



European and North  
Atlantic Office

*NAT Doc 006 – Part I*

# **AIR TRAFFIC MANAGEMENT OPERATIONAL CONTINGENCY PLAN**

## **NORTH ATLANTIC REGION**

**Second Edition, Amendment 2**

**January 2024**

*Prepared by the ICAO European and North Atlantic Office*

*Published on behalf of the North Atlantic Systems Planning Group (NAT SPG)*

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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 the busiest oceanic airspace in the world, extending from the North Pole to 27N and spanning the high seas between Europe and North America. In 2019 in excess of 600,000 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**

<b>Amdt. Number</b>	<b>Effective Date</b>	<b>Details</b>
2nd Ed.	August 2022	<p><i>Approved by NAT SPG Conclusion 58/16</i></p> <p>This new edition comprises a comprehensive change to the structure of the document as follows:</p> <ul style="list-style-type: none"> <li>- new Chapter 1 on Common Procedures: the procedures that were in the ANSPs' specific parts which were similar in content were moved here;</li> <li>- new Chapter 10 on Notification Messages: the common NOTAM template was moved here, along with the relevant messages that each ANSP considered relevant;</li> <li>- new Chapter 11 on Contingency Route Structures: the Contingency Route Structure for each ANSP was moved here;</li> <li>- new Chapter 12 on Contact Details: all contact information for each ANSP was moved here;</li> <li>- all the references to Oceanic Clearance were removed, with a proposed procedure in case of limited/no service; and</li> <li>- all crew procedures were removed, as they will be published in a new update to the <i>North Atlantic Operations and Airspace Manual</i> (NAT Doc 007).</li> </ul>
Amdt. 1	December 2022	<p><i>Approved by NAT SPG Conclusion 59/01 [CORR]</i></p> <ul style="list-style-type: none"> <li>- Page 1, insert text on Part III on Space Weather Contingency Procedures; and</li> <li>- Chapter 1, paragraph 1.1, Chart 1 replaced.</li> </ul>
Amdt. 2	January 2024	<p><i>Approved by NAT SPG Conclusion 60/6 [CORR]</i></p> <p>Chapter 1, new paragraph 1.3, Return To Normal Operation</p> <p>Chapter 6, paragraph 6.2.2, remove references to Oceanic Clearances.</p>



# **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 2.32.

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 OAC/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.

#### **Part III – Contingency Situations Caused By Space Weather Events**

This part of the plan considers events which are likely to affect one or more than one facility within the NAT region, specifically the contingency processes applied to minimize operational impacts of space weather events.

## 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 (OAC)
- Scottish FIR (ACC)

### Canada

- Gander Oceanic FIR (OAC)

### Iceland

- Reykjavik CTA

### Portugal

- Santa Maria Oceanic FIR (OAC)

### United States

- New York Oceanic FIR (OAC)

### Norway

- Bodø FIR (OAC)

### 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

## CHAPTER 1: COMMON PROCEDURES

### 1.1 IMPLEMENTATION OF THE PLAN

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

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.

Examples of limited services would be the removal of datalink or services for the purpose of maintenance or forecast radio propagation issues resulting in partial fade-out due to Solar Flares or Geomagnetic Storms.

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. Operators in receipt of the contingency message are asked to forward this information to affected flights wherever possible.

Operator attention is directed to Chart 1, which provides a “quick reference” guide for pilots in the immediate aftermath of a sudden withdrawal of ATC services in NAT airspace. It is intended to be used as an aid for operators developing pilot training material.

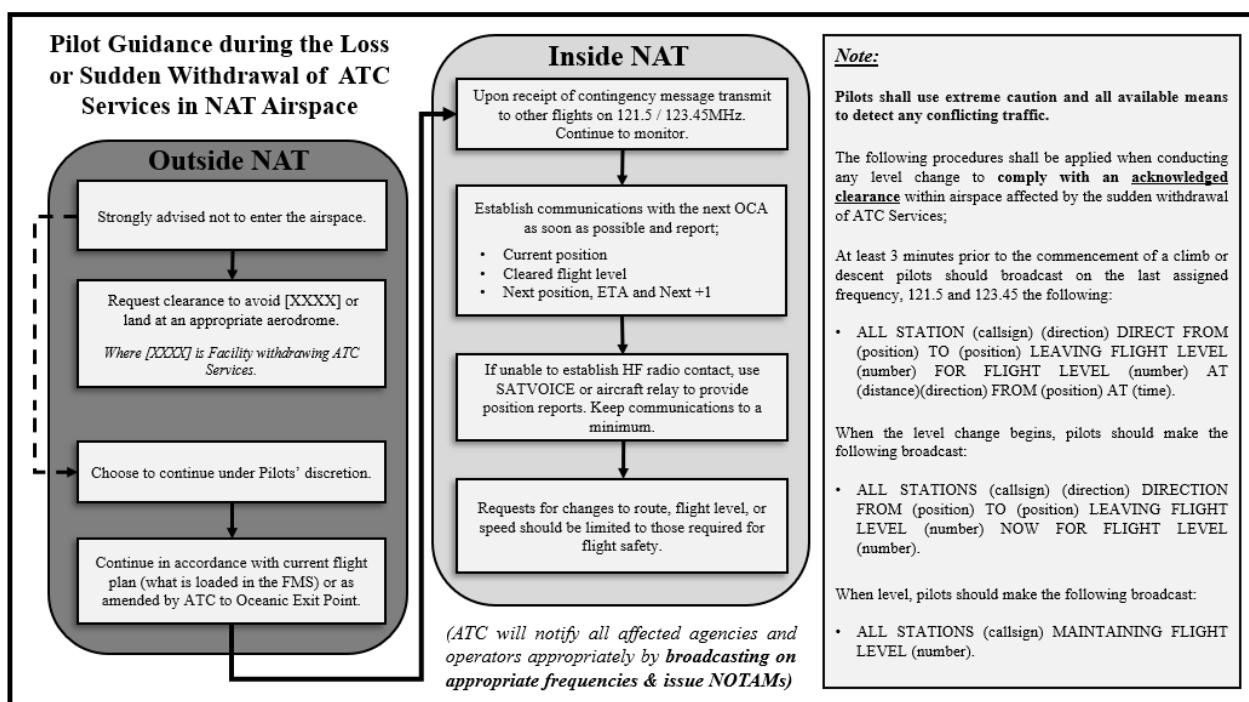


Chart 1

## 1.2 LIMITED/NO SERVICE - PROCEDURES

A disruption to services will most likely be the result of a disruption to air/ground communications capabilities and in some cases a limitation on the ability to provide control services.

### *Communications*

Where the disruption is in relation to air/ground communications, inter-facility arrangements will guarantee to the maximum extent possible the continuation of services, and the transmission of information to maintain flight crew awareness of the situation.

In the event that communications are degraded substantially, ATFM measures may be imposed as necessary. If the event is limited to ADS/OCL/CPDLC, flights will revert to HF/VHF/SATVOICE which may result in frequency congestion.

### *Control Services*

In the event where an Air Navigation Service Provider (ANSP) is unable to continue to provide control services, that ANSPs shall determine, co-ordinate and promulgate any necessary restrictions to meet the service limitation. The coordinated restrictions will vary and be dependant on the nature of the service limitation which may impact, the flow of traffic through adjacent ANSPs airspace. Such measures may include, but are not limited to, temporary capacity restrictions and tactical rerouting measures.

Traffic about to enter the NAT region may be subject to tactical traffic management to meet the requirements of the service limitation, for example being tactically issued en-route re-clearances to avoid the OCA that is impacted.

Traffic already within the NAT or close to entry (within 60 minutes) shall have priority over any other traffic. En-route re-clearance of such traffic should be avoided except in emergency.

As soon as possible after the limited or no service situation, notification will be sent to the relevant agencies that in turn are expected to advise the affected traffic.

Operator attention is directed to Chart 1, which provides a “quick reference” guide for pilots in the immediate aftermath of a sudden withdrawal of ATC services in NAT airspace. It is intended to be used as an aid for operators developing pilot training material.

### *Contingency routes*

Dependant on the nature of the service limitation, ANSPs may promulgate and activate contingency routes. See Chapter 11:.

### *Air Traffic Flow Management*

ANSPs shall co-ordinate any necessary traffic management measures where necessary. Such measures may include, but are not limited to, temporary capacity restrictions and tactical rerouting measures.

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

### *Notification*

As soon as possible after the limited or no service situation, notification will be sent to the relevant agencies that in turn are expected to advise the affected traffic.

### 1.2.1 Effects on Flights in NAT airspace

Flights inside the NAT airspace, upon notification of the contingency, must be operated in accordance with the last received and acknowledged clearance.

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) as these reports may not have been received by the next agency.

When ADS equipped flights are notified of a control centre evacuation they must revert to voice position reporting until clear of that OCA, or notified otherwise. Pilots should note that they may be asked to log-on to the next centre when within that 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.

As there may be unknown aircraft in the airspace from adjacent centers under contingency procedures, flights should avoid any profile changes.

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

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.

### 1.2.2 Effects on flights approaching the NAT

In the event that an OAC must be evacuated, traffic within 20 minutes of that FIR should proceed according to the last received and acknowledged ATC clearance. In the event that Gander OAC must be evacuated, only aircraft 60 minutes or less from their respective OEPs at the time of service disruption shall be permitted to transit Gander OCA.

All other flights should plan to re-route around the affected OCA or to land at an appropriate airfield, but can proceed at the pilot's discretion. Frequency congestion is likely.

Adjacent OACs will issue advice on procedures to be followed.

**No conflict free profiles for the affected portion of the route are guaranteed by ATC.**

## 1.3 RETURN TO NORMAL OPERATION

As soon as the contingency situation that caused the limited service situation ceases, the affected ANSPs will conduct the appropriate inter facility coordination to agree on the safest way to return to normal operation considering the measures that were taken.

The notification of the return to normal operations to affected ANSPs and operators may be done by the same means as the notification of the contingency (AFTN, NOTAM).

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## CHAPTER 2: DETAILED PROCEDURES – SHANWICK OAC

### 2.1 AREA FOR WHICH THE CONTINGENCY PLAN APPLIES

Shanwick Oceanic FIR

### 2.2 FIRs WITH SUPPORTING PROCEDURES

Gander Oceanic FIR

Shannon FIR

Scottish FIR

Brest FIR

### 2.3 DISRUPTION OF AIR GROUND COMMUNICATIONS

Scottish and Oceanic Area Control Centre includes both Scottish Radar and Shanwick Oceanic Control. Should Shanwick OAC 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.

### 2.4 LOSS OF ABILITY TO PROVIDE CONTROL SERVICES

Shanwick OAC will send a signal to all NAT track collective addresses advising of the Shanwick evacuation, as per Chapter 10:.

OAC Contingency routes for Scottish FIR are in Chapter 11:.

### 2.5 LONG TERM CONTINGENCY ARRANGEMENTS

In the event that Shanwick loses the ability to provide an ATC service from the OAC 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 is 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.



## CHAPTER 3: DETAILED PROCEDURES – GANDER OAC

### 3.1 AREA FOR WHICH THE CONTINGENCY PLAN APPLIES

Gander Oceanic FIR

### 3.2 FIRs WITH SUPPORTING PROCEDURES

Shanwick Oceanic FIR  
Reykjavik Oceanic FIR

### 3.3 OAC LIMITED SERVICE - PROCEDURES

#### 3.3.1 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 Gander International Flight Service Station will be delegated to the other International radio stations; New York Radio, Iceland Radio, Santa Maria Radio and Shanwick Radio. Appropriate frequency will be published in the daily ATFM messages (NOTAM, Advisory).

### 3.4 NO SERVICE - PROCEDURES

#### 3.4.1 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.

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.

**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.

### 3.5 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.

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## CHAPTER 4: DETAILED PROCEDURES – REYKJAVIK CTA

### 4.1 AREA FOR WHICH THE CONTINGENCY PLAN APPLIES

Reykjavik CTA

### 4.2 FIRs WITH SUPPORTING PROCEDURES

None

### 4.3 LIMITED SERVICE - PROCEDURES

#### 4.3.1 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 OAC provides DCPC VHF communications in the South sector, East sector, West sector and the southernmost part of North sector. Reykjavik OAC and Iceland Radio are located in separate buildings several kilometres 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 Shanwick Radio, Gander Radio and Bodø Radio.

#### 4.3.2 Disruption of ability to provide control services

Reykjavik will determine, co-ordinate and promulgate any necessary restrictions to meet the service limitation. Traffic may be subject to tactical traffic management measurements to meet the requirements of the service limitation.

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 Shanwick Radio, 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 CTA. West of 030W the ATS surveillance service is provided with ADS-B only.

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#### **4.4 NO SERVICE - PROCEDURES**

##### **4.4.1 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 OAC provides DCPC VHF communications in the South sector, East sector, West sector and the southern most part of North sector. Reykjavik OAC and Iceland Radio are in separate buildings located several kilometres 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 Shanwick Radio, Gander Radio and Bodø Radio.

##### **4.4.2 Loss of ability to provide control services**

Should Reykjavik OAC 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 OAC is evacuated, the operations will be moved to Iceland Radio and the provision of Air Traffic Services (ATS) within the Reykjavik CTA 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.

Aircraft unable to contact Iceland Radio on general purpose VHF or HF Frequency shall call Shanwick Radio, 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 CTA.

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.

## **CHAPTER 5: DETAILED PROCEDURES – SANTA MARIA OAC**

### **5.1 AREA FOR WHICH THE CONTINGENCY PLAN APPLIES**

Santa Maria Oceanic FIR

### **5.2 FIRs WITH SUPPORTING PROCEDURES**

Nil

### **5.3 LIMITED SERVICE**

#### *Communications*

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

SATVOICE equipped flights using INMARSAT or IRIDIUM ATS Safety network may contact Santa Maria Radio through published short codes 426302 and 426305.

SATVOICE equipped flights using non ATS Safety satellite network (for example, a portable satellite phone) may exceptionally contact Santa Maria Radio dialing 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.

#### *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.

### **5.4 NO SERVICE**

#### *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.

#### *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 Radio 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.

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## CHAPTER 6: DETAILED PROCEDURES – NEW YORK OAC

### 6.1 AREA FOR WHICH THE CONTINGENCY PLAN APPLIES

New York OAC

#### 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. 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.

### 6.2 LIMITED SERVICE - PROCEDURES

#### 6.2.1 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.

#### 6.2.2 Disruption of ability to provide control services

NY OAC shall determine, co-ordinate, and issue any necessary restrictions to meet the service limitation. En route re-clearances of traffic shall be limited to aircraft in emergency situations. Traffic 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.

### **6.3 NO SERVICE – PROCEDURES**

#### **6.3.1 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.

#### **6.3.2 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.

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.

### **6.4 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.



**Appendix 1****Adjacent Agencies Communications**

<b>Westbound via</b>	<b>Facility to contact</b>	<b>Frequencies</b>
DOVEY	N.Y. Center (ZNY)	125.925 / 284.75
JOB OC	N.Y. Center (ZNY)	125.925 / 284.75
SLATN	N.Y. Center (ZNY)	125.925 / 284.75

<b>North or Northwest bound via</b>	<b>Facility to contact</b>	<b>Frequencies</b>
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

<b>Inbound to Bermuda airspace via</b>	<b>Facility to contact</b>	<b>Frequencies</b>
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

<b>North or Westbound via</b>	<b>Facility to contact</b>	<b>Frequencies</b>
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

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
OPAU	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

NEW YORK RADIO 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	

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	

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**Appendix 2****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.**

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

## **CHAPTER 7: DETAILED PROCEDURES – BODØ OAC**

### **7.1 AREA FOR WHICH THE CONTINGENCY PLAN APPLIES**

Bodø Oceanic FIR

### **7.2 FIRs WITH SUPPORTING PROCEDURES**

Reykjavik FIR  
Polaris FIR, Stavanger ACC  
Polaris FIR, Bodø ACC  
Sweden FIR, Stockholm ACC  
Finland FIR, Helsinki ACC,  
St. Petersburg FIR

### **7.3 OAC 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 “7.4 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.

#### **7.3.1 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.

#### **7.3.2 Disruption of ability to provide control services**

Bodø OAC 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 CTA 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.

## **7.4 NO SERVICE - PROCEDURES**

### **7.4.1 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.

### **7.4.2 Loss of ability to provide control services**

The Bodø ACC facility includes Bodø Domestic Control, Bodø Oceanic Control and Bodø Radio (HF). Should Bodø ACC be evacuated, the potential exists for a major disruption to Air Traffic Control service within Bodø ACC (Polaris FIR from 62N to Russian Border boundary) as well as 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 Chapter 12: 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 coordinate 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 CTA 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 ACCs.

### *Separation Minima*

Longitudinal separation for all traffic entering Bodø OCA from Norwegian domestic airspace may be increased.

### *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 the NMOC, initiate ATFM measures as required.

## CHAPTER 8: DETAILED PROCEDURES – SHANNON ACC

### 8.1 AREA FOR WHICH THE CONTINGENCY PLAN APPLIES

Shannon FIR

### 8.2 FIRs WITH SUPPORTING PROCEDURES

Shanwick Oceanic FIR

### 8.3 LIMITED SERVICE

#### *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.

### 8.4 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 in Chapter 11:). 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	LIFY	40	LAC (Shanwick)
BEXET	DCT	LIFY	38	LAC (Shanwick)
OLGON	DCT	LIPGO	40	LAC (Shanwick)
GISTI	DCT	SLANY	38	LAC (Shanwick)
RILED	DCT	SLANY	41	LAC (Shanwick)
XETBO	DCT	NORLA	33	LAC (Shanwick)
LEKVA	DCT	NORLA	33	LAC (Shanwick)
ELSOX	DCT	LESLU	28	LAC (Shanwick)
EPUNA	DCT	LESLU	29	LAC (Shanwick)
ATSUB	DCT	GAPLI	29	LAC (Shanwick)
BIMGO	DCT	GAPLI	29	LAC (Shanwick)
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.

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## **CHAPTER 9: DETAILED PROCEDURES – BREST ACC**

### **9.1 AREA FOR WHICH THE CONTINGENCY PLAN APPLIES**

Brest FIR

### **9.2 FIRs WITH SUPPORTING PROCEDURES**

Shanwick Oceanic FIR

### **9.3 LIMITED SERVICE**

#### *Communications*

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

### **9.4 NO SERVICE**

#### **9.4.1 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:*

#### *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 OAC 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 OAC 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.

## CHAPTER 10: NOTIFICATION MESSAGES

### 10.1 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 OAC 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.

An example of the NOTAM is as follows:

DUE TO EMERGENCY EVACUATION OF [OAC/CTA] DUE [REASON] AIR TRAFFIC CONTROL SERVICES ARE UNAVAILABLE IN THE [NAME] OCA.

FLIGHTS NOT YET OPERATING WITHIN THE [AIRSPACE NAME] ARE STRONGLY ADVISED NOT TO ENTER THE AIRSPACE. IF POSSIBLE REQUEST CLEARANCE TO AVOID [NAME] OR LAND AT AN APPROPRIATE AERODROME.

FLIGHTS THAT CONTINUE UNDER PILOTS DISCRETION ARE EXPECTED TO PROCEED IN ACCORDANCE WITH THE LAST 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 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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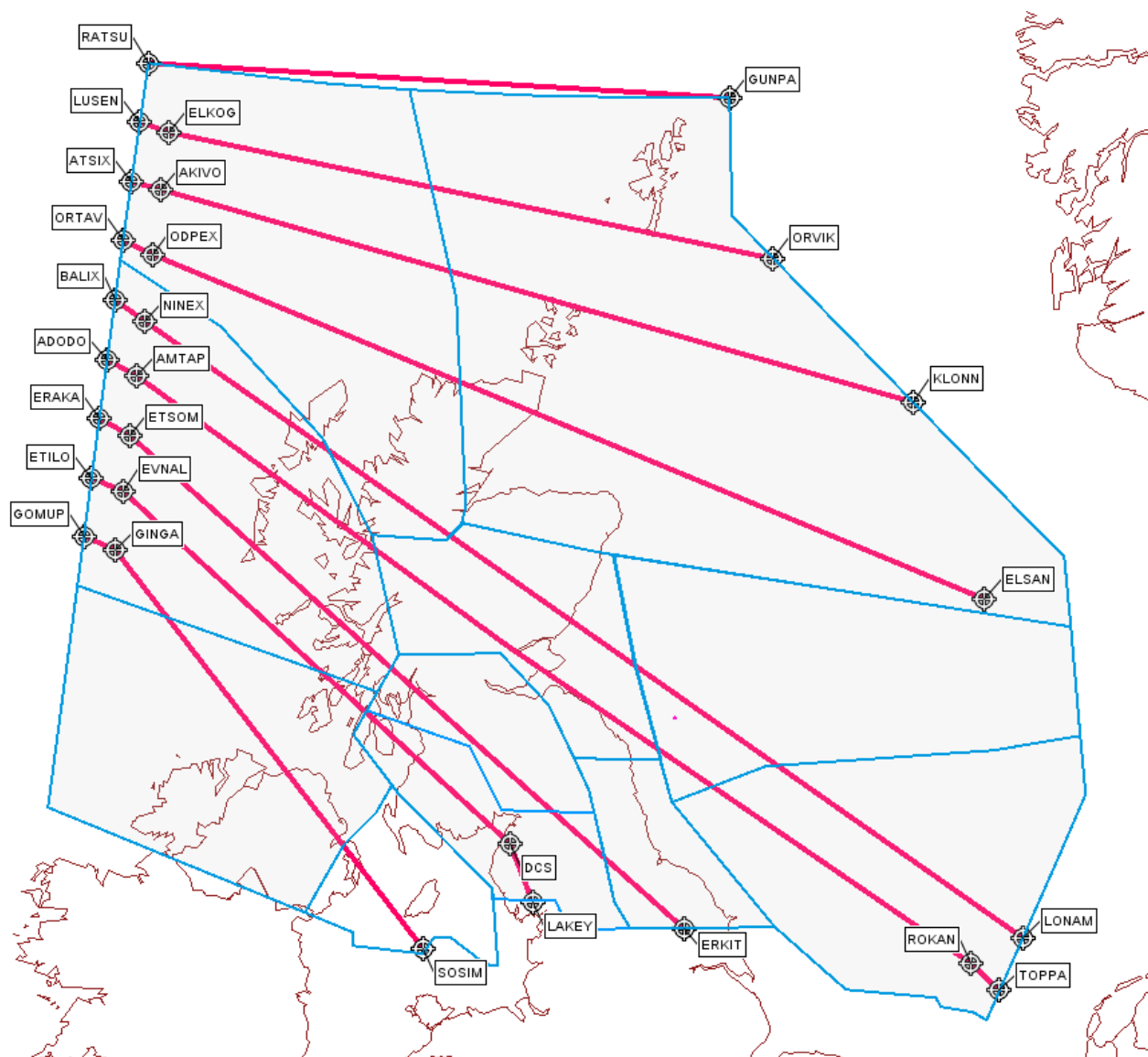
## CHAPTER 11: CONTINGENCY ROUTE STRUCTURES

### 11.1 SHANWICK OAC

#### 11.1.1 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.

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

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.

***Reykjavik OCA/FIR***

In limited- and no service contingency situations in Shanwick the following contingency tracks may be activated in Reykjavik CTA/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 – EMBOK

BESGA – MATIK – 62N010W – 63N020W – 63N030W – 63N040W – 63N050W – KETLA

BARKU – RATSU – 62N020W – 62N030W – 62N040W – 62N050W – MAXAR

## 11.2 GANDER OAC

### 11.2.1 For activation within Gander OCA

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
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



*Contingency Route Structures*

FLIGHT IS ROUTED OVER	THE FLIGHT SHALL PROCEED:	Next control agency and frequency:
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 ACC 132.25@ 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

*Contingency Route Structures*

*Contingency Route Structures*

INLAND CONTINGENCY FIX	INTERMEDIATE FIX	OCEANIC ENTRY POINT
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	

*Contingency Route Structures*

### **11.3 REYKJAVIK CTA**

#### **11.3.1 For activation within Reykjavik CTA**

In a **limited service** contingency situation Reykjavik CTA may promulgate contingency tracks in addition to the published OTS.

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.

## 11.4 SANTA MARIA OAC

### 11.4.1 For activation within Santa Maria FIR

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

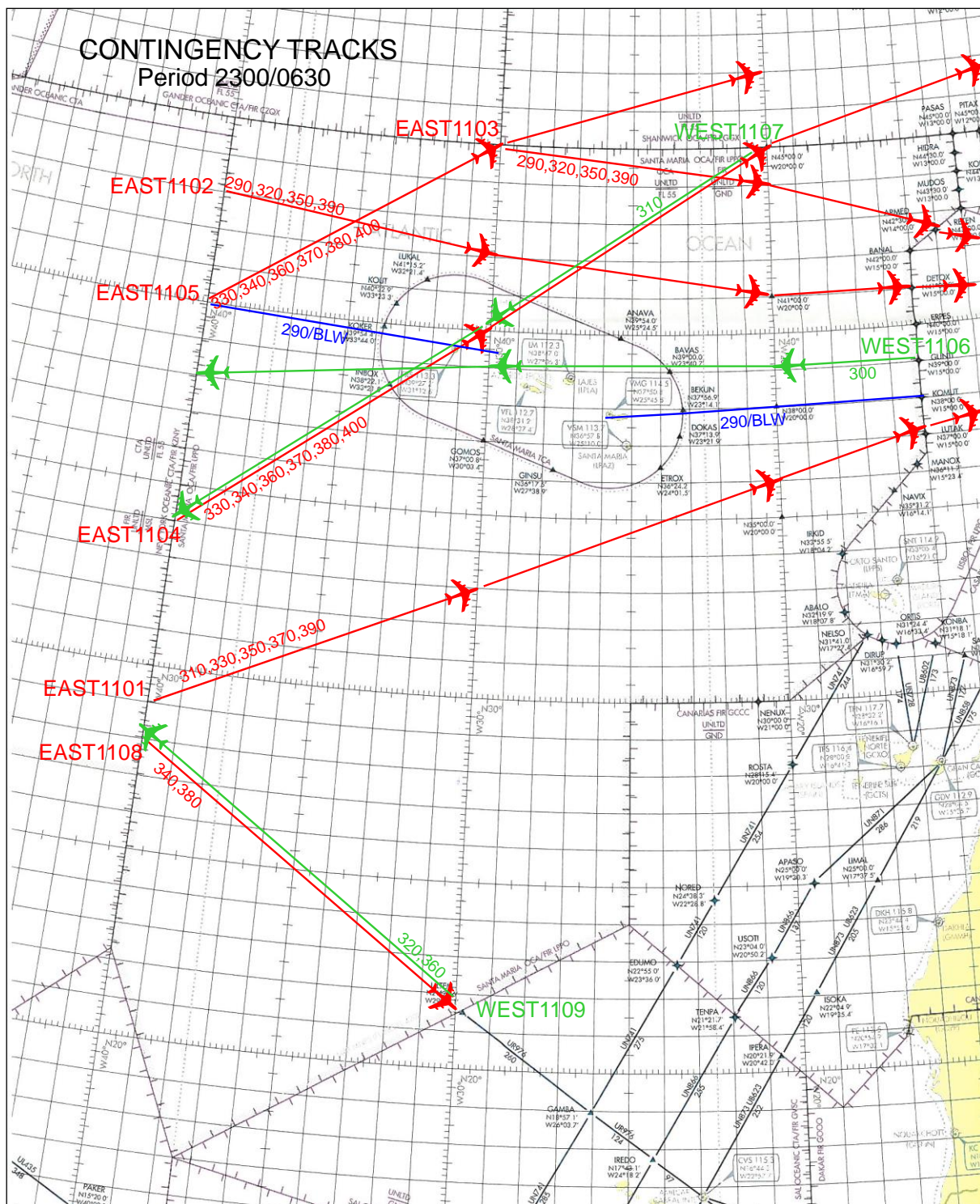
#### Period 2300 UTC - 0630 UTC

##### *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

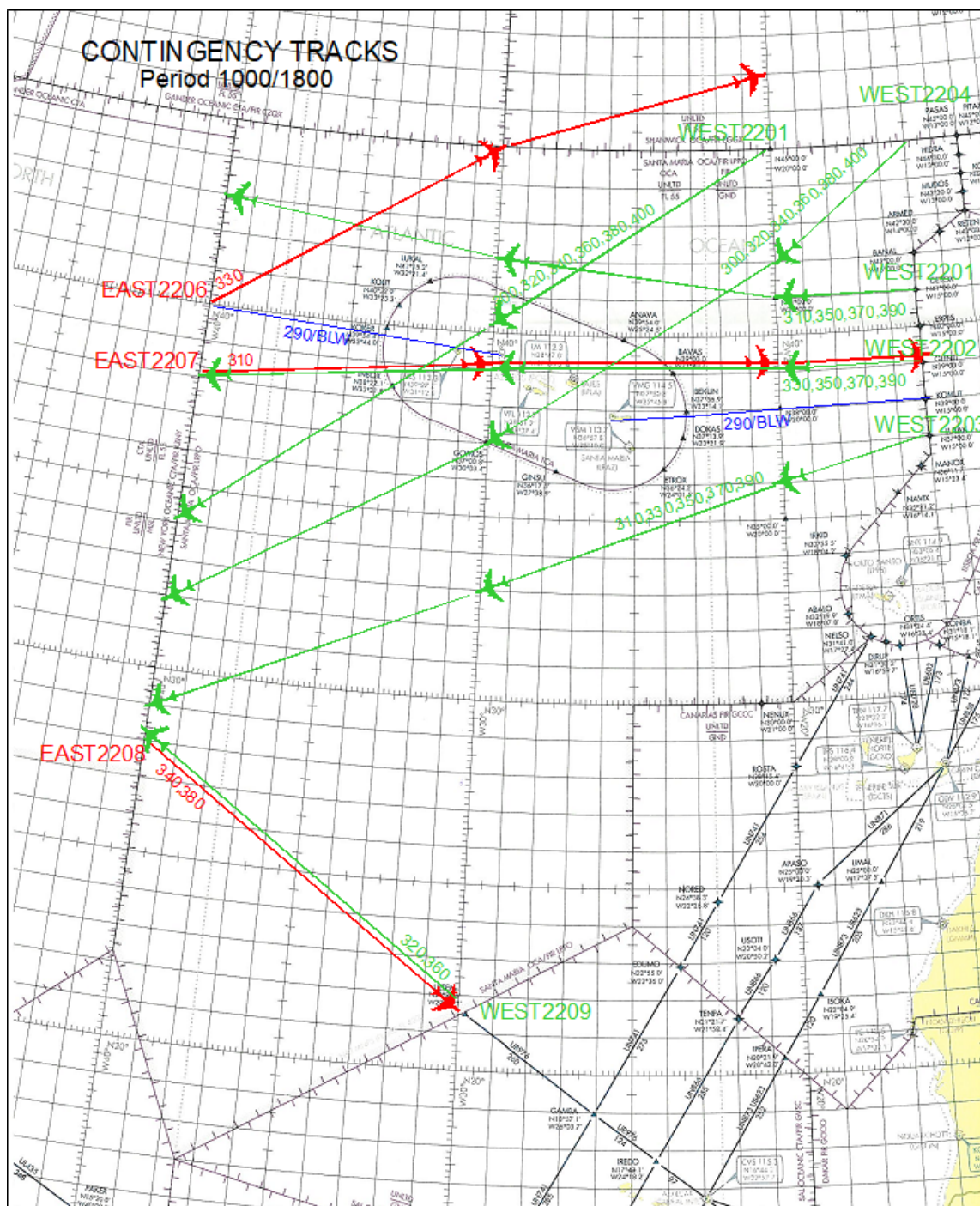
**Flights between Santa Maria Radar and Lisboa FIR**

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)

## Contingency Route Structures



**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.

## Contingency Route Structures



## 11.5 NY OAC

### 11.5.1 For activation within NY FIR

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.

<i>Stratification Category</i>	<i>Altitude Range</i>
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.

Route #								Altitudes
1	46/40	44/50	42/60	DOVEY				FL350 and below
2	44/40	42/50	40/60	SLATN				FL350 and below
3		41/50	39/60	SELIM	M203			FL350 and below east of 60w FL290 and below west of 60w
4	NOVOK	M201						FL360 and above
5	JEBBY	M202						FL360 and above
6	BOBTU	M203						FL360 and above
7	43/40	40/50	36/60	RNGRS	JIMAC	M327		FL 290 or below west of JIMAC
8	41/40	38/50	34/60	LAZEY	BALTN	M329		FL 290 or below west of ALUDA
9	39/40	36/50	32/60	WINGZ	GECAL	M331		FL 290 or below west of GECAL
10	37/40	34/50	AMENO	M594				FL 290 and below OR FL360 and above
11	35/40	30/50	FIVZE	M597				FL 290 and below OR FL360 and above
12	33/40	28/50	RKDIA	A516	OBIKE			FL 290 and below OR FL360 and above
13	31/40	25/50	18/60					NO restrictions
14	28/40	22/50	18/56					NO restrictions



## 11.6 BODØ OAC

### 11.6.1 For activation within Bodø FIR

Bodø OCA Contingency Tracks, FL280 or above

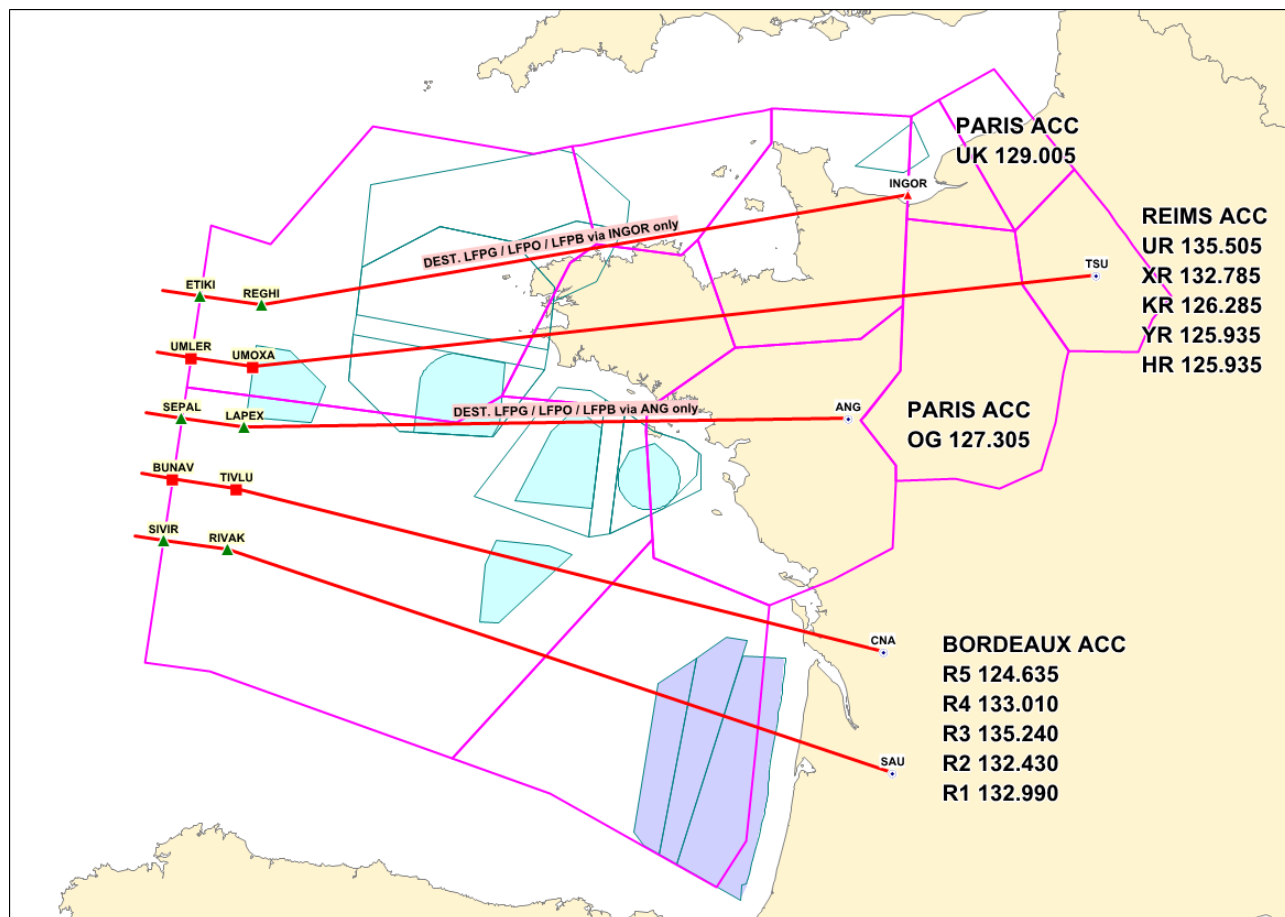
Latitude at 0°L	Domestic border/Landfall
80N	TRO
72N	AND
70N	BDO
69N	OGPAR
68N	BNN
67N	TRM
66N	ABADA
65N	VIG
64N	FLS

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



**11.8 BREST ACC****11.8.1 For activation within Brest FIR**

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



## **CHAPTER 12: CONTACT DETAILS**

*Contact Details*

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**Contact Details - Shanwick OAC**

Shanwick Watch Supervisor	+44 1294 655141
Shanwick OAC 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

*Contact Details***Contact Details - Gander OAC**

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

*Contact Details*

**Contact Details - Reykjavik CTA**

<b>Reykjavik CTA</b>		
Reykjavik Shift Manager (07:00-22:00)	+354 424 4241	acc@isavia.is
Reykjavik Shift Manager Iridium Satellite Phone (07:00-22:00)	+881 631 450 347	
Shift Manager (22:00-07:00)	+354 424 4240	
Reykjavik ACC Telefax	+354 424 4200	
North Sector primary commercial/ 1 <sup>st</sup> backup	+354 424 4264	
West Sector primary commercial/ 1 <sup>st</sup> backup	+354 424 4264	
East Sector primary commercial/ 1 <sup>st</sup> backup	+354 424 4263	
South Sector primary commercial/ 1 <sup>st</sup> backup	+354 424 4262	
South Sector domestic operations commercial/ 1 <sup>st</sup> backup	+354 424 4261	
All Sectors 2 <sup>nd</sup> backup	+354 568 3033	
All Sectors 3 <sup>rd</sup> 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 H24	+354 424 5203	
ATM Systems Department, Mobile	+354 897 8483	
Supervisor Iceland Radio	+354 424 4100	supervisor.iceland.radio@isavia.is
Radio operator Iceland Radio	+354 568 4600	

*Contact Details***Contact Details – Santa Maria OAC**

<b>Santa Maria OAC</b>	<b>Telephone Number</b>	<b>AFTN</b>
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)	

*Contact Details*



*Contact Details***Contact Details – NY OAC**

<b>New York Center (ZNY) OAC Telephone/Facsimile Numbers:</b>		
ZNY Watch Desk	+1-631-468-5959	Fax: +1-631-468-4224
ZNY Traffic Management Unit	+1-631-468-1084	Fax: +1-631-468-4224
ZNY North Atlantic Operating Area Supvr	+1-631-468-1496	Fax: +1-631-468-4224
ZNY WATRS Operating Area Supvr	+1-631-468-1495	Fax: +1-631-468-4224
ZNY Airspace & Procedures Office	+1-631-468-1018	Fax: +1-631-468-4229
ZNY Technical Operations Area	+1-631-468-1293	Fax: +1-631-468-1289

<b>Collins Aerospace INC. (Radio) Telephone/Facsimile Numbers:</b>		
Radio Operation Team Leader	+1-631-589-7272	Fax: +1-631-563-2412
Radio Shift Manager	+1-631-244-2483	Fax: +1-631-563-2412

<b>Boston Center (ZBW) Telephone/Facsimile Numbers:</b>		
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

<b>Moncton ACC (YQM) Telephone/Facsimile Numbers:</b>		
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

<b>Gander ACC (YQX) Telephone/Facsimile Numbers:</b>		
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

*Contact Details*

*Contact Details*

<b>Santa Maria (LPAZ) Telephone/Facsimile Numbers:</b>		
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

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

<b>San Juan CENRAP (ZSU) Telephone/Facsimile Numbers:</b>		
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	

<b>Miami Center (ZMA) Telephone/Facsimile Numbers:</b>		
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

*Contact Details*

*Contact Details*

<b>Jacksonville Center (ZJX) Telephone/Facsimile Numbers:</b>		
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

<b>Fleet Area Control and Surveillance Facility, Virginia Capes Telephone/Facsimile Numbers:</b>		
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	

<b>FAA Air Traffic Control System Command Center (ATCSCC) Telephone/Facsimile Numbers:</b>		
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

*Contact Details*

*Contact Details***Contact Details – Bodo OAC**

Bodø Supervisor (07:00-22:00)	+47 755 42900
Bodø Supervisor Mob.(07:00-22:00)	+47 478 06643
Bodø OAC/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 OAC/ACC Mr. Raymond Ingebrigtsen	+47 670 33751 +47 992 32628 (mobile)
Operational Manager Bodø OAC/ACC Mr. Morten Tjønndal	+47 670 33753 +47 911 05587 (mobile)
Bodø Radio	+47 755 42940

— **END** —