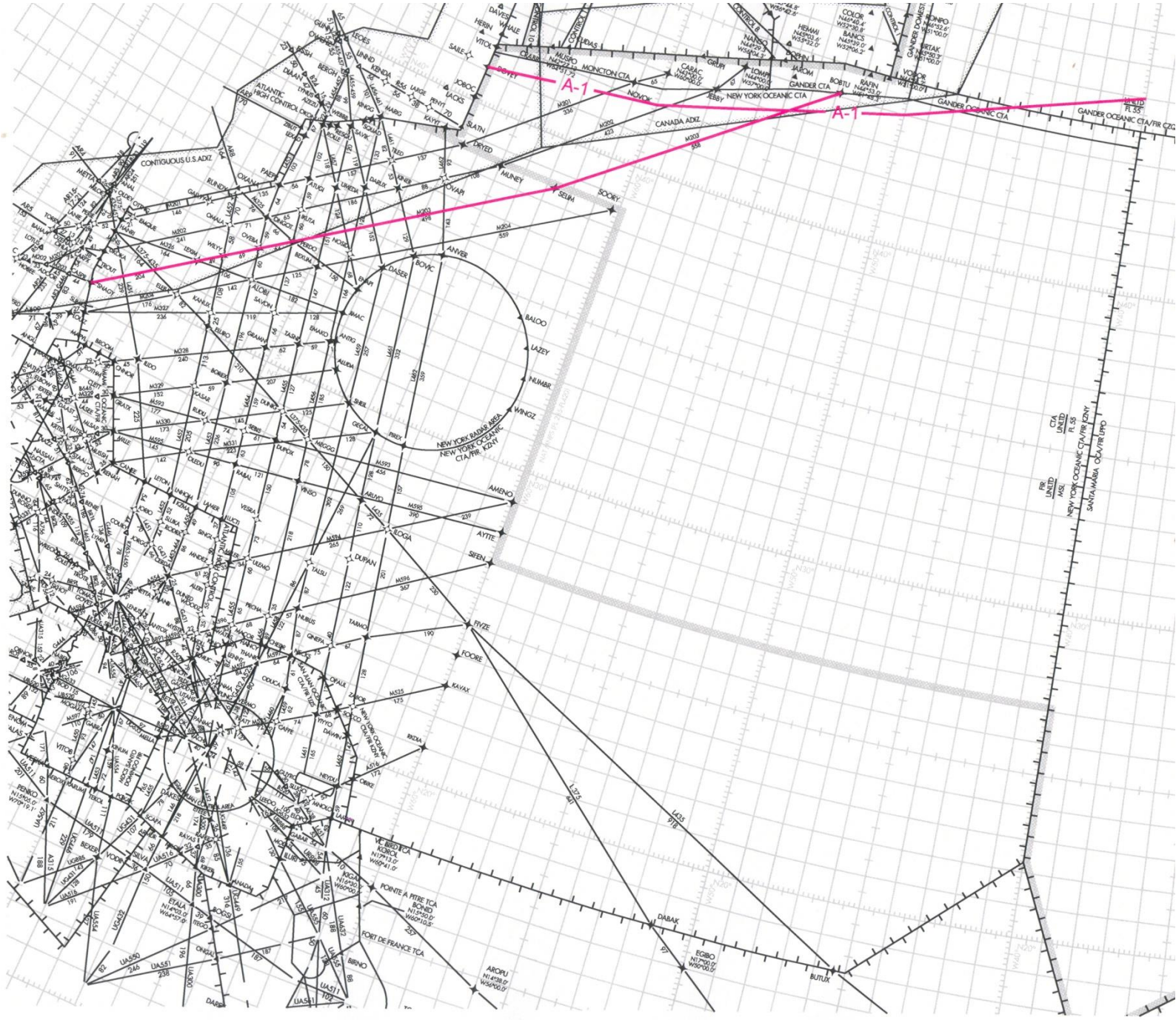
New York (ZNY) OAC Telephone/Facsimile Numbers:		
ZNY Watch Desk	+1-631-468-5959	Fax: +1-631-468-4224
ZNY Traffic Management Unit	+1-631-468-1080	Fax: +1-631-468-4224
ZNY North Atlantic Operating Area Supvr	+1-631-468-1496/1413	Fax: +1-631-468-4224
ZNY WATRS Operating Area Supvr	+1-631-468-1495	Fax: +1-631-468-4224
ZNY Procedures Office	+1-631-468-1018	Fax: +1-631-468-4229
ZNY Traffic Management Officer	+1-631-468-1010	Fax: +1-631-468-4211
ZNY Technical Operations Area	+1-631-468-1293	Fax: +1-631-468-1289
ARINC Operation Team Leader	+1-631-589-7272	Fax: +1-631-563-2412
ARINC Shift Manager	+1-631-244-2483	Fax: +1-631-563-2412

Gander ACC (YQX) Telephone/Facsimile Numbers:		
Nav Canada National Operations Center	+1-613-248-4087	Fax: +1-613-248-3983
YQX Gander Shift Manager	+1-709-651-5207	Fax: +1-709-651-5324
YQX Gander Shift Manager	+1-709-651-5203	Fax: +1-709-651-5324
YQX Gander Oceanic Supervisor	+1-709-651-5324	Fax: +1-709-651-5324
Gander Radio Supervisor	+1-709-651-5212	Fax: +1-709-651-5344

Appendix 3A-1 - Routes (A-1, M203) pictorial



Appendix 3A-2 - Routes (A-1, M203) pictorial



Appendix 4 –

Contingency Procedures between NY OAC and Santa Maria

Upon notification that NY OAC has lost its ability to provide air traffic control service, Santa Maria ACC will reroute traffic that is flight planned to enter ZNY airspace either into Gander ACC or Piarco ACC airspace.

Implementation of Limited Service

When NY OAC becomes capable of providing limited ATC service, it will be provided to aircraft on the following routes.

Rte Name	Route Definition (See Pictorial - Appendix 4A)	Altitudes
B-1	SLATN 4000N/06000W 4200N/05000W 4400N/04000W FPR (and the reverse)	FL350 and below
M326 then C-1 after BALOO	JAINS M326 JIMAC BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)	FL290 and below to JIMAC, then any useable altitude
M326 then D-1 after NUMBR	JAINS M326 JIMAC NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)	FL290 and below to JIMAC, then any useable altitude
M203 then B-2 after SELIM	SNAGY M203 SELIM 40000N06000W 42000N/05000W 4400N/04000W FPR (and the reverse)	FL360 and above
M327 then C-1 after BALOO	SUMRS M327 JIMAC BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)	FL290 and below to JIMAC, then any useable altitude
M327 then D-1 after NUMBR	SUMRS M327 JIMAC NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)	FL290 and below to JIMAC, then any useable altitude
M328 then C-1 after BALOO	CNNOR M328 ANTIG BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above to ANTIG, then any useable altitude
M328 then D-1 after NUMBR	CNNOR M328 ANTIG NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)	FL290 and below or FL 360 and above to ANTIG, then any useable altitude
M329 then C-1 after BALOO	GRATX M329 ALUDA BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)	FL290 and below or FL360 and above to ALUDA, then any useable altitude
M329 then D-1 after NUMBR	GRATX M329 ALUDA NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above to ALUDA, then any useable altitude
M330 then C-1 after BALOO	MILLE M330 SHEIL BALOO 3500N06000W 3900N05000W 4200N04000W FPR (and the reverse)	FL290 and below, or FL360 and above to SHEIL, then any useable altitude

Rte Name	Route Definition (See Pictorial - Appendix 4A)	Altitudes
M330 then D-1 after NUMBR	MILLE M330 SHEIL NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above to SHEIL, then any useable altitude
M331 then C-1 after BALOO	CANEE M331 GECAL BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)	FL290 and below, or FL 360 and above to GECAL, then any useable altitude
M331 then D-1 after NUMBR	CANEE M331 GECAL NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above to GECAL, then any useable altitude
M594 then E-1 after AMENO	MLLER M594 AMENO 3400N/05000W 3800N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above
M596 then F-1 after SIFEN	WATRS M596 SIFEN 3200N/05000W 3600N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above

Appendix 4-2

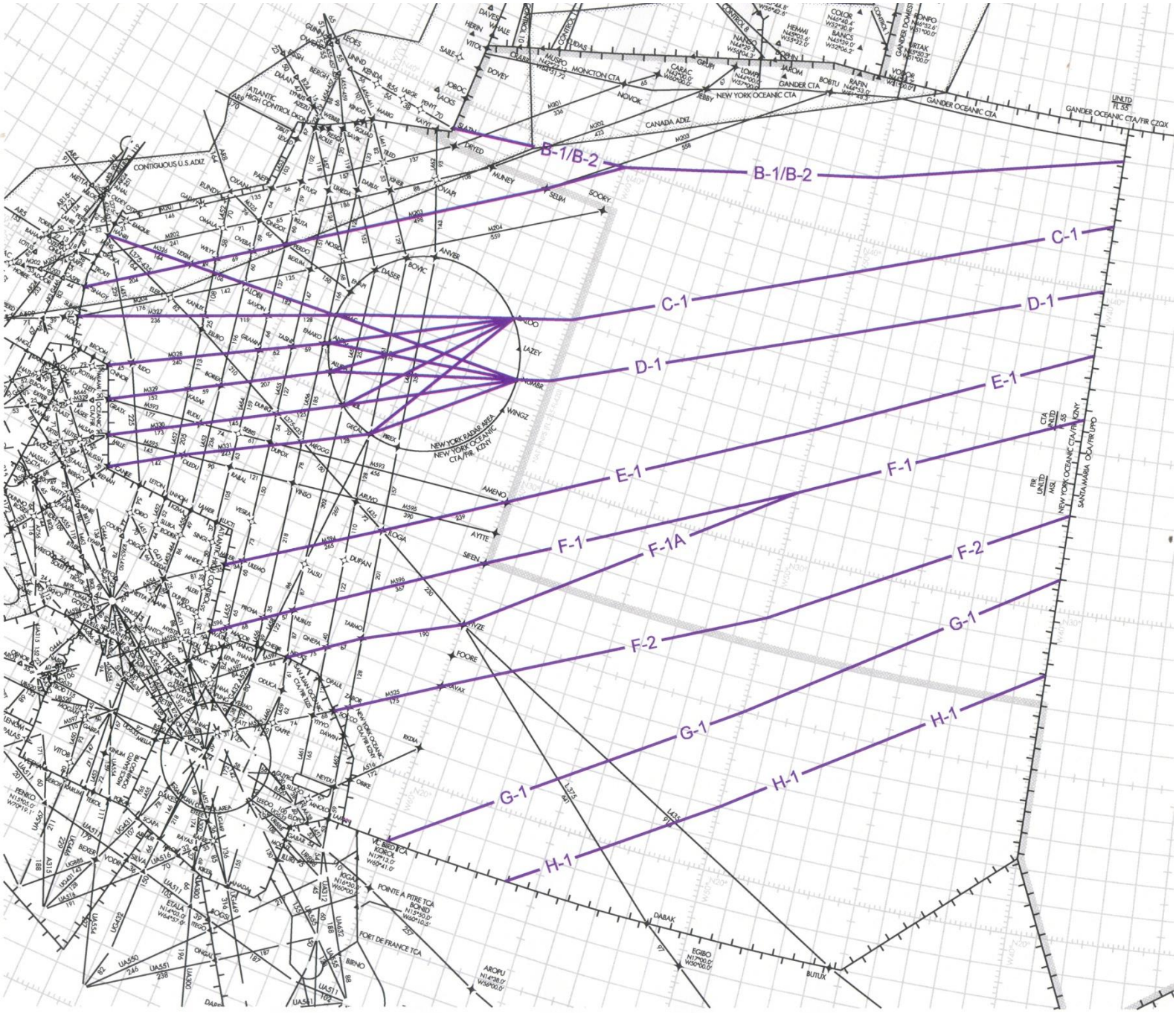
Rte Name	Route Definition (See Pictorial - Appendix 4A-1/2/3)	Altitudes
M597 then F-1A after FIVZE	NECKS M597 FIVZE 3200N/05000W 3600N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above
F-2	SOCOO M525 KAVAX 2800N/05000W 3300N/04000W FPR (and the reverse)	Any useable altitude
G-1	1800N/06000W 2500N/05000W 3100N/04000W FPR (and the reverse)	Any useable altitude
H-1	1800N/05600W 2200N/05000W 2800N/04000W FPR (and the reverse)	Any useable altitude

If, during the provision of limited service, NY OAC becomes capable of increasing air traffic services, more routes and/or increased capacity will be made available to operators.

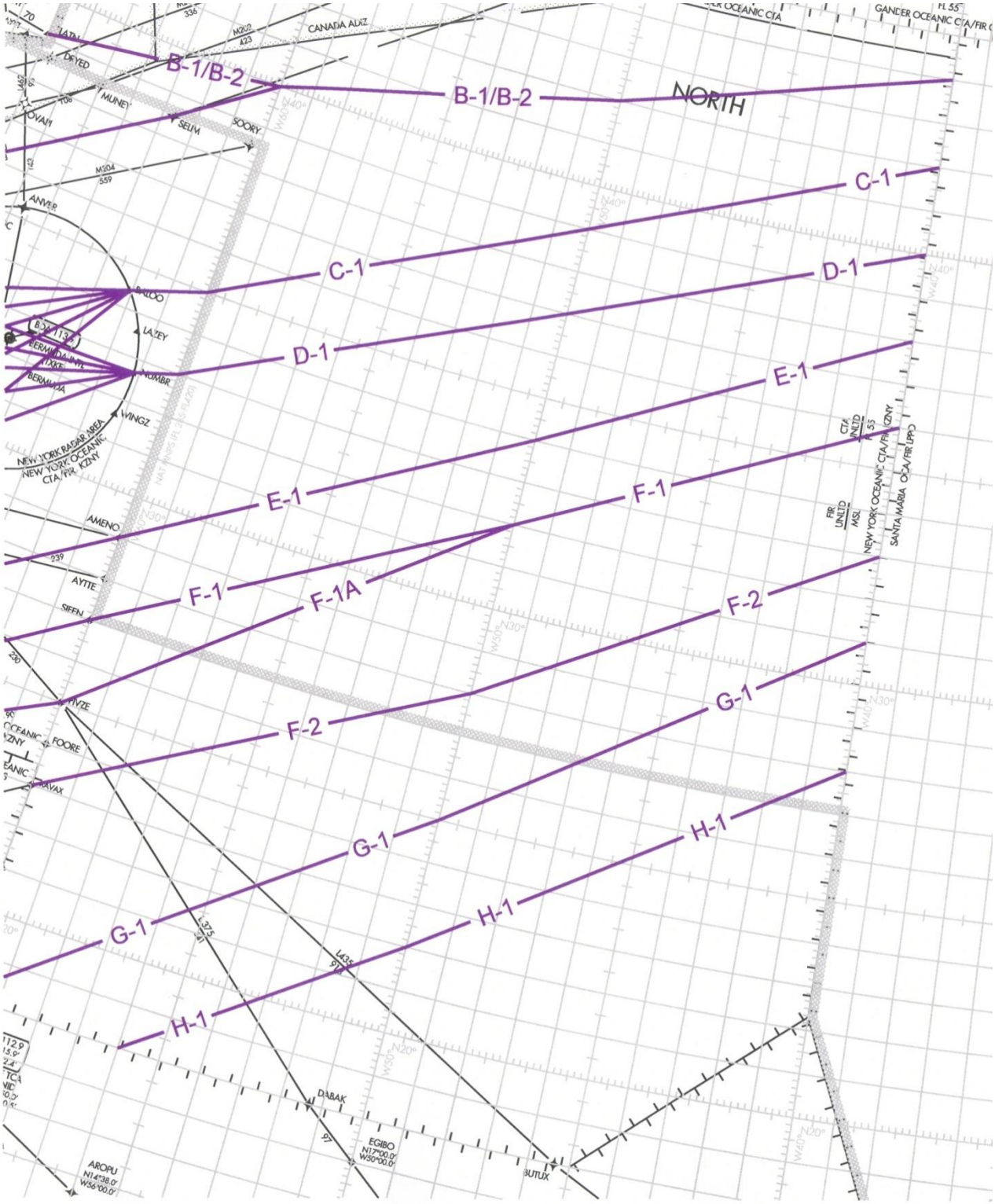
New York (ZNY) OAC Telephone/Facsimile Numbers:		
ZNY Watch Desk	+1-631-468-5959	Fax: +1-631-468-4224
ZNY Traffic Management Unit	+1-631-468-1080	Fax: +1-631-468-4224
ZNY North Atlantic Operating Area Supvr	+1-631-468-1496/1413	Fax: +1-631-468-4224
ZNY WATRS Operating Area Supvr	+1-631-468-1495	Fax: +1-631-468-4224
ZNY Procedures Office	+1-631-468-1018	Fax: +1-631-468-4229
ZNY Traffic Management Officer	+1-631-468-1010	Fax: +1-631-468-4211
ZNY Technical Operations Area	+1-631-468-1293	Fax: +1-631-468-1289
ARINC Operation Team Leader	+1-631-589-7272	Fax: +1-631-563-2412
ARINC Shift Manager	+1-631-244-2483	Fax: +1-631-563-2412

Santa Maria ACC (LPAZ) Telephone/Facsimile Numbers:		
LPAZ Santa Maria ACC	+351-296-820-438	
LPAZ Santa Maria ACC (satellite link)	+351-296-886-042	
LPAZ Atlantic Operations Director	+351-296-820-501	
LPAZ Operations Division Manager	+351-296-820-501	
LPAZ ATC Operations Manager	+351-296-820-508	
LPAZ Radio Station Manager	+351-296-820-509	
LPAZ ACC Watch Manager	+351-296-820-400	
LPAZ ACC Watch Manager	+351-296-886-299	+351-296-820-422
LPAZ Radio Station Watch Manager	+351-296-820-401	
Lajes RCC	+351-295-540-515	
Lajes RCC	+351-295-513-686	+351-295-540-792

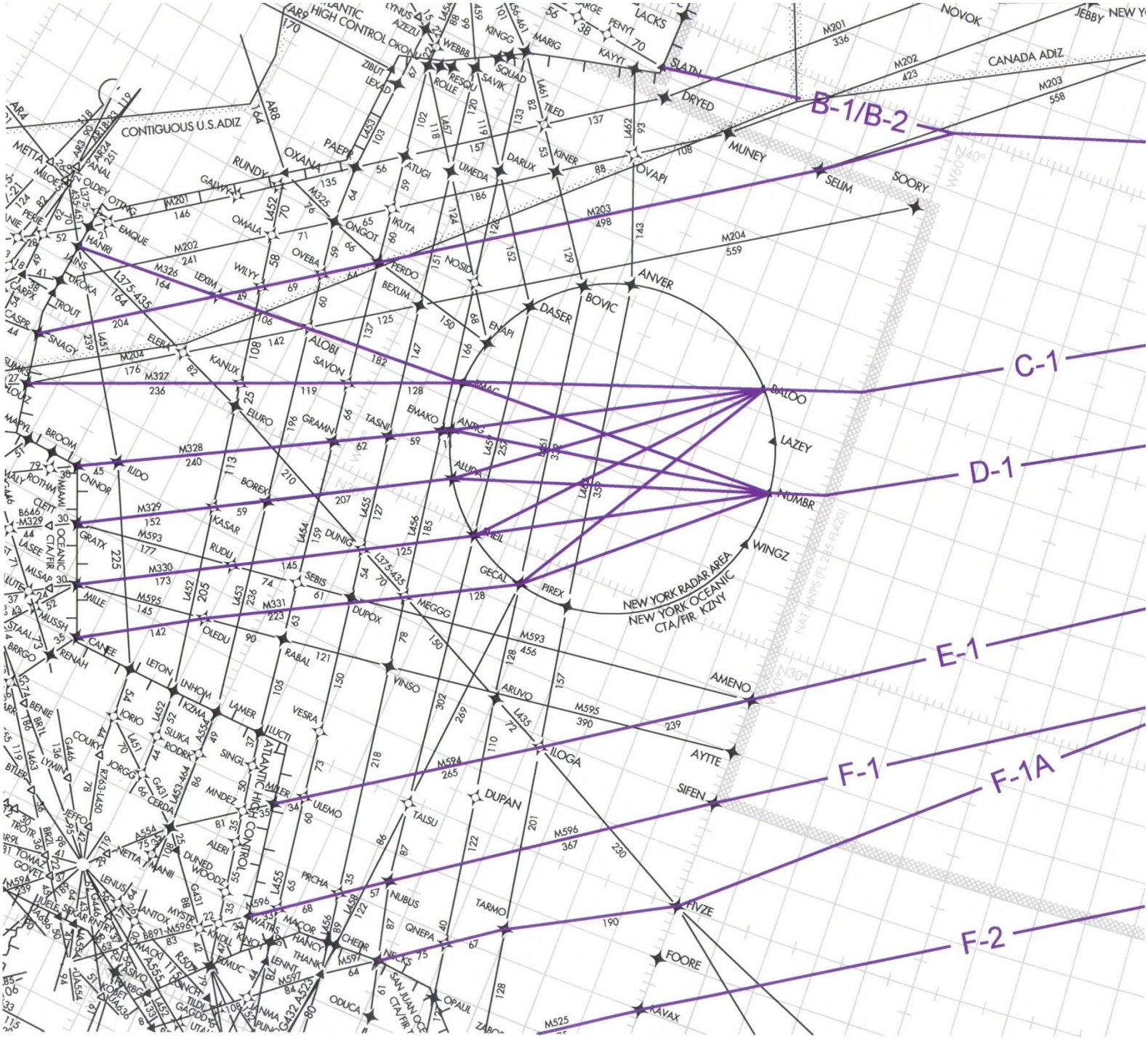
Appendix 4A-1
Routes (B-1, [M203toB-2], [M326, M327, M328, M329, M330, M331toC-1], [M326, M327, M328, M329, M330, M331toD-1], [M594toE-1], [M596toF-1], [M597toF-1A], F-2, G-1, H-1) Pictorial



Appendix 4A-2
Routes (B-1, B-2, C-1, D-1, E-1, F-1, F-1A, F-2, G-1, H-1) Pictorial



Appendix 4A-3
Routes (B-1, [M203toB-2], [M326,M327,M328,M329,M330,M331toC-1], [M326,M327,M328,M329,M330,M331toD-1], [M594toE-1], [M596toF-1], [M597toF-1A], F-2, G-1, H-1) Pictorial



Appendix 5 –

Contingency Procedures between NY OAC and Piarco ACC

Upon notification that NY OAC has lost its ability to provide air traffic control service, Piarco ACC will reroute traffic to avoid entry into ZNY airspace.

Implementation of Limited Service

When NY OAC becomes capable of providing limited ATC service, it will be provided to aircraft on the following routes.

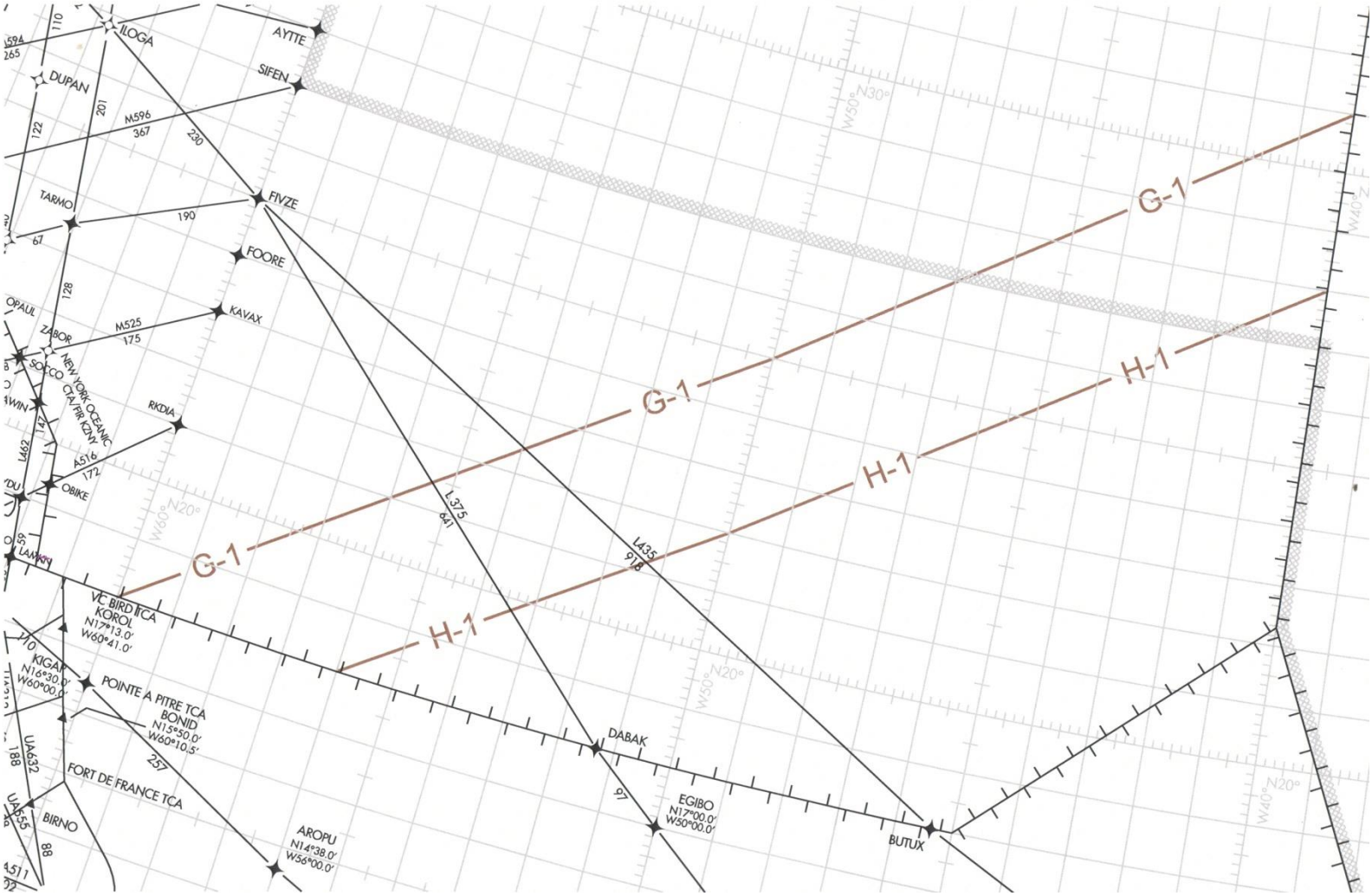
Rte Name	Route Definition (See Pictorial - Appendix 5A-1/2)	Altitudes
G-1	1800N/06000W 2500N/05000W 3100N/04000W FPR (and the reverse)	any useable altitude
H-1	1800N/05600W 2200N/05000W 2800N/04000W FPR (and the reverse)	any useable altitude

If, during the provision of limited service, NY OAC becomes capable of increasing air traffic services, more routes and/or increased capacity will be made available to operators.

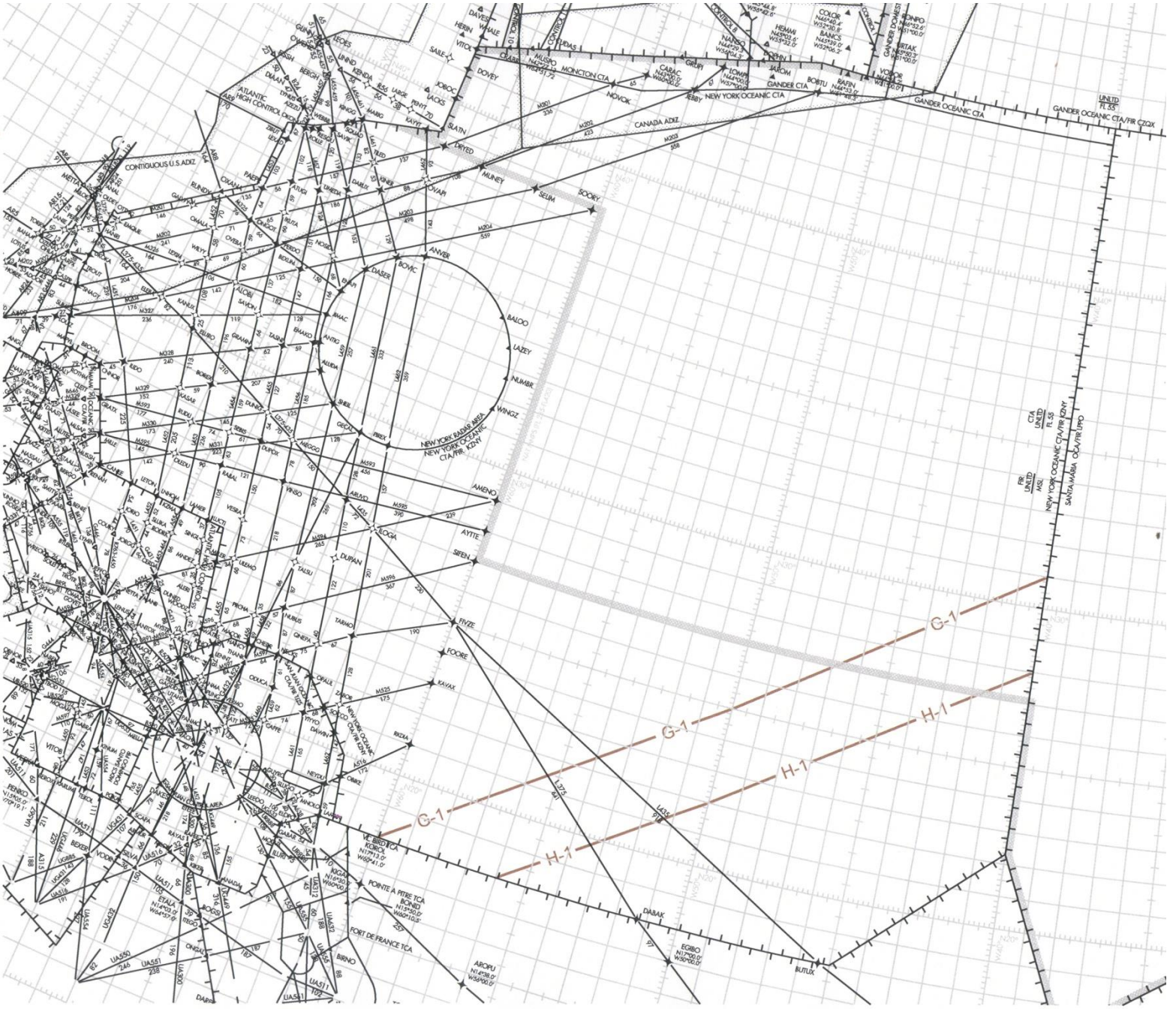
New York (ZNY) OAC Telephone/Facsimile Numbers:		
ZNY Watch Desk	+1-631-468-5959	Fax: +1-631-468-4224
ZNY Traffic Management Unit	+1-631-468-1080	Fax: +1-631-468-4224
ZNY North Atlantic Operating Area Supvr	+1-631-468-1496/1413	Fax: +1-631-468-4224
ZNY WATRS Operating Area Supvr	+1-631-468-1495	Fax:+1-631-468-4224
ZNY Procedures Office	+1-631-468-1018	Fax: +1-631-468-4229
ZNY Traffic Management Officer	+1-631-468-1010	Fax: +1-631-468-4211
ZNY Technical Operations Area	+1-631-468-1293	Fax: +1-631-468-1289
ARINC Operation Team Leader	+1-631-589-7272	Fax: +1-631-563-2412
ARINC Shift Manager	+1-631-244-2483	Fax: +1-631-563-2412

Piarco ACC Telephone/Facsimile Numbers:		
Piarco Control Room	+868-669-6181	Fax: +868-669-1716
Piarco Control Room	+868-669-4852	

Appendix 5A-1 - Routes (G-1, H-1) Pictorial



Appendix 5A-2 - Routes (G-1, H-1) Pictorial



Appendix 6 –

Contingency Procedures between NY OAC and San Juan CERAP

Upon notification that NY OAC has lost its ability to provide air traffic control service, San Juan CERAP will reroute northbound traffic that is flight planned to enter NY OAC airspace through Miami ARTCC, and northeast bound traffic through Piarco ACC.

Implementation of Limited Service

When NY OAC becomes capable of providing limited ATC service, it will be provided to aircraft on the following routes.

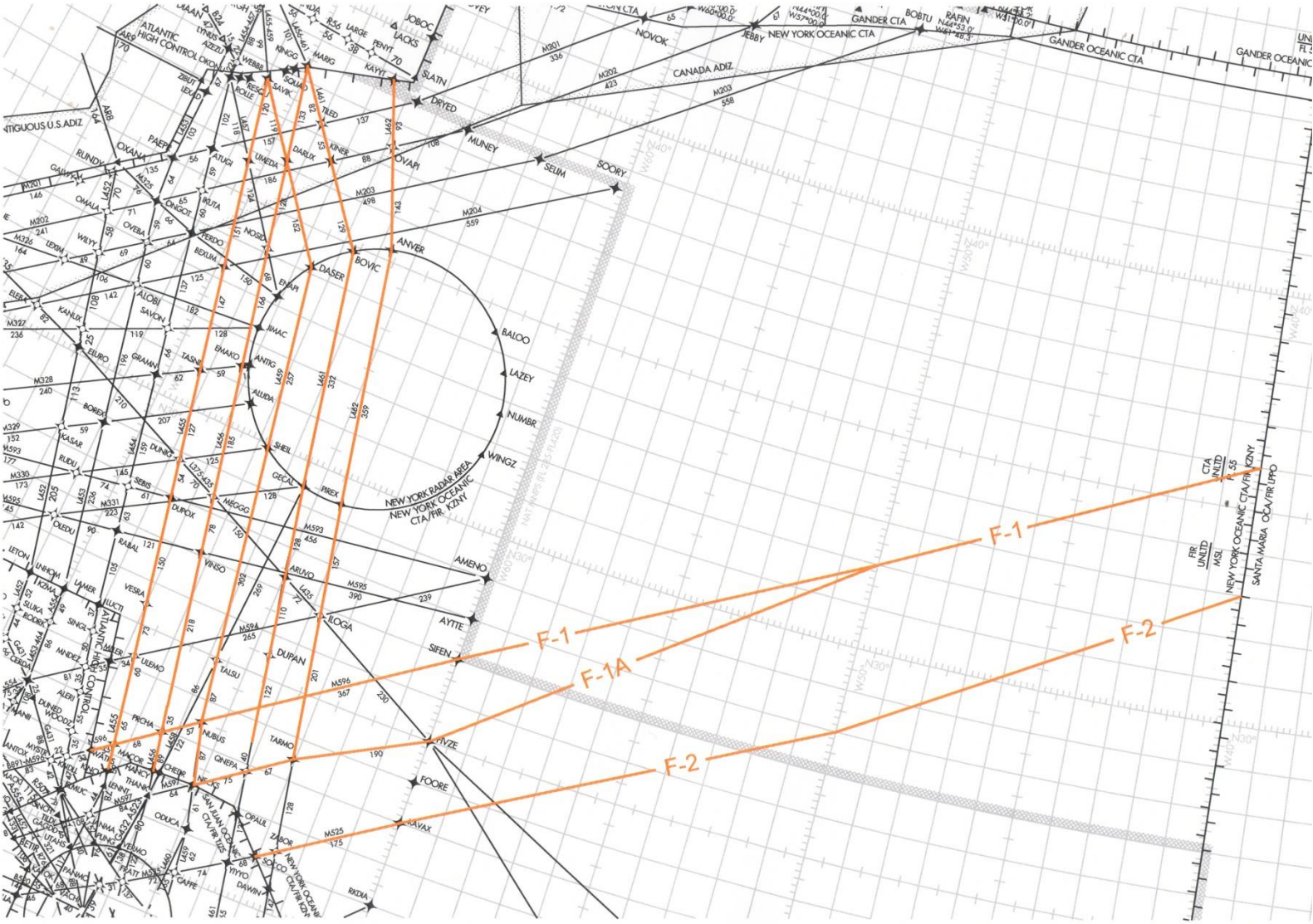
Rte Name	Route Definition (See Pictorial - Appendix 6A)	Altitudes
L455	SAVIK L455 KINCH FPR (and the reverse)	FL300 to FL350
L456	MARIG L456 HANCY FPR (and the reverse)	FL300 to FL350
L459	SAVIK L459 NECKS FPR (and the reverse)	FL290 or below to DASER, then FL300 to FL350
L461	MARIG L461 OPAUL FPR (and the reverse)	FL290 and below to BOVIC, then FL300 to FL350
L462	KAYYT L462 DAWIN FPR (and the reverse)	FL350 and below to ANVER, then FL300 to FL350
M596 then F-1 after SIFEN	NUBUS M596 SIFEN 3200N/05000W 3600N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above
M597 then F-1A after FIVZE	NECKS M597 FIVZE 3200N/05000W 3600N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above
F-2	SOCCO M525 KAVAX 2800N/05000W 3300N/04000W FPR (and the reverse)	any useable altitude

If, during the provision of limited service, NY OAC becomes capable of increasing air traffic services, more routes and/or increased capacity will be made available to operators.

New York (ZNY) OAC Telephone/Facsimile Numbers:		
ZNY Watch Desk	+1-631-468-5959	Fax: +1-631-468-4224
ZNY Traffic Management Unit	+1-631-468-1080	Fax: +1-631-468-4224
ZNY North Atlantic Operating Area Supvr	+1-631-468-1496/1413	Fax: +1-631-468-4224
ZNY WATRS Operating Area Supvr	+1-631-468-1495	Fax: +1-631-468-4224
ZNY Procedures Office	+1-631-468-1018	Fax: +1-631-468-4229
ZNY Traffic Management Officer	+1-631-468-1010	Fax: +1-631-468-4211
ZNY Technical Operations Area	+1-631-468-1293	Fax: +1-631-468-1289
ARINC Operation Team Leader	+1-631-589-7272	Fax: +1-631-563-2412
ARINC Shift Manager	+1-631-244-2483	Fax: +1-631-563-2412

San Juan (ZSU) OAC Telephone/Facsimile Numbers:		
ZSU Watch Supervisor	+1-787-253-8664	Fax: +1-787-253-8685
ZSU Watch Supervisor	+1-787-253-8665	
ZSU Watch Supervisor	+1-787-253-8648	
ZSU Watch Supervisor (Satellite Phone)	..888-570-3278	

Appendix 6A
Routes (L455, L456, L459, L461, L462, [M596toF-1], [M597to F-1A], F-2) Pictorial



Appendix 7 –

Contingency Procedures between NY OAC and Miami ARTCC

Upon notification that NY OAC has lost its ability to provide air traffic control service, Miami ARTCC will reroute traffic that is flight planned to enter ZNY airspace through Jacksonville ARTCC.

Implementation of Limited Service

When NY OAC becomes capable of providing limited ATC service, it will be provided to aircraft on the following routes listed in

Rte Name	Route Definition (See Pictorial - Appendix 7A-1/2/3)	Altitudes
L454	OKONU L454 LUCTI FPR (and the reverse)	FL300 to FL350
L453	AZEZU L453 LAMER FPR (and the reverse)	FL300 to FL350
L452	OXANA L452 LNHOM FPR (and the reverse)	FL300 to FL350
L451	JAINS L451 LETON FPR (and the reverse)	FL300 to FL350
M203	SNAGY M203 BOBTU FPR (and the reverse)	FL360 and above
M203 then B-2 after SELIM	SNAGY M203 SELIM 40000N/06000W 42000N/05000w 4400N/04000W FPR (and the reverse)	FL360 and above
M327 then C-1 after BALOO	SUMRS M327 JIMAC BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)	FL290 and below to JIMAC, then any useable altitude
M327 then D-1 after NUMBR	SUMRS M327 JIMAC NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)	FL290 and below to JIMAC, then any useable altitude
M328 then C-1 after BALOO	CNNOR M328 ANTIG BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above to ANTIG, then any useable altitude
M328 then D-1 after NUMBER	CNNOR M328 ANTIG NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above to ANTIG, then any useable altitude
M329 then C-1 after BALOO	GRATX M329 ALUDA BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above
M329 then D-1 after NUMBR	GRATX M329 ALUDA NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above
M330 then C-1 after BALOO	MILLE M330 SHEIL BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above
M330 then D-1 after NUMBR	MILLE M330 SHEIL NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above
M331 then C-1 after BALOO	CANEE M331 GECAL BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above
M331 then D-1 after NUMBR	CANEE M331 GECAL NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)	FL290 and below, or FL360 and above

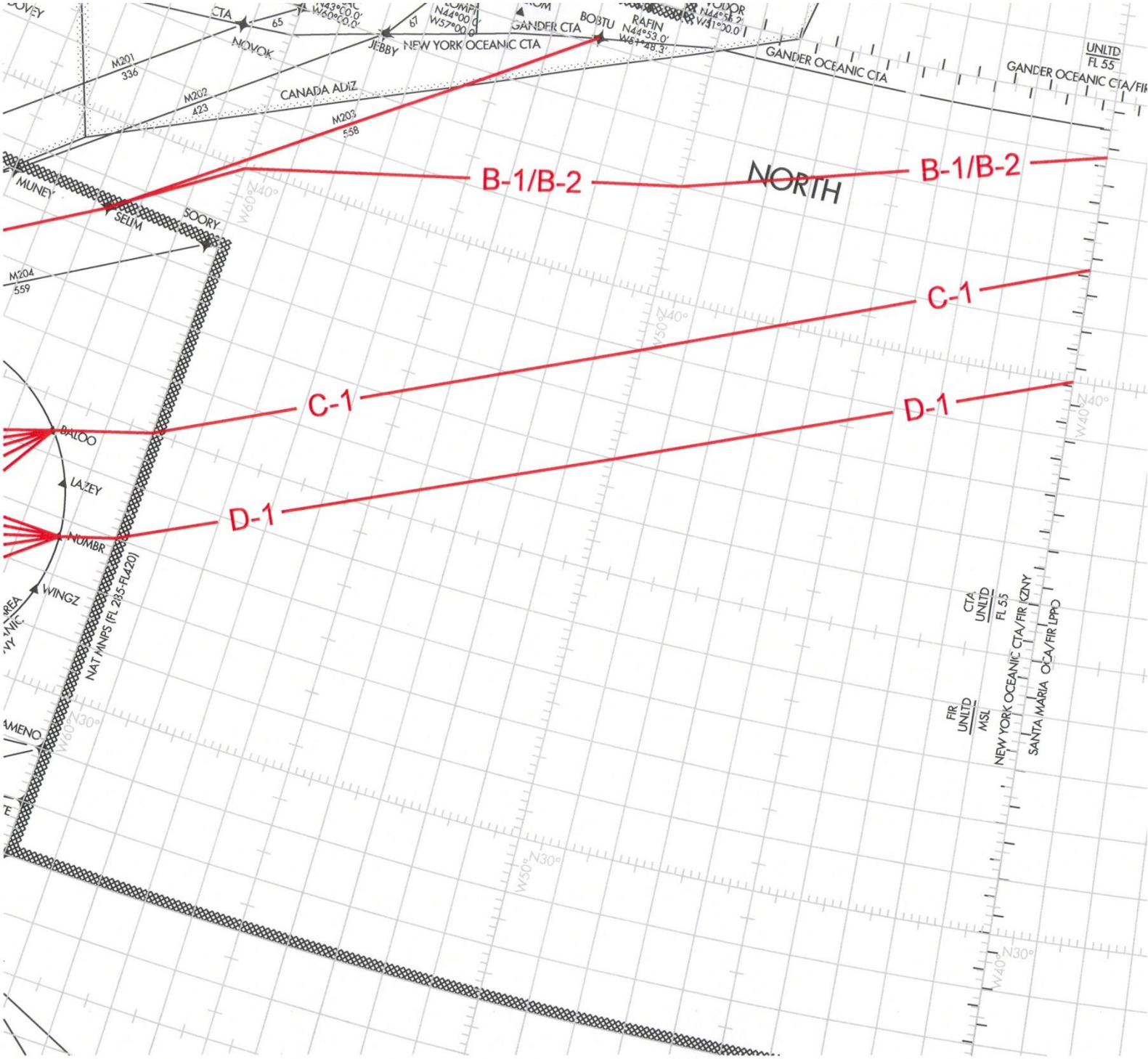
Appendix 7-2

If, during the provision of limited service, NY OAC becomes capable of increasing air traffic services, more routes and/or increased capacity will be made available to operators.

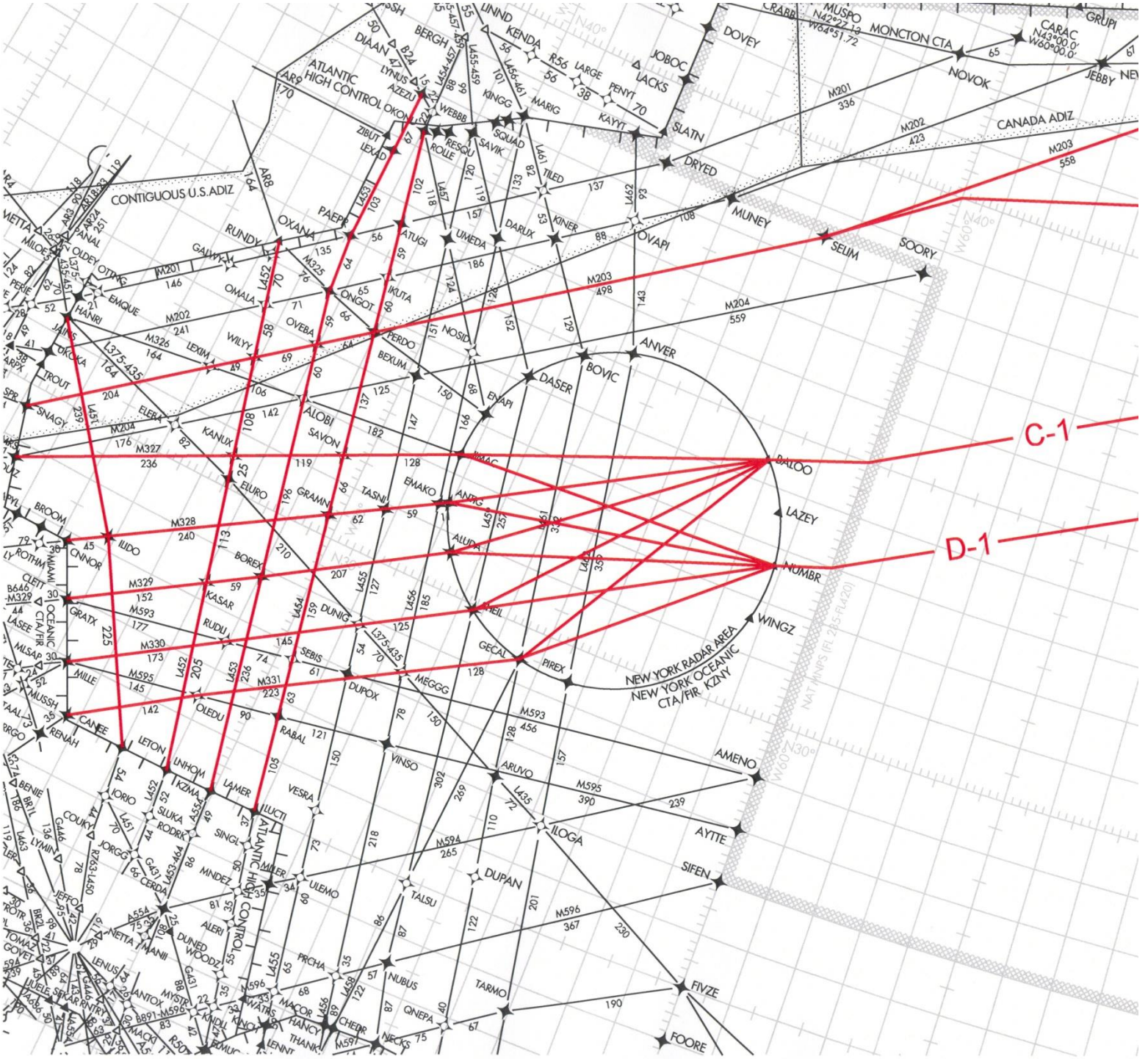
New York (ZNY) OAC Telephone/Facsimile Numbers:		
ZNY Watch Desk	+1-631-468-5959	Fax: +1-631-468-4224
ZNY Traffic Management Unit	+1-631-468-1080	Fax: +1-631-468-4224
ZNY North Atlantic Operating Area Supvr	+1-631-468-1496/1413	Fax: +1-631-468-4224
ZNY WATRS Operating Area Supvr	+1-631-468-1495	Fax: +1-631-468-4224
ZNY Procedures Office	+1-631-468-1018	Fax: +1-631-468-4229
ZNY Traffic Management Officer	+1-631-468-1010	Fax: +1-631-468-4211
ZNY Technical Operations Area	+1-631-468-1293	Fax: +1-631-468-1289
ARINC Operation Team Leader	+1-631-589-7272	Fax: +1-631-563-2412
ARINC Shift Manager	+1-631-244-2483	Fax: +1-631-563-2412

Miami Center (ZMA) Telephone/Facsimile Numbers:		
ZMA Watch Desk	+1-305-716-1588	Fax: +1-305-716-1511/1613
ZMA Traffic Management Unit	+1-305-716-1736	Fax: +1-305-716-1777
ZMA Traffic Management Officer	+1-305-716-1591	Fax: +1-035-716-1777
ZMA Airspace and Procedures	+1-305-716-1547	
ZMA Tech Ops	+1-305-716-1204	Fax: +1-305-716-1293

Appendix 7A-1
Routes (B-2, C-1, D-1) Pictorial



Appendix 7A-2
Routes (L454, L453, L452, L451, M203, [M203toB-2], [M327,M328,M329,M330,M331toC-1], [M327,M328,M329,M330,M331toD-1]) Pictorial



Appendix 8 –

Contingency Procedures between NY OAC and Jacksonville ARTCC

Upon notification that NY OAC has lost its ability to provide air traffic control service, Jacksonville ARTCC will reroute traffic that is flight planned to enter ZNY airspace, depending on its original route, northward into Washington ARTCC airspace, or southward into Miami ARTCC airspace.

Implementation of Limited Service

When NY OAC becomes capable of providing limited ATC service, it will be provided to aircraft on the following routes.

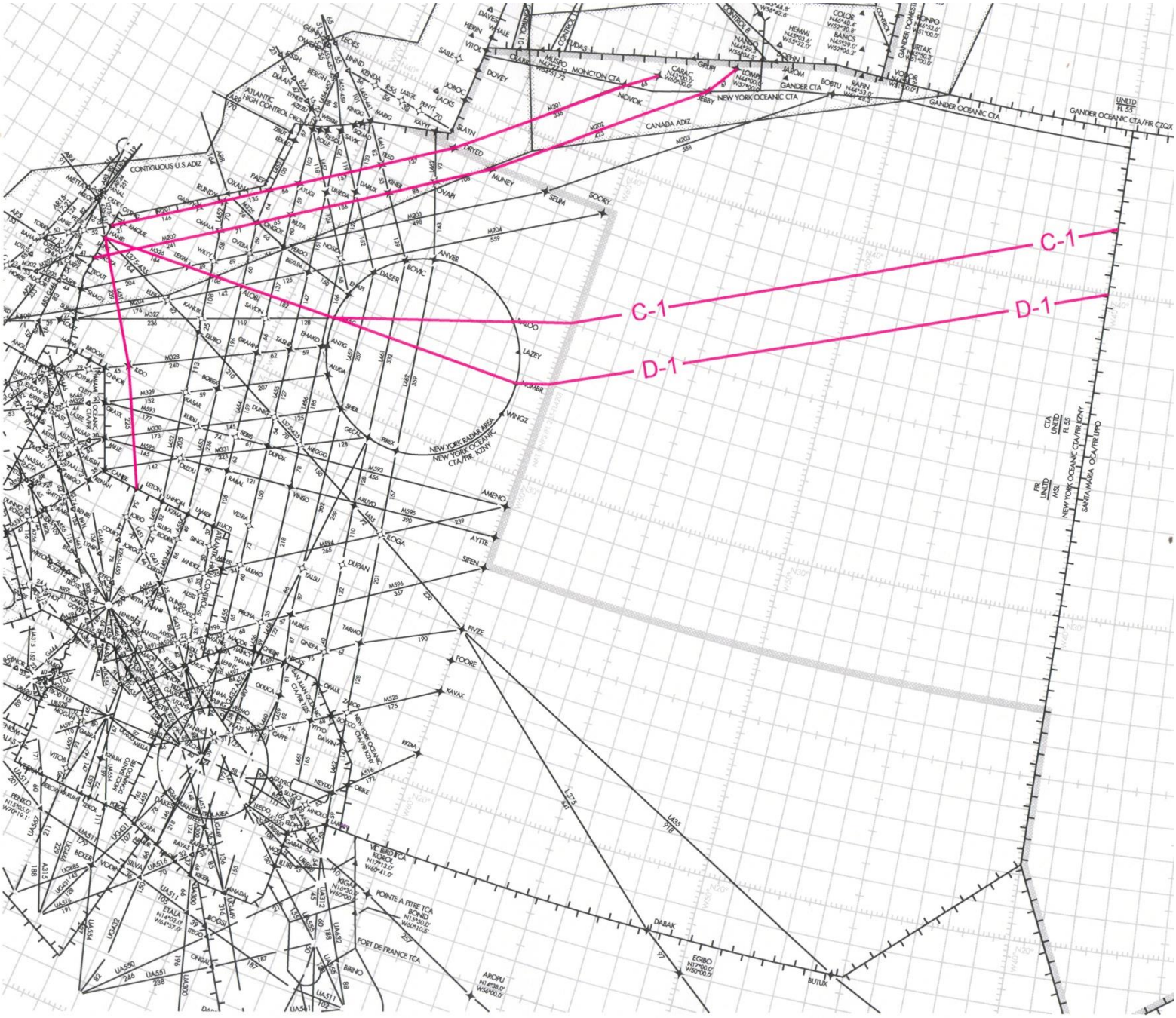
Rte Name	**Route Definition (See Pictorial - Appendix 8A-1/2/3)**	**Altitudes**
M201	HANRI M201 CARAC FPR (and the reverse)	FL360 and above
M326 then C-1 after BALOO	JAINS M326 JIMAC BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)	FL290 and below to JIMAC, then any useable altitude
M326 then D-1 after NUMBR	JAINS M326 JIMAC NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)	FL290 and below to JIMAC, then any useable altitude
L451	JAINS L451 LETON FPR (and the reverse)	FL300 to FL350
M202	UKOKA M202 JEBBY FPR (and the reverse)	FL360 and above

If, during the provision of limited service, NY OAC becomes capable of increasing air traffic services, more routes and/or increased capacity will be made available to operators.

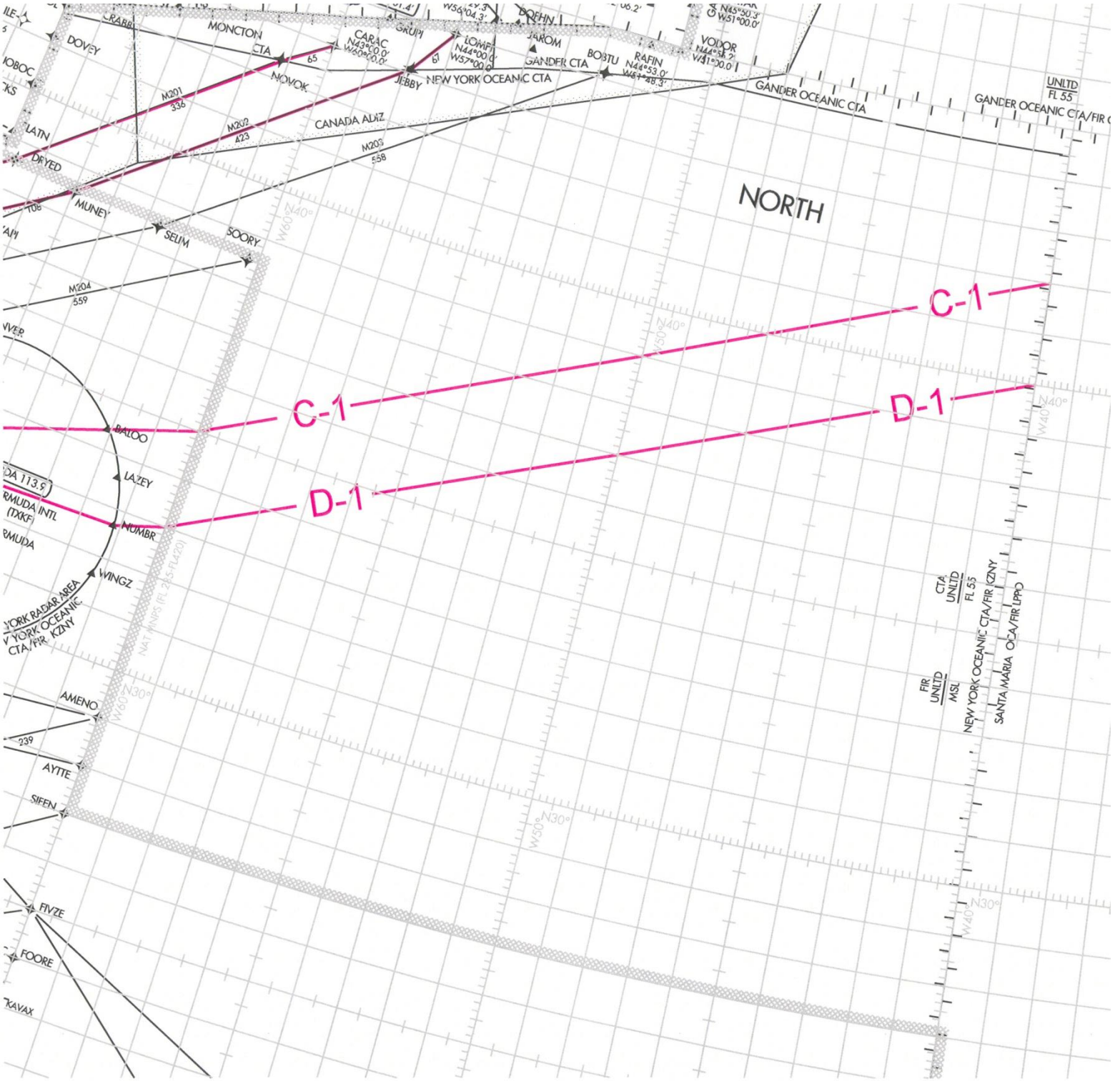
New York (ZNY) OAC Telephone/Facsimile Numbers:		
ZNY Watch Desk	+1-631-468-5959	Fax: +1-631-468-4224
ZNY Traffic Management Unit	+1-631-468-1080	Fax: +1-631-468-4224
ZNY North Atlantic Operating Area Supvr	+1-631-468-1496/1413	Fax: +1-631-468-4224
ZNY WATRS Operating Area Supvr	+1-631-468-1495	Fax: +1-631-468-4224
ZNY Procedures Office	+1-631-468-1018	Fax: +1-631-468-4229
ZNY Traffic Management Officer	+1-631-468-1010	Fax: +1-631-468-4211
ZNY Technical Operations Area	+1-631-468-1293	Fax: +1-631-468-1289
ARINC Operation Team Leader	+1-631-589-7272	Fax: +1-631-563-2412
ARINC Shift Manager	+1-631-244-2483	Fax: +1-631-563-2412

Jacksonville Center (ZJX) Telephone/Facsimile Numbers:		
ZJX Watch Desk	+1-904-549-1537	Fax: +1-904-549-1843
ZJX Area 2 – North Area	+1-904-549-1546	Fax: +1-904-549-1843
ZJX Traffic Management Unit	+1-904-549-1542	Fax: +1-904-549-1843
ZJX Airspace and Procedures Office	+1-904-549-1574	Fax: +1-904-549-1803
ZJX Traffic Management Officer	+1-904-549-1538	Fax: +1-904-549-1843
ZJX Tech Ops	+1-904-549-1604	Fax: +1-904-549-1695

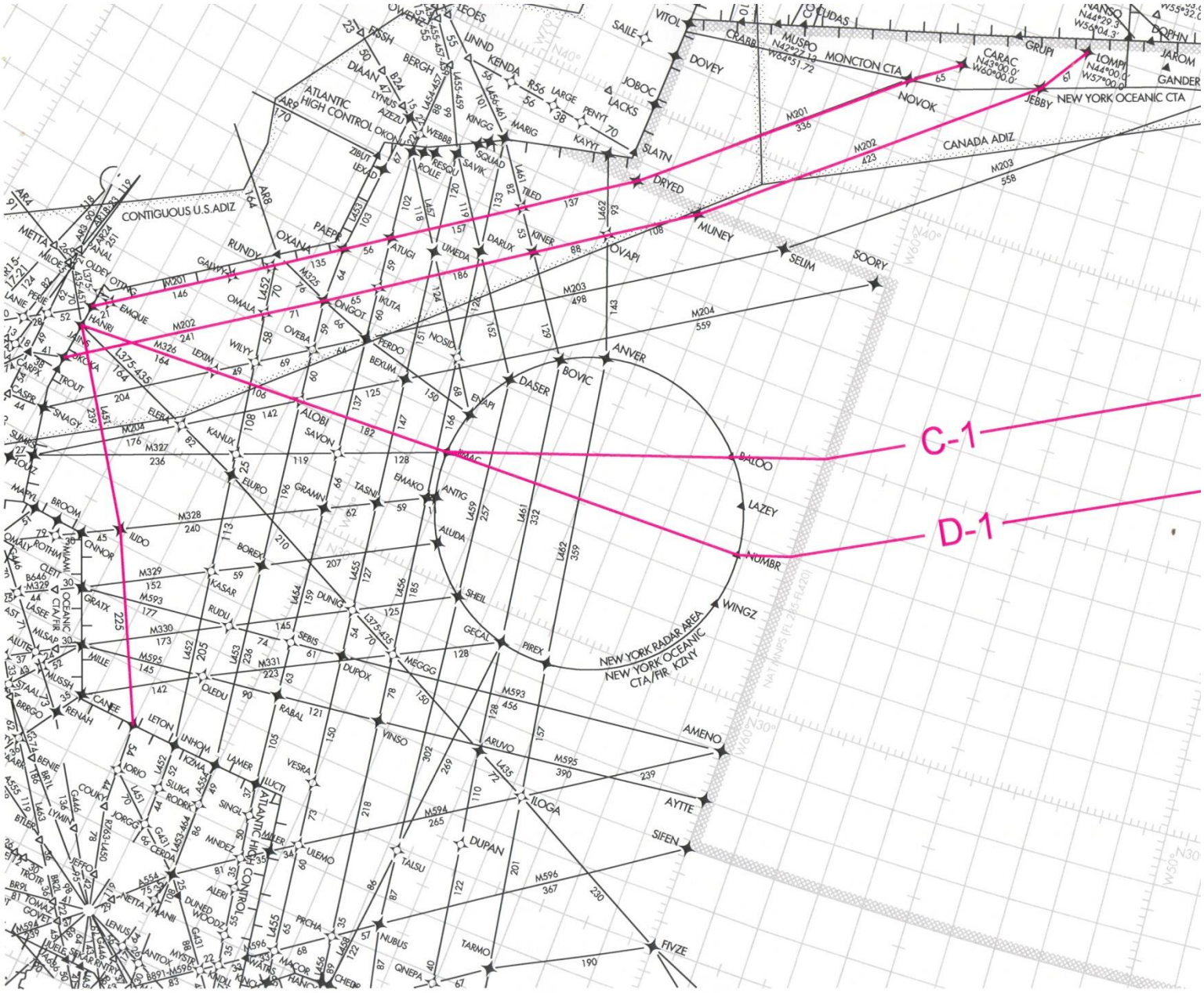
Appendix 8A-1
Routes (L451, M201, M202, [M326toC-1], [M326toD-1]) Pictorial



Appendix 8A-2
Routes (C-1, D-1) Pictorial



Appendix 8A-3
Routes (L451, M201, M202, [M326toC-1], [M326toD-1]) Pictorial



Appendix 9 –

Contingency Procedures between NY OAC and Fleet Area Control and Surveillance Facility, Virginia Capes (at to below FL230 only)

Upon notification that NY OAC has lost its ability to provide air traffic control service, Fleet Area Control and Surveillance Facility, Virginia Capes will reroute traffic that is flight planned to enter ZNY airspace to remain clear of the affected airspace.

Implementation of Limited Service

When NY OAC becomes capable of providing limited ATC service, it will be provided to aircraft on the routes listed.

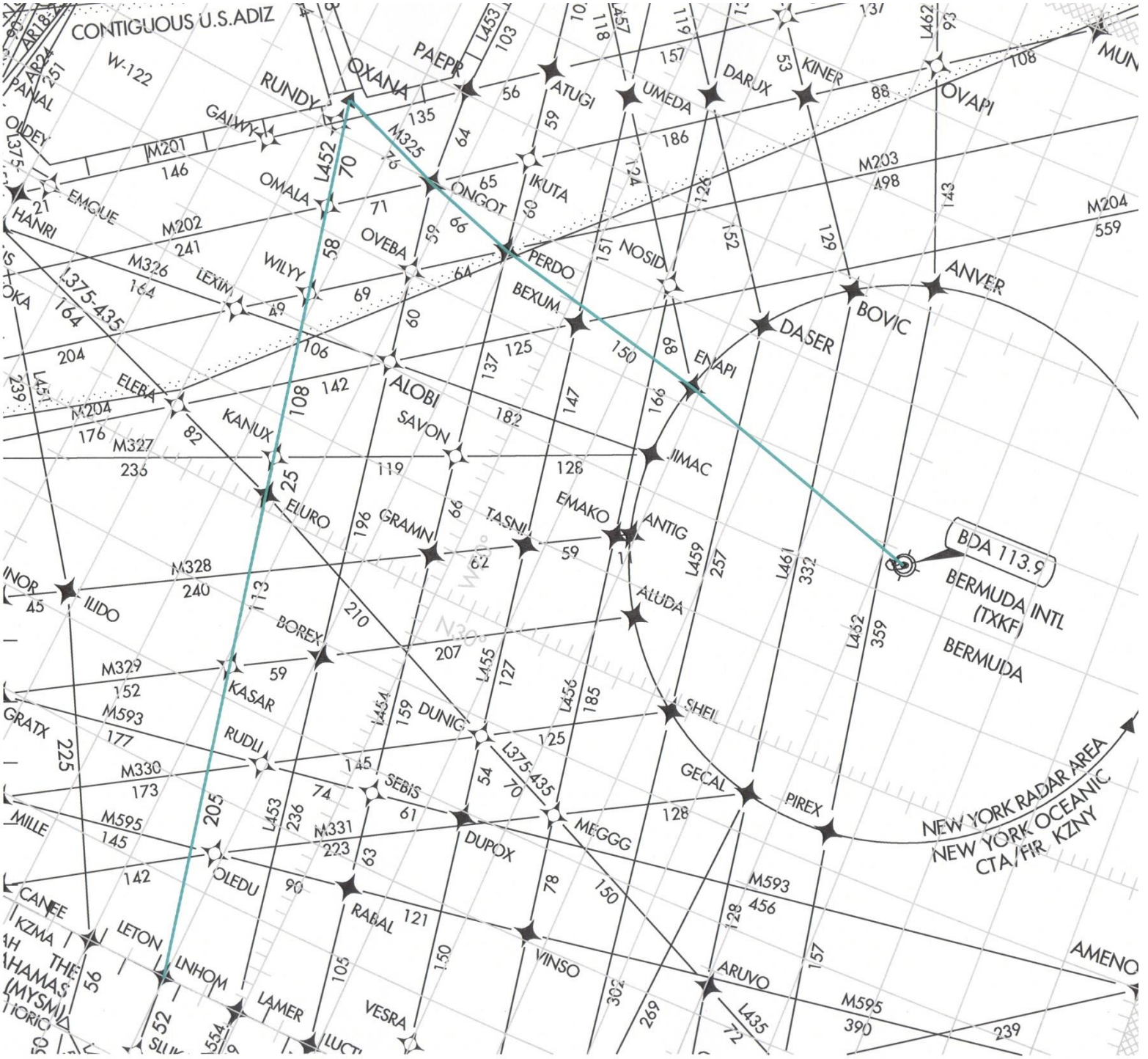
Rte Name	Route Definition (See Pictorial - Appendix 9A-1/2)	Altitudes
M325	OXANA M325 ENAPI TXKF (and the reverse)	FL230 and below
L452	OXANA L452 LNHOM FPR (and the reverse)	FL230 and below

If, during the provision of limited service, NY OAC becomes capable of increasing air traffic services, more routes and/or increased capacity will be made available to operators.

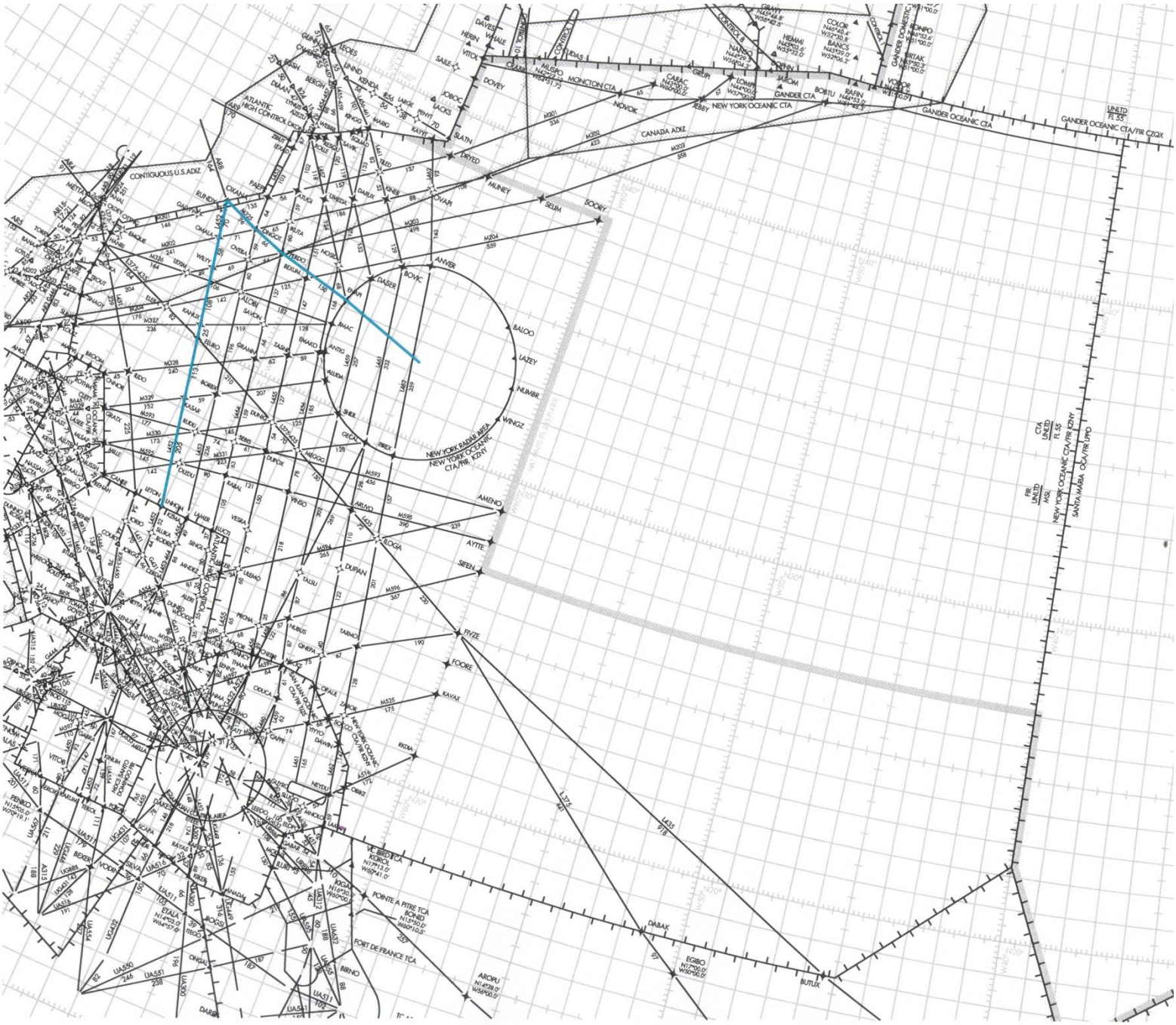
New York (ZNY) OAC Telephone/Facsimile Numbers:		
ZNY Watch Desk	+1-631-468-5959	Fax: +1-631-468-4224
ZNY Traffic Management Unit	+1-631-468-1080	Fax: +1-631-468-4224
ZNY North Atlantic Operating Area Supvr	+1-631-468-1496/1413	Fax: +1-631-468-4224
ZNY WATRS Operating Area Supvr	+1-631-468-1495	Fax: +1-631-468-4224
ZNY Procedures Office	+1-631-468-1018	Fax: +1-631-468-4229
ZNY Traffic Management Officer	+1-631-468-1010	Fax: +1-631-468-4211
ZNY Technical Operations Area	+1-631-468-1293	Fax: +1-631-468-1289
ARINC Operation Team Leader	+1-631-589-7272	Fax: +1-631-563-2412
ARINC Shift Manager	+1-631-244-2483	Fax: +1-631-563-2412

Fleet Area Control and Surveillance Facility, Virginia Capes Telephone/Facsimile Numbers:		
Control Room Supervisor	+1-757-433-1230	Fax: +1-757-433-1266/1209
Control Room Supervisor	+1-757-433-1231	Fax: +1-757-433-1266/1209
Airspace Officer	+1-757-433-1248	
Airspace Chief Petty Officer	+1-757-433-1225	

Appendix 9A-1
Routes (M325, L452) Pictorial



Appendix 9A-2
Routes (M325, L452) Pictorial



Appendix 10 –

NY OAC FIR Contingency Routes (East / West)

Rte Name	Route Definition
A-1	DOVEY 4200N/06000W 4400N/05000W 4600N/04000W FPR (and the reverse)
B-1	SLATN 4000N/06000W 4200N/05000W 4400N/04000W FPR (and the reverse)
M201	HANRI M201 CARAC FPR (and the reverse)
M326 then C-1 after BALOO	JAINS M326 JIMAC BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)
M326 then D-1 after NUMBR	JAINS M326 JIMAC NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)
M202	UKOKA M202 LOMPI FPR (and the reverse)
M203	SNAGY M203 BOBTU FPR (and the reverse)
M203 then B-2 after SELIM	SNAGY M203 SELIM 4000N/06000W 4200/N05000W 4400N/04000W FPR (and the reverse)
M327 then C-1 after BALOO	SUMRS M327 JIMAC BALOO 3500/N06000W 3900N/05000W 4200N/04000W FPR (and the reverse)
M327 then D-1 after NUMBR	SUMRS M327 JIMAC NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)
M328 then C-1 after BALOO	CNNOR M328 ANTIG BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)
M328 then D-1 after NUMBR	CNNOR M328 ANTIG NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)
M329 then C-1 after BALOO	GRATX M329 ALUDA BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)
M329 then D-1 after NUMBR	GRATX M329 ALUDA NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)
M330 then C-1 after BALOO	MILLE M330 SHEIL BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)
M330 then D-1 after NUMBR	MILLE M330 SHEIL NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)
M331 then C-1 after BALOO	CANEE M331 GECAL BALOO 3500N/06000W 3900N/05000W 4200N/04000W FPR (and the reverse)
M331 then D-1 after NUMBR	CANEE M331 GECAL NUMBR 3300N/06000W 3700N/05000W 4000N/04000W FPR (and the reverse)
M594 then E-1 after AMENO	MLLER M594 AMENO 3400N/05000W 3800N/04000W FPR (and the reverse)
M596 then F-1 after SIFEN	WATRS M596 SIFEN 3200N/05000W 3600N/04000W FPR (and the reverse)
M597 then F-1A after FIVZE	NECKS M597 FIVZE 3200N/05000W 3600N/04000W FPR (and the reverse)
F-2	SOCCO M525 KAVAX 2800N/05000W 3300N/04000W FPR (and the reverse)
G-1	1800N/06000W 2500N/05000W 3100N/04000W FPR (and the reverse)
H-1	1800N/05600W 2200N/05000W 2800N/04000W FPR (and the reverse)

Appendix 10-2

NY OAC FIR Contingency Routes (North / South)

Rte Name	Route Definition
L451	JAINS L451 LETON FPR (and the reverse)
L452	OXANA L452 LNHOM FPR (and the reverse)
L453	AZEZU L453 LAMER FPR (and the reverse)
L454	OKONU L454 LUCTI FPR (and the reverse)
L455	SAVIK L455 KINCH FPR (and the reverse)
L456	MARIG L456 HANCY FPR (and the reverse)
L459	SAVIK L459 NECKS FPR (and the reverse)
L461	MARIG L461 OPAUL FPR (and the reverse)
L462	KAYYT L462 DAWIN FPR (and the reverse)

NY OAC FIR UNAVAILABLE Routes (any direction)

UNAVAILABLE Routes
L375
L435
L457
L458
M593
M595

If, during the provision of limited service, NY OAC becomes capable of increasing air traffic services, more routes and/or increased capacity will be made available to operators.

New York (ZNY) OAC Telephone/Facsimile Numbers:		
ZNY Watch Desk	+1-631-468-5959	Fax: +1-631-468-4224
ZNY Traffic Management Unit	+1-631-468-1080	Fax: +1-631-468-4224
ZNY North Atlantic Operating Area Supvr	+1-631-468-1496/1413	Fax+1-631-468-4224
ZNY WATRS Operating Area Supvr	+1-631-468-1495	Fax: +1-631-468-4224
ZNY Procedures Office	+1-631-468-1018	Fax: +1-631-468-4229
ZNY Traffic Management Officer	+1-631-468-1010	Fax: +1-631-468-4211
ZNY Technical Operations Area	+1-631-468-1293	Fax: +1-631-468-1289
ARINC Operation Team Leader	+1-631-589-7272	Fax: +1-631-563-2412
ARINC Shift Manager	+1-631-244-2483	Fax: +1-631-563-2412

Appendix 11 –

Contingency Procedures between NY OAC and the

Air Traffic Control System Command Center

Upon notification by the New York Center that its oceanic operation has been impacted to the point where either no service or only limited service is available, the Command Center shall undertake the following actions:

1. Advise all affected ANSPs, flow units and operators of the contingency and the level of service available.

2. Manage and coordinate capacity limitations and associated restrictions, airway usage and altitude availability procedures.

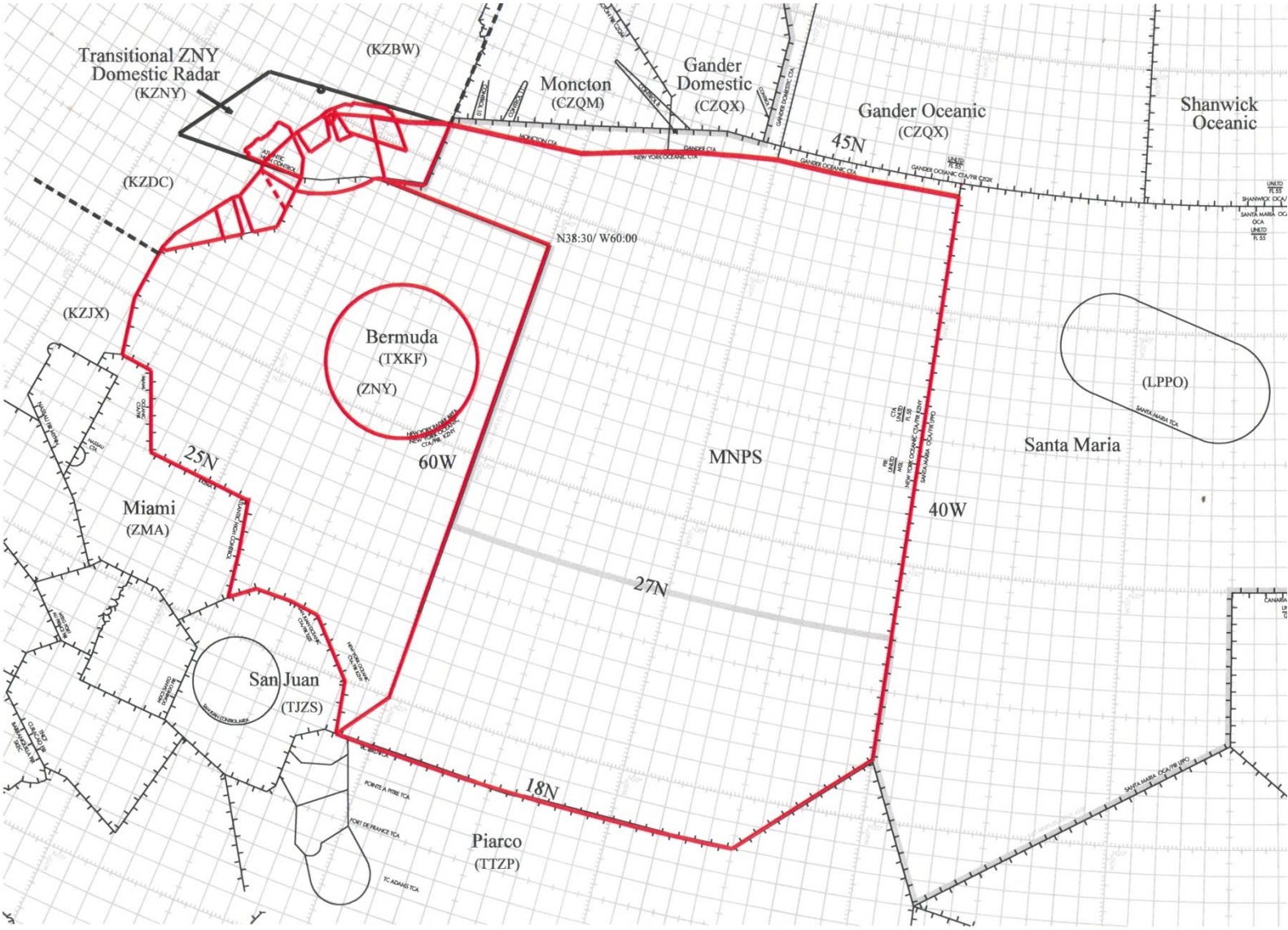
Appendix 12 –

Evacuation Message

Emergency evacuation of New York OAC is in progress. No IFR control or communication will be provided by New York OAC. HF communication is still possible with New York Radio, ADS equipped aircraft must provide position reporting via HF. Use extreme caution and monitor this frequency, emergency frequencies and air to air frequencies. As appropriate: eastbound flights contact Santa Maria ACC, Gander ACC or Moncton ACC, westbound flights contact PIARCO ACC, San Juan CERAP, Miami Center, Jacksonville Center, Fleet Area Control and Surveillance Facility-Virginia Capes, Boston Center, Moncton ACC or Gander ACC. Aircraft not in receipt of an oceanic clearance should expect to land at an appropriate aerodrome, or request appropriate re-clearance to avoid New York OAC. All flights should contact New York ARINC, Santa Maria Radio, or Shanwick Radio as soon as possible. Please broadcast this message on HF, 123.45, 121.5 and 243.0.

Appendix 13 –

Adjacent Agencies



Appendix 14 –

Adjacent Agencies Communications

Westbound via	Facility to contact	Frequencies
DOVEY	N.Y. Center (ZNY)	125.925 / 284.75
JOBOC	N.Y. Center (ZNY)	125.925 / 284.75
SLATN	N.Y. Center (ZNY)	125.925 / 284.75

North or Northwest bound via	Facility to contact	Frequencies
KAYYT	N.Y. Center (ZNY)	125.925 / 284.75
MARIG	N.Y. Center (ZNY)	133.5 / 354.0
SAVIK	N.Y. Center (ZNY)	133.5 / 354.0
OKONU	N.Y. Center (ZNY)	133.5 / 354.0

Inbound to Bermuda airspace via	Facility to contact	Frequencies
BALOO	N.Y. Center (ZNY)	128.5 / 239.0
NUMBR	N.Y. Center (ZNY)	128.5 / 239.0
LAZEY	N.Y. Center (ZNY)	128.5 / 239.0
WINGZ	N.Y. Center (ZNY)	128.5 / 239.0
PIREX	N.Y. Center (ZNY)	128.5 / 239.0
GECAL	N.Y. Center (ZNY)	128.5 / 239.0
SHEIL	N.Y. Center (ZNY)	128.5 / 239.0
ALUDA	N.Y. Center (ZNY)	128.5 / 239.0
ANTIG	N.Y. Center (ZNY)	128.5 / 239.0
JIMAC	N.Y. Center (ZNY)	128.5 / 239.0
ENAPI	N.Y. Center (ZNY)	128.5 / 239.0
DASER	N.Y. Center (ZNY)	128.5 / 239.0
BOVIC	N.Y. Center (ZNY)	128.5 / 239.0
ANVER	N.Y. Center (ZNY)	128.5 / 239.0

North or Westbound via	Facility to contact	Frequencies
OXANA (FL240 & above)	N.Y. Center (ZNY)	126.025 / no UHF
OXANA (FL230 & below)	Giant Killer (VACAPES)	135.875 / 251.6
JAINS (FL380 and above)	Jacksonville Center (ZJX)	120.125 / 381.45
JAINS (FL370 and below)	Jacksonville Center (ZJX)	135.05 / 307.05
UKOKA (FL380 and above)	Jacksonville Center (ZJX)	120.125 / 381.45
UKOKA (FL370 and below)	Jacksonville Center (ZJX)	135.05 / 307.05

Appendix 14-2
Adjacent Agencies Communications

South or Southwest bound via	Facility to contact	Frequencies
SNAGY	Miami Center (ZMA)	123.67 / no UHF
SUMRS	Miami Center (ZMA)	123.67 / no UHF
MAPYL	Miami Center (ZMA)	134.8 / 298.9
CONNR	Miami Center (ZMA)	134.8 / 298.9
GRATX	Miami Center (ZMA)	134.8 / 298.9
MILLE	Miami Center (ZMA)	126.27 / 251.12
CANEE	Miami Center (ZMA)	126.27 / 251.12
LETON	Miami Center (ZMA)	135.2 / 327.0
LNHOM	Miami Center (ZMA)	135.2 / 327.0
LAMER	Miami Center (ZMA)	135.2 / 327.0
LUCTI	Miami Center (ZMA)	135.2 / 327.0
MLLER	Miami Center (ZMA)	135.2 / 327.0

Southbound via	Facility to contact	Frequencies
KINCH	San Juan CERAP (TJZS)	134.3/307.0
HANCY	San Juan CERAP (TJZS)	134.3/307.0
NECKS	San Juan CERAP (TJZS)	134.3/307.0
OPAUL	San Juan CERAP (TJZS)	125.0/285.5
DAWIN	San Juan CERAP (TJZS)	125.0/285.5
LAMKN	Piarco Center (TTZP)	123.7 / no UHF
North or Northeast bound via	**Facility to contact**	**Frequencies**
NOVOK	Moncton ACC (ZQM)	125.25 / no UHF
JEBBY	Moncton ACC (ZQM)	125.25 / no UHF
BOBTU	Gander ACC (ZQX)	134.7 / no UHF

ARINC HF Frequency Families			
NAT Region HF Frequencies		**WATRS Region HF Frequencies**	
2962 -QE	11309 -XE	2887 -QE	8846 -VF
3016 -QA	13306 -YA	3455 -CS	8918 -VQ
5598 -TA	13354 -YE	5520 -EN	11330 -LS
6628 -TE	17952 -ZE	5550 -TL	11396 -XO
8825 -VE	21964 -PN	6577 -UI	13297 -YG
8906 -VA		6586 -UJ	17907 -ZD
N.Y. U.S.A., Area VHF 129.9 -JW		San Juan, PR, Area VHF 130.7 -KA	

Appendix 14-3
Adjacent Agencies Communications

Gander Radio HF Frequencies									
Family	Frequency bands								
	3 MHz	3.5 MHz	4.7 MHz	5.6 MHz	6.6 MHz	9 MHz	11.3 MHz	13.3 MHz	18 MHz
A	3016			5598		8906		13306	
B	2899			5616		8864		13291	
C	2872			5649		8879	11336	13306	
D	2971		4675			8891	11279		
F		3476			6622	8831		13291	
VOLMET		3485			6604		10051	13270	

Appendix 15 –

Consolidated New York Center Contact Details

New York Center (ZNY) OAC Telephone/Facsimile Numbers:		
ZNY Watch Desk	+1-631-468-5959	Fax: +1-631-468-4224
ZNY Traffic Management Unit	+1-631-468-1080	Fax: +1-631-468-4224
ZNY North Atlantic Operating Area Supvr	+1-631-468-1496/1413	Fax: +1-631-468-4224
ZNY WATRS Operating Area Supvr	+1-631-468-1495	Fax: +1-631-468-4224
ZNY Procedures Office	+1-631-468-1018	Fax: +1-631-468-4229
ZNY Traffic Management Officer	+1-631-468-1010	Fax: +1-631-468-4211
ZNY Technical Operations Area	+1-631-468-1293	Fax: +1-631-468-1289

New York Aeronautical Radio INC. (ARINC) Telephone/Facsimile Numbers:		
ARINC Operation Team Leader	+1-631-589-7272	Fax: +1-631-563-2412
ARINC Shift Manager	+1-631-244-2483	Fax: +1-631-563-2412

Boston Center (ZBW) Telephone/Facsimile Numbers:		
ZBW Watch Desk	+1-603-879-6655	Fax: +1-603-879-6717
ZBW Traffic Management Unit	+1-603-879-6666	Fax: +1-603-879-6717
ZBW Procedures Office	+1-603-879-6858	Fax: +1-603-879-6410
ZBW Traffic Management Officer	+1-603-879-6644	Fax: +1-603-879-6717
ZBW Technical Operations Area	+1-603-879-6729	Fax: +1-603-879-6934

Moncton ACC (YQM) Telephone/Facsimile Numbers:		
Nav Canada National Operations Center	+1-613-248-4087	Fax: +1-613-248-3983
YQM Moncton ACC (at NOVOK or JEBBY)	+1-506-867-7175	Fax: +1-506-867-7180
YQM Moncton ACC (at NOVOK or JEBBY)	+1-506-867-7173	Fax: +1-506-867-7180

Gander ACC (YQX) Telephone/Facsimile Numbers:		
Nav Canada National Operations Center	+1-613-248-4087	Fax: +1-613-248-3983
YQX Gander Shift Manager	+1-709-651-5207	Fax: +1-709-651-5324
YQX Gander Shift Manager	+1-709-651-5203	Fax: +1-709-651-5324
YQX Gander Oceanic Supervisor	+1-709-651-5324	Fax: +1-709-651-5324
Gander Radio Supervisor	+1-709-651-5212	Fax: +1-709-651-5344

Appendix 15-2
Consolidated New York Center Contact Details

Santa Maria (LPAZ) Telephone/Facsimile Numbers:		
LPAZ Santa Maria ACC	+351-296-820-438	
LPAZ Santa Maria ACC (satellite link)	+351-296-886-042	
LPAZ Atlantic Operations Director	+351-296-820-501	
LPAZ Operations Division Manager	+351-296-820-501	
LPAZ ATC Operations Manager	+351-296-820-508	
LPAZ Radio Station Manager	+351-296-820-509	
LPAZ ACC Watch Manager	+351-296-820-400	
LPAZ ACC Watch Manager	+351-296-886-299	Fax: +351-296-820-422
LPAZ Radio Station Watch Manager	+351-296-820-401	
Lajes RCC	+351-295-540-515	
Lajes RCC	+351-295-513-686	Fax: +351-295-540-792

Piarco ACC Telephone/Facsimile Numbers:		
Piarco Control Room	+868-669-6181	Fax: +868-669-1716
Piarco Control Room	+868-669-4852	

San Juan CENRAP (ZSU) Telephone/Facsimile Numbers:		
ZSU Watch Supervisor	+1-787-253-8664	Fax: +1-787-253-8685
ZSU Watch Supervisor	+1-787-253-8665	
ZSU Watch Supervisor	+1-787-253-8648	
ZSU Watch Supervisor (Satellite Phone)	..888-570-3278	

Miami Center (ZMA) Telephone/Facsimile Numbers:		
ZMA Watch Desk	+1-305-716-1588	Fax: +1-305-716-1511/1613
ZMA Traffic Management Unit	+1-305-716-1736	Fax: +1-305-716-1777
ZMA Traffic Management Officer	+1-305-716-1591	Fax: +1-035-716-1777
ZMA Airspace and Procedures	+1-305-716-1547	
ZMA Tech Ops	+1-305-716-1204	Fax: +1-305-716-1293

Appendix 15-3
Consolidated New York Center Contact Details

Jacksonville Center (ZJX) Telephone/Facsimile Numbers:		
ZJX Watch Desk	+1-904-549-1537	Fax: +1-904-549-1843
ZJX Area 2 – North Area	+1-904-549-1546	Fax: +1-904-549-1843
ZJX Traffic Management Unit	+1-904-549-1542	Fax: +1-904-549-1843
ZJX Airspace and Procedures Office	+1-904-549-1574	Fax: +1-904-549-1803
ZJX Traffic Management Officer	+1-904-549-1538	Fax: +1-904-549-1843
ZJX Tech Ops	+1-904-549-1604	Fax: +1-904-549-1695

Fleet Area Control and Surveillance Facility, Virginia Capes Telephone/Facsimile Numbers:		
Control Room Supervisor	+1-757-433-1230	Fax: +1-757-433-1266/1209
Control Room Supervisor	+1-757-433-1231	Fax: +1-757-433-1266/1209
Airspace Officer	+1-757-433-1248	
Airspace Chief Petty Officer	+1-757-433-1225	

FAA Air Traffic Control System Command Center (ATCSCC) Telephone/Facsimile Numbers:		
National Operations Manager (NOM)	+1-703-904-4525	Fax: +1-703-904-4459
International Operations	+1-703-925-3113	Fax: +1-703-904-4461
Strategic Operations	+1-703-904-4402	Fax: +1-703-904-4461

Appendix 16 –

VOLMET International Broadcast

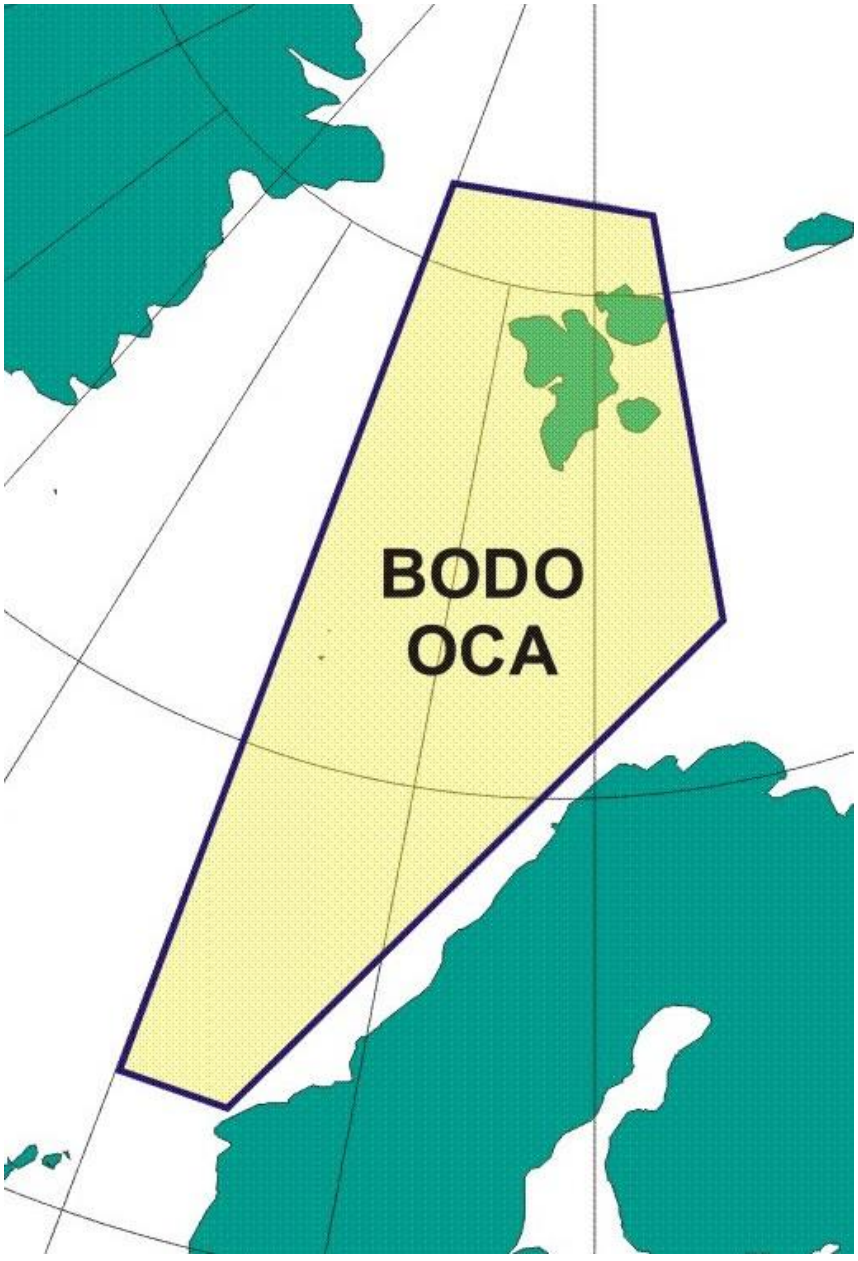
The VOLMET broadcast is an international broadcast providing Terminal Aerodrome Forecasts, and METARs, plus the New York and Caribbean Oceanic SIGMETs to pilots traversing the Atlantic Ocean and Caribbean Sea enroute to the United States. The VOLMET broadcast operates on the hour and thirty minutes past each hour, announcing the weather for 25 different airports, including 3 Caribbean Island air terminals. The program (as represented below) is divided into four 5-minute segments, each dealing with 6 terminals in a predetermined schedule, including any pertinent severe weather advisories. Immediately following the New York broadcast, a similar 10 minute presentation is made for airports in Canada by Gander Radio, located at Gander, Newfoundland.

The operating frequencies of the broadcast are 3485, 6604, 10051 and 13270 MHz. All transmitters are located at Barnegat, New Jersey.

Information related to a significant system failure or pertinent to a U. S. National emergency, MAY be available on VOLMET.

NAT VOLMET 3.485 6.604 10.051 13.270 MHz					
WSY 70 **NEW YORK**				VFG **GANDER**	
H + 00	**H + 05**	**H + 10**	**H + 15**	**H + 20**	**H + 25**
DETROIT CLEVELAND CINCINNATI Detroit Cleveland Cincinnati Indianapolis Pittsburgh	BANGOR WINDSOR LOCKS CHARLOTTE Bangor Windsor Locks Norfolk Charlotte	**NEW YORK** NEWARK BOSTON **New York** Newark Boston Baltimore Washington	BERMUDA MIAMI ATLANTA Bermuda Miami Nassau Orlando Atlanta	MONTREAL TORONTO OTTAWA **Gander** Montreal Toronto Ottawa Goose	WINNIPEG EDMONTON CALGARY CHURCHILL Kuujjuaq Winnipeg Churchill
H + 30	**H + 35**	**H + 40**	**H + 45**	**H + 50**	**H + 55**
CHICAGO MILWAUKEE MINNEAPOLIS Chicago Milwaukee Minneapolis Detroit Boston	INDIANAPOLIS ST LOUIS PITTSBURGH Indianapolis St Louis Pittsburgh Atlantic City	BALTIMORE PHILADELPHIA WASHINGTON Baltimore Philadelphia Washington **New York** Newark	NASSAU ORLANDO Bermuda Miami Nassau Orlando Atlanta Tampa West Palm Beach	**GANDER** ST JOHN'S HALIFAX **Gander** St John's Halifax Stephenville Montreal / Mirabel	GOOSE IQALUIT SØNDRE STRØM Goose Iqaluit Søndre Strøm Kuujjuaq

CHAPTER 6: DETAILED PROCEDURES – BODØ OACC



6.1 FIR FOR WHICH THE CONTINGENCY PLAN APPLIES

Bodø Oceanic FIR

6.2 FIRs WITH SUPPORTING PROCEDURES

Reykjavik FIR
Norway FIR, Stavanger AoR
Norway FIR, Oslo AoR
Sweden FIR, Stockholm AoR
Fin FIR, Rovaniemi AoR
Murmansk FIR

6.3 NOTIFICATION PROCEDURES

In a limited service situation notification of any service limitations and traffic management measures will be promulgated to operators and adjacent ANSPs by NOTAM normally not later than 12 hours prior to activation or as soon as practicable in case of an unexpected service interruption.

In a no service situation the OACC is likely to have been evacuated. As soon as possible after evacuation a contingency message will be sent by NOTAM and Iceland radio will advise aircraft within Reykjavik FIR/CTA. Adjacent centres will be advised by phone.

6.4 LIMITED SERVICE- PROCEDURES

The Regional Rules and Regulation for Bodø Oceanic Area Control Centre (OAC) address the issues of limited service provision in the Nat Region. In the event that Bodø OAC/ATCC must be evacuated, the specifics of section "6.5 NO SERVICE – PROCEDURES" will immediately be activated.

Once the Bodø Area Control Centre has been sterilized of oceanic traffic, the rebuilding of service provision will begin.

Until full service can be re-established Bodø OAC will delegate control of aircraft within Bodø Oceanic Control Area to Stavanger ATCC, Bodø ATCC Domestic sectors, Stockholm ACC and Reykjavik ACC.

Situations which could result in a Limited Service are:

Equipment Failure
- Transmitters (Loss of a number of Transmitters)
- Receivers (Loss of a number of Receivers)
- Aerials (Loss of a number of Aerials)

Propagation
- Radio Propagation resulting in partial fade-out can be affected by many factors including Solar Flares and Geomagnetic Storms

Staffing
- Reduced Staffing
- Illness
- Weather (Severe Weather i.e. Storm, Snow, Flooding)
- Industrial Relations issues

Security Threat

Depending on the level of the Security threat and if essential staff are allowed to remain on Station

6.4.1 Disruption of ground/air communication capability

A limited communication service will be maintained with the assistance of adjacent ACC's and Aeronautical Radio Stations. Appropriate frequencies will be advised by the assisting stations.

6.4.2 Disruption of ability to provide control services

Bodø OACC will determine, co-ordinate and promulgate any necessary restrictions to meet the service limitation.

Dispersal of Air Traffic

Aircraft already within the Bodø OCA, will be given priority for the limited services available. Aircraft intending to enter Bodø OCA will, if necessary, be restricted to meet the limited service capability. Random westbound routing may be restricted.

Communications

Communication services will be maintained to the possible extent using available equipment supplemented with the assistance of adjacent facilities. Aircraft unable to contact Bodø Radio on HF Frequency shall call one of the following stations:

Iceland Radio
Shanwick Radio

Notification

Bodø OAC will notify all adjacent units and co-ordinate necessary traffic restrictions.

Responsibilities of adjacent OACs and ATCCs

The action required of adjacent ANSPs will vary dependant on the nature of the service limitation. Where such action is not contained within the inter-centre Letters of Agreement (LOAs) the requirement will be promulgated within the initial failure and restrictions message.

For Westbound traffic, Bodø OAC will issue clearances to 0° Longitude only. Reykjavik OAC will assume responsibility west of 0° Longitude. Eastbound traffic will be accepted as normal.

Separation Minima

Bodø OAC will be responsible for ensuring the coordination and implementation of any additional separation standard.

Same direction longitudinal separation may be increased if (e.g. add 5 minutes). Lateral separation will not be increased. Flight profile changes in the Bodø OCA may be limited.

Contingency Tracks

Bodø OAC shall publish contingency tracks within the Bodø OCA and ensure that the available limited Air Traffic Services are not overloaded.

Air Traffic Flow Management (ATFM) Requirements

Bodø OAC will, in conjunction with the NMOC , initiate ATFM measures as required.

6.5 NO SERVICE - PROCEDURES

Situations which could result in No Service being provided are:

Equipment Failure
- Transmitters (Loss of all Transmitters)
- Receivers (Loss of all Receivers)
- Aerials (Loss of all Aerials)

Propagation
- Radio Propagation resulting in total fade-out which can be caused by many factors including Solar Flares and Geomagnetic Storms

Staffing
- No Staff
- Illness (Seasonal Influenza)
- Weather
- Industrial Relations issues

Evacuation of Station
- Fire
- Bomb threat

6.5.1 Loss of ground/air communication capability

A limited communication service will be maintained with the assistance of adjacent ACC's and Aeronautical Radio Stations. Appropriate frequencies will be advised by the assisting stations.

6.5.2 Loss of ability to provide control services

Bodø ATCC includes Bodø Domestic Control, Bodø Oceanic Control and Bodø HF. Should Bodø ATCC be evacuated, the potential exist for a major disruption to Air Traffic Control service within Bodø AoR (Norway FIR from 62N to Russian Border boundary) and Bodø OFIR/OCA.

As soon as possible after evacuation Contingency Message will be forward to all concerned agencies.

Dispersal of Air Traffic

Where possible, aircraft already within the Bodø OCA will be notified that no services are available. Oceanic traffic intending to operate through Norwegian domestic airspace will require further clearance to do so.

Aircraft that elect to continue flight through Bodø OCA will operate on published tracks and at published flight levels. Aircraft that already are on random track will require specific co-ordination and approval from all concerned ATS units until the contingency tracks become active. The lowest flight level available for transiting flights will be FL280.

Traffic to and from Svalbard/ Longyear will use flight levels appropriate to direction of flight until exiting Bodø OCA. The highest available flight level will be FL270.

Communications

Bodø Radio and adjacent facilities will extend HF monitoring and assist with flight information services to aircraft within or about to enter Bodø OCA.

If unable to establish radio contact with adjacent facilities, flights may use SATCOM voice and satellite telephone to provide position reports.

Notification

Bodø OAC will attempt to notify adjacent units of the loss of service. If adjacent units are unable to establish contact with Bodø OAC, the phone numbers listed in the appendix can be used. Adjacent facilities are also listed.

Responsibilities of adjacent OACs and ATCCs

Adjacent OACs/ATCCs should implement ATFM measures as required. In addition, they may co-ordinate and publish routes to minimize the impact of the loss of service. Norwegian domestic ATCC will ensure that the necessary oceanic separation minima are established for traffic entering Bodø OCA from their area.

Reykjavik OAC will be required to:

Clear eastbound traffic in accordance with the contingency tracks and provide necessary separation; and

Organize a method of passing and receiving estimates with the Norwegian domestic ATCC.

Separation Minima

Longitudinal separation for all traffic entering Bodø OCA from Norwegian domestic airspace shall be increased by 10 minutes.

Contingency Tracks

The contingency tracks, FL280 or above, will be laterally separated and will use flight levels appropriate to direction of flight. Before leaving Bodø OCA, aircraft operating on contingency tracks shall request a clearance from the appropriate adjacent unit. Change of flight level will not be permitted while on the contingency tracks.

Air Traffic Flow Management

Bodø OAC will, in conjunction with theNMOC, initiate ATFM measures as required.

6.6 FLIGHT CREW AND OPERATOR PROCEDURES

6.6.1 For flights within the Bodø OCA when the contingency is activated

The procedures outlined below are to be used as guidance for pilots in the immediate aftermath of sudden withdrawal of the ATC service as described above.

On receipt of the contingency message pilots are requested to broadcast the information to other flights on VHF frequency 127,725 or 121,5.

Flights should establish communication with the next agency at the earliest opportunity stating current position, cleared Flight Level, next position and estimate and subsequent position. This also applies to flights using automatic position reports.

If unable to establish radio contact, flights may use SATCOM voice or satellite telephone to provide position reports.

Oceanic Centre	Telephone Number	SATCOM Inmarsat Short Code
Reykjavik	+354 568 4600	425105
Santa Maria	+351 296 820 438 +351 296 886 042 (satellite link)	426305
New York	+1 631 468 1413	436623
Ballygreen (Shanwick Radio)	+353 61 368241 Ground/Air Ops	425002
Bodø	+47 755 42900	425702
Gander	+1 709 651 5207	431613

Flights may request their flight dispatch offices to forward position reports, if sending position reports to multiple ATS Units or if otherwise unable to forward position reports.

Flights operating with a received and acknowledged oceanic clearance will be expected to continue in accordance with the last clearance issued unless otherwise advised by ATC.

Flights involved in level change should complete the manoeuvre as soon as possible in accordance with the clearance.

Flights making automatic position reports are required to make voice position reports whilst within the Bodø OCA unless advised otherwise.

Communications with the next ATSU should be established at the earliest opportunity. Where no contact with the next agency can be established, Shanwick radio should be contacted on HF for advice.

6.6.2 For flights approaching the Bodø OCA when the contingency is activated

Not in Receipt of an Oceanic Clearance

In the event that Bodø OACC must be evacuated, only aircraft with received and acknowledged oceanic clearances shall be permitted to transit Bodø OCA.

If aircraft are unable to obtain or acknowledge an oceanic clearance, flights must plan to re-route around the Bodø OCA or to land at an appropriate aerodrome. Request the appropriate re-clearance on the current frequency.

In receipt of an acknowledged Oceanic Clearance

Aircraft operating with a received and acknowledged ocean clearance should proceed in accordance with the clearance. Flights should not request changes in altitude, speed or route except for reasons of flight safety or to comply with the oceanic clearance.

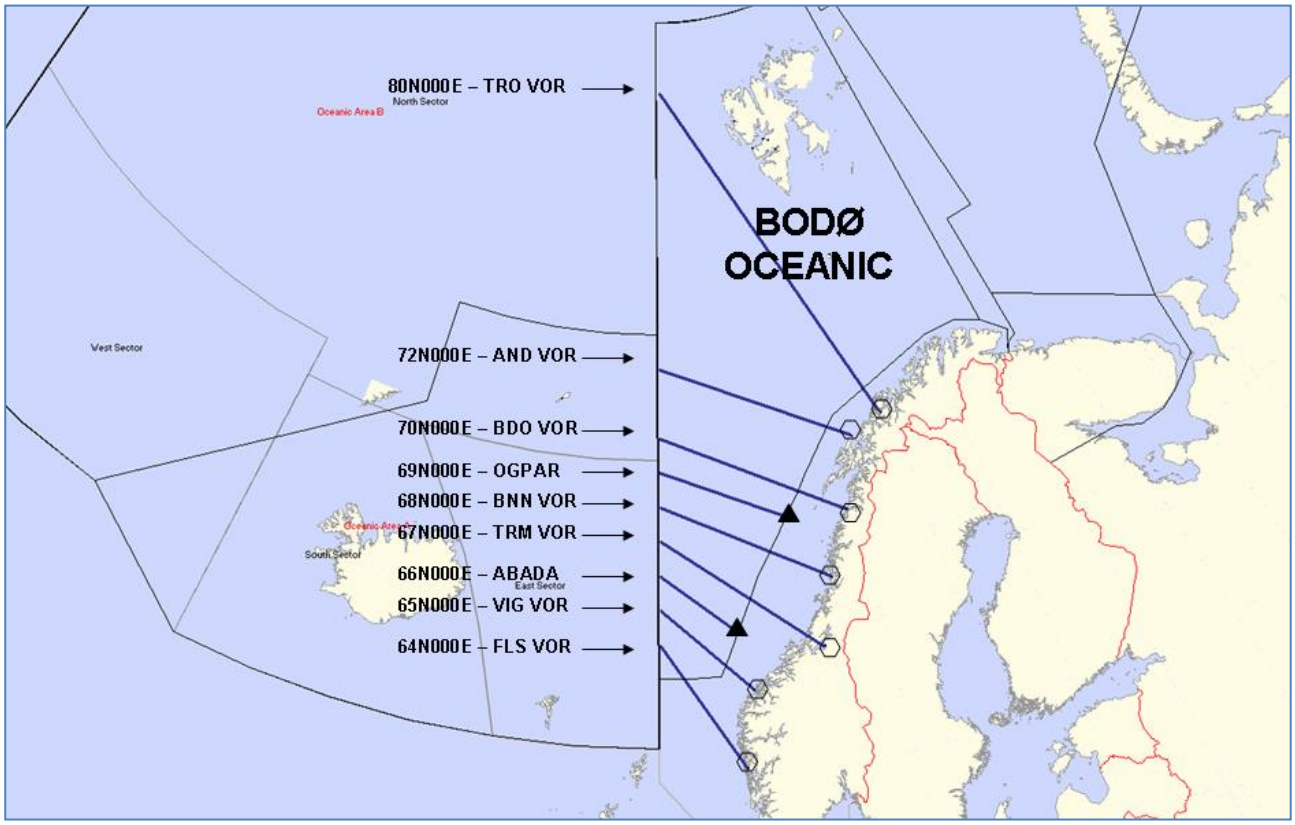
Entering from another OCA

Flights within Reykjavik Oceanic Airspace, can anticipate a large re-route to avoid the Bodø OCA.

Reykjavik will issue advice on procedures to be followed.

6.7 BODØ OACC – CONTINGENCY ROUTE STRUCTURE

6.7.1 For activation within Bodø FIR



Bodø OCA Contingency Tracks, FL280 or above

Latitude at 0°L	Domestic border/Landfall
80N	TRO
72N	AND
70N	BDO
69N	OGPAR
68N	BNN
67N	TRM
66N	ABADA
65N	VIG
64N	FLS

Westbound traffic shall use even levels, and eastbound traffic shall use odd levels.

6.8 LONG TERM CONTINGENCY ARRANGEMENTS

In development.

———————————

Appendix A –

Procedures by Adjacent Areas in Event of Bodø OAC/ACC Evacuation

NONE

Appendix B –

Contact Details – Bodø OACC

Bodø Supervisor (07:00-22:00)	+47 755 42900
Bodø Supervisor Mob.(07:00-22:00)	+47 478 06643
Bodø OACC/ACC Telefax	+47 755 20733
Oceanic Sector primary commercial	+47 755 42935
Domestic Sector primary commercial	+47 755 20391
All Sectors 2nd backup (mobile)	+47 478 06644
All Sectors 3rd backup (mobile)	+47 478 06647
System Operators and Flight Data Specialists	+47 755 42902
Systems Department	+47 670 33830
Manager Bodø OACC/ACC Mr. Raymond Ingebrigtsen	+47 670 33751 +47 992 32628 (mobile)
Operational Manager Bodø OACC/ACC Mr. Morten Tjønndal	+47 670 33753 +47 911 05587 (mobile)
Bodø Radio	+47 755 42940

Appendix C –

Evacuation Messages – Bodø OACC

AFTN

Bodø OACC/ACC has been evacuated, limited availability via telephone numbers: +47 478 06643(supervisor), +47 478 06644(oceanic sector).

Bodø OACC/Bodø Radio on voice

Emergency evacuation of Bodø OACC/ACC is in progress. No air traffic control service will be provided by Bodø. Use extreme caution and monitor frequency 127.725 MHz, emergency frequencies, air to air frequencies and NAT D family HF frequencies.

CHAPTER 7: DETAILED PROCEDURES – SHANNON ACC

7.1 FIR FOR WHICH THE CONTINGENCY PLAN APPLIES

Shannon FIR

7.2 FIRs WITH SUPPORTING PROCEDURES

Shanwick Oceanic FIR

7.3 LIMITED SERVICE

Dispersal of Traffic

Shannon shall determine, co-ordinate and promulgate any necessary restrictions to meet the service limitation. The NAT traffic eastbound already within the OCA will have priority of remaining services.

Westbound Flights

Traffic in possession of a valid oceanic clearance shall continue in accordance with its Oceanic Clearance, Shannon will endeavor in as far as possible that flights will enter Shanwick OCA at the time and flight level specified in the oceanic clearance.

Aircraft not in receipt of an Oceanic clearance will be kept clear of Shanwick OCA.

Eastbound Flights

Eastbound NAT traffic will receive priority of the remaining services and will normally be accepted without restriction.

Communications

Communication services will be maintained by using available equipment backed up by reserve Radio Equipment (RBS) and relays via Shanwick radio if required.

Notification

Shannon ACC will notify adjacent ATCC and NMOC of the situation.

Responsibilities of other adjacent centres.

Details are contained in the relevant annexes of the Letters of Agreement between Shannon and adjacent ACCs.

Separation Minima

After consideration of the situation affecting the provision of ATC services, Shannon ACC may decide to increase separation minima and will inform adjacent centres accordingly.

Air Traffic Flow Management

Shannon will co-ordinate any necessary traffic management measures with the NMOC.

7.4 NO SERVICE

Dispersal of traffic

Westbound Flights

Westbound flights not already in the Shannon FIR/UIR/SOTA or NOTA will be routed clear of the Shannon ACC by the ACC concerned.

Shannon shall advise westbound flights already within the Shannon FIR/UIR/SOTA or NOTA as follows…

- Aircraft at assigned OAC level to contact Shanwick on VHF or HF.

- Aircraft not at assigned OAC levels will be instructed to climb immediately to OAC levels and contact Shanwick. Where aircraft are restricted in climb due traffic, they will be cleared to the highest available track level and instructed to contact Shanwick.

Eastbound Flights

Shanwick will attempt to reroute eastbound flights clear of the Shannon FIR/UIR/SOTA or NOTA.

If Shanwick are unable to route aircraft clear of the Shannon FIR/UIR/SOTA/NOTA, they will advise the flights of the non availability of service in the Shannon area and adopt the Procedures detailed below:

- Eastbound NAT overflying traffic will continue to landfall and after that position, direct to a point on the Scottish, London or Brest FIR boundary associated with that landfall point (See chart below). Aircraft will maintain their assigned OAC level and Mach No. and contact the adjacent centre for further instruction as soon as possible. Shanwick will advise Scottish, London or Brest of the estimate for the FIR entry point based on the estimate/report for 20W/15W positions and no level changes shall be effected without co-ordination between Shanwick and the centre involved. See notes below.

Landfall points and associated FIR Boundary points

Landfall	Route	Boundary Point	Elapsed Time	Contact
AGORI		See Note 1		Scottish
KESIX	DCT	IBROD	17	Scottish
BEGID	DCT	MIMKU	17	Scottish
SOVED	DCT	MIMKU	17	Scottish
MOGLO	DCT	NIBOG	17	Scottish
NETKI	DCT	NIBOG	17	Scottish
KOKIB	DCT	LIFFY	40	LAC (Swanwick)
BEXET	DCT	LIFFY	38	LAC (Swanwick)
OLGON	DCT	LIPGO	40	LAC (Swanwick)
GISTI	DCT	SLANY	38	LAC (Swanwick)
RILED	DCT	SLANY	41	LAC (Swanwick)
XETBO	DCT	NORLA	33	LAC (Swanwick)
LEKVA	DCT	NORLA	33	LAC (Swanwick)
ELSOX	DCT	LESLU	28	LAC (Swanwick)

Landfall	Route	Boundary Point	Elapsed Time	Contact
EPUNA	DCT	LESLU	29	LAC (Swanwick)
ATSUR	DCT	GAPLI	29	LAC (Swanwick)
BIMGO	DCT	GAPLI	29	LAC (Swanwick)
NASBA	DCT	RATKA	29	Brest
OMOKO	DCT	TAKAS See Note 2	20	Brest
TAMEL	DCT	See Note 3	12	Brest
LASNO	DCT	See Note 4		Brest

Note 1: Traffic planned to enter the Shannon AOR via AGORI will be re-routed by Shanwick to enter Scottish airspace north of the Shannon AOR.

Note 2: Traffic planned to enter the Shannon AOR via OMOKO will not continue to landfall but will be cleared direct from the common boundary to TAKAS to ensure track separation with the NASBA/RATKA track.

Note 3: Traffic planned to enter the Shannon AOR via TAMEL will not continue to landfall but will be cleared direct from the common boundary to TULTA. If there is conflicting traffic routeing OMOKO – TAKAS, another form of separation will be applied.

Note 4: Traffic planned to enter the Shannon AOR via LASNO will be re-routed by Shanwick to enter Brest airspace south of the Shannon AOR.

Communications

Communication services may be possible by using Shanwick radio. Inter centre telephone communication will be established and may be supplemented with the assistance of adjacent centres. Shannon will notify Shanwick of the relevant frequencies in use in Scottish, London and Brest.

Search and Rescue

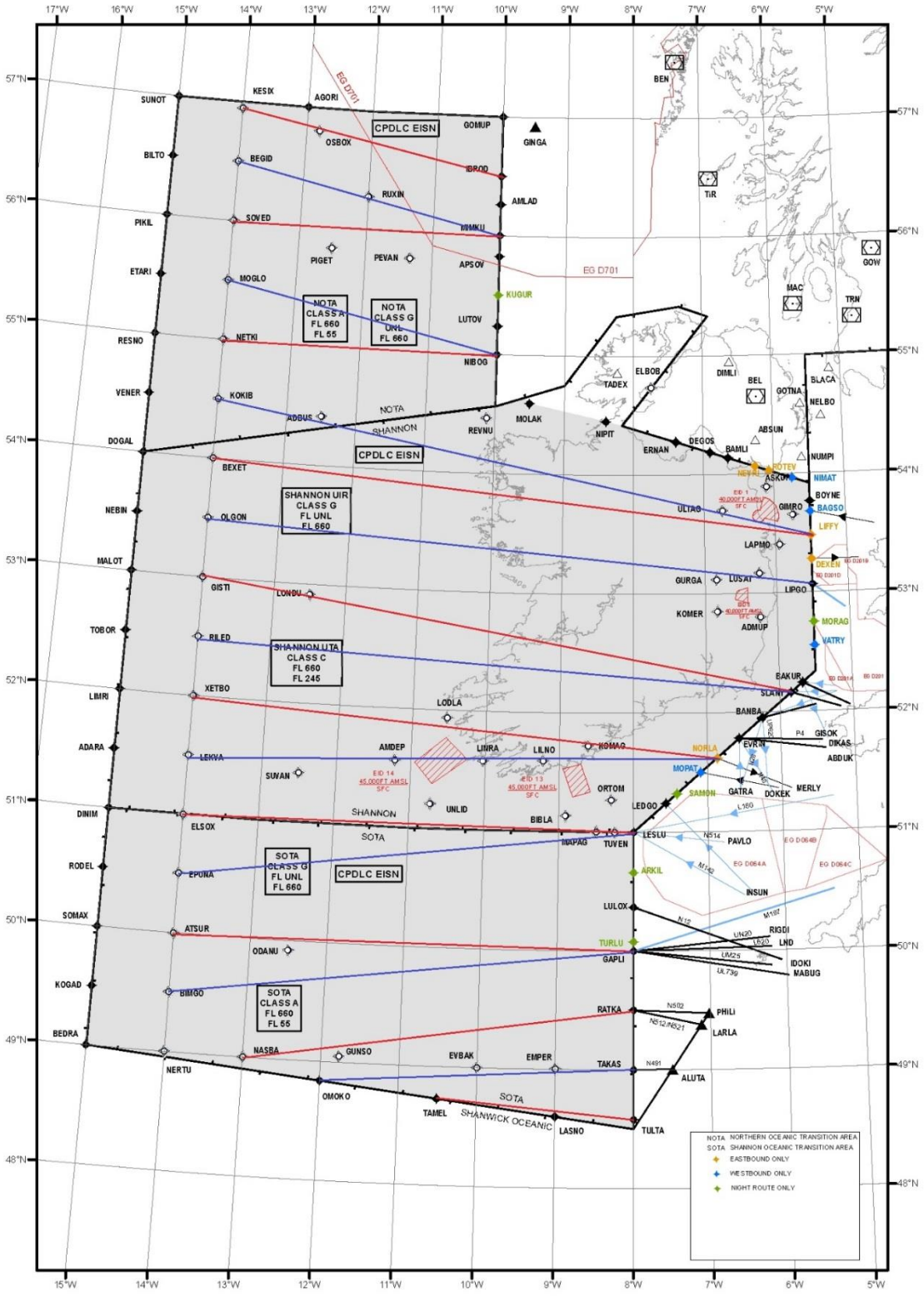
Should Shanwick become aware of an aircraft in need of Search & Rescue in Shannon's area of responsibility, they shall forward this information immediately to the Station Manager, Air Traffic Control, Dublin.

Responsibility of the other adjacent centres

Details are contained in the relevant annexes of the Letters of Agreement between Shannon and adjacent ACCs.

7.5 SHANNON ACC – CONTINGENCY ROUTE STRUCTURE

7.5.1 For activation within Shannon FIR - NAT Eastbound Contingency Routes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NOTA
EG D701
SUNOT
KESIX
AGORI
OSBOX
GOMUP
GINGA
BILTO
BEGID
IBROD
RUXIN
AMLAD
PIKIL
SOVED
MMKU
PIGET
PEVAN
APSOV
ETARI
MOGLO
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DOGAL
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GISTI
LONDU
TOBOR
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LIMRI
XETBO
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ADARA
LEKVA
SUVAN
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LIMRA
LILNO
KOMAG
ORTOM
UNLID
DINIM
ELSOX
BIBLA
MAPAG
TUVEN
RODEL
EPUNA
SOMAX
ATSUR
ODANU
KOGAD
BIMGO
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KOMER
LIPGO
LUSAT
GURGA
DEXEN
LAPMO
LIFFY
BAGSO
BOYNE
NIMAT
NUMPI
ASKOM
GIMRO
ULTAG
BAMLI
DEGOS
ERNAN
ABSUN
NELBO
GOTNA
BLACA
BEL
DIMLI
ELBOB
TADEX
NIPIT
BEN
TIR
MAC
TRN
GOW
IDOKI
MABUG
LND
RIGDI
NORTHERN OCEANIC TRANSITION AREA
SHANNON OCEANIC TRANSITION AREA
EASTBOUND ONLY
WESTBOUND ONLY
NIGHT ROUTE ONLY

CHAPTER 8: DETAILED PROCEDURES – BREST ACC

8.1 FIR FOR WHICH THE CONTINGENCY PLAN APPLIES

Brest FIR

8.2 FIRs WITH SUPPORTING PROCEDURES

Shanwick Oceanic FIR

8.3 LIMITED SERVICE

Dispersal of Traffic

The NAT traffic eastbound already within the OCA will have priority of the remaining services. The Brest supervisor will determine with the Brest FMP the need of traffic management measures and will inform the NMOC.

Westbound Flights

with Shanwick Brest ACC will respect as far as possible the oceanic clearances so as to present the flights at time and level co-ordinated.

with Shannon, if the ACT message is working normally there will be no difference with the present procedures. In case of radar troubles the reduced separation procedures and radar handover procedures shall be cancelled.

Eastbound Flights

from Shanwick and Shannon the flights will be accepted without any restriction. In case of a failure of the ACT message a telephone call will be necessary for each flight. In case of radar troubles the reduced separation procedures and radar handover procedures shall be cancelled with Shannon.

Communications

Communication services will be maintained either by using back up radio equipment or available equipment supplemented with the assistance of adjacent facilities.

Notification

Brest ACC will notify the situation to the NMOC and to all adjacent units.

Responsibilities of other adjacent centres

All details are in the Letters of agreement established between the different adjacent centres.

Separation minima

Considering the importance of the troubles affecting the ATC services, Brest ACC can decide of an increase of the separation minima.

Air Traffic Flow Management

Brest ACC will co-ordinate any necessary traffic management measure with the NMOC.

8.4 NO SERVICE

8.4.1 Dispersal of traffic

The Brest supervisor will inform the NMOC (Network Manager Operational Centre) and the adjacent centres. The NMOC will issue a message instituting an alternative route traffic scheme.

WESTBOUND FLIGHTS

If the flights are not in Brest airspace they will be re-routed by the concerned ACC clear of the Brest ACC area.

Already in Brest area, proceeding to Shannon:

Westbound traffic continue the flight in accordance with the current flight plan and maintain the last acknowledged cruising level until the exit point. It is strongly recommended to the pilot to try to contact Shannon as soon as possible so as to continue the flight in normal condition.

Already in Brest area, proceeding to Shanwick:

If the aircraft has received an oceanic clearance from Shanwick, he is allowed to continue to the exit point (SIVIR, UMLER, SEPAL, BUNAV, or ETIKI) in accordance with the current flight plan and at the last acknowledged cruising level received from Brest ACC. Any level or speed changes required to comply with the oceanic clearance shall be completed after the specific points at 008°00W (RIVAK, TIVLU, LAPEX, UMOXA, or REGHI).

The aircraft will continue the flight after 008°45W on Shanwick frequency.

If the aircraft has not received an oceanic clearance he is allowed to continue to the specific point at 008°00W (RIVAK, TIVLU, LAPEX, UMOXA, or REGHI) in accordance with the current flight plan and at the last acknowledged cruising level received from Brest ACC. It is strongly recommended to the pilot to try to contact Shanwick as soon as possible so as to get an oceanic clearance*.

Today, in normal conditions, aircraft have good radio communications with Shanwick thirty minutes before the exit points.

When the contact with Shanwick has been established and the oceanic clearance obtained, any level or speed changes required to comply with this oceanic clearance shall be completed after the specific points at 08.000W (RIVAK, TIVLU, LAPEX, UMOXA. or REGHI).

The aircraft will continue the flight after 08.000W on Shanwick frequency.

Flights proceeding to Brest area:

In accordance with the NMOC all these flights will be instructed to avoid Brest area.

EASTBOUND FLIGHTS

Already in Brest area:

The Eastbound traffic will continue in accordance with the current flight plan and maintain the last acknowledged cruising level. Each concerned aircraft will try to contact the next ACC, in accordance with the current flight plan as soon as possible so as to give a position report and flight details to that ACC.

Flights proceeding to Brest area:

Eastbound traffic will be rerouted by Shannon ACC clear of Brest area.

Eastbound traffic will whenever possible be rerouted by Shanwick OACC clear of Brest area.

These traffic that cannot be rerouted by Shanwick will follow the procedure hereafter :

Maintain their last oceanic flight level.

Squawk 2000.

-Navigate as detailed below :

Traffic leaving Shanwick OACC airspace via :

ETIKI:

Traffic with destination LFPG/LFPO/LFPB shall route direct from REGHI to DVL (Deauville VOR) and be instructed to contact Paris ACC.

Other traffic shall route direct from REGHI to TSU (Toussus VOR) and be instructed to contact Reims ACC as soon as possible.

UMLER:

Traffic shall route direct from UMOXA to TSU (Toussus VOR) and be instructed to contact Reims ACC as soon as possible

SEPAL:

Traffic with destination LFPG/LFPO/LFPB shall route direct from LAPEX to ANG (Angers VOR) and be instructed to contact Paris ACC as soon as possible.

Other traffic shall route direct from LAPEX to CNA (Cognac VOR) and be instructed to contact Bordeaux ACC as soon as possible.

SIVIR:

Traffic shall route direct from RIVAK to SAU (Sauveterre VOR) and be instructed to contact Bordeaux ACC as soon as possible.

BUNAV:

Traffic shall route direct from TIVLU to CNA (Cognac VOR) and be instructed to contact Bordeaux ACC as soon as possible

Communications

In case of a total radio failure, at present time there is no plan to guarantee the possibility for any adjacent centre to cover a part of Brest airspace.

Notification

In the event of a total loss of service Brest will inform the NMOC and all the adjacent centres.

Responsibilities of the other adjacent centres

All the details are in the Letters Of Agreement between the different adjacent centres.

Separation minima

Traffic that cannot be re-routed by Shanwick to avoid Brest airspace will have to navigate as described in paragraph 1.7.2. This will ensure lateral separation until the above mentioned fixes. Whenever possible, Shanwick will try to establish increased separation at the Oceanic Exit Point.

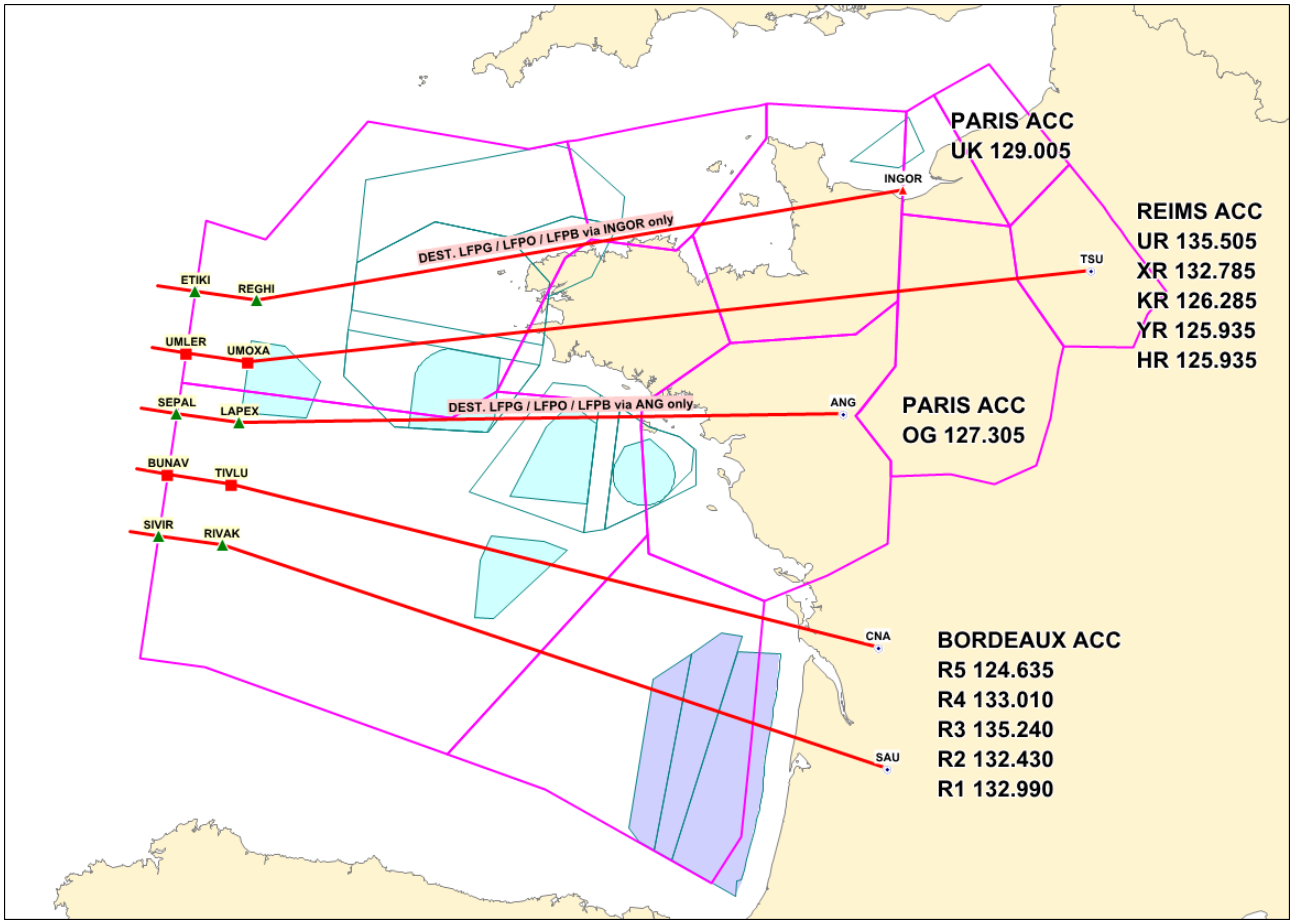
Air Traffic Flow management

The NMOC should be in charge of all necessary flow management procedures in case of re-routeing or transfer of the Brest area to another ATCC.

8.5 BREST ACC – CONTINGENCY ROUTE STRUCTURE

8.5.1 For activation within Brest FIR

Unless instructed otherwise, flights entering the Brest FIR should use the following contingency route:



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