

ATTACHMENT 5
NORTH ATLANTIC FLIGHT LEVEL ALLOCATION SCHEME

Flight Level Availability

1. Introduction

Following statistical analysis and discussions NAT FLAS was developed to:

- (i) Utilise additional levels, made available by RVSM expansion.
- (ii) Standardise the flight level profiles available for eastbound traffic, originating in the New York East/ Santa Maria OCAs, during the eastbound flow, with a view to incorporating the functionality of ADT links.
- (iii) Ensure that economic profiles are available for westbound aircraft routing from Reykjavik OCA.

The procedures entail the establishment of a Night Datum Line, south of which is reserved principally for traffic originating in New York East/ Santa Maria OCAs.

The procedures entail the establishment of a North Datum Line, on or north of which is reserved for late running westbound traffic from Reykjavik OCA to Gander OCA.

Aircraft operators are advised that the altitude scheme described herein should primarily be used for flight planning using the flight levels specified in this document, relative to their particular flight(s). However, final altitude assignments will be assigned tactically by ATC, reference traffic, and that any requested altitude profile changes will be processed and approved if available.

Procedures

2. General

The westbound OTS tracks are published by Shanwick OAC using FL 310 to FL 390. Gander OAC publishes the eastbound OTS tracks using FL 310 to FL 400. However, FL 310 will only be used for “New York Tracks” which are eastbound OTS tracks that originate in the New York OCA East area and are separated from the main OTS by more than one degree at 030°W.

The activation times of the westbound OTS shall be published as 1130 UTC to 1900 UTC at 30W.

The activation times of the eastbound OTS shall be published as 0100 UTC to 0800 UTC at 30W.

3. Delegated Opposite Direction Levels (ODLs)

Gander OAC will accept FL 310 as a westbound level H24 subject to eastbound CAR/SAM traffic, as described in “*Eastbound Traffic originating in New York/Santa Maria, during the eastbound OTS*” shown below.

During the westbound OTS, FL 330 is delegated to Shanwick OAC for westbound traffic.

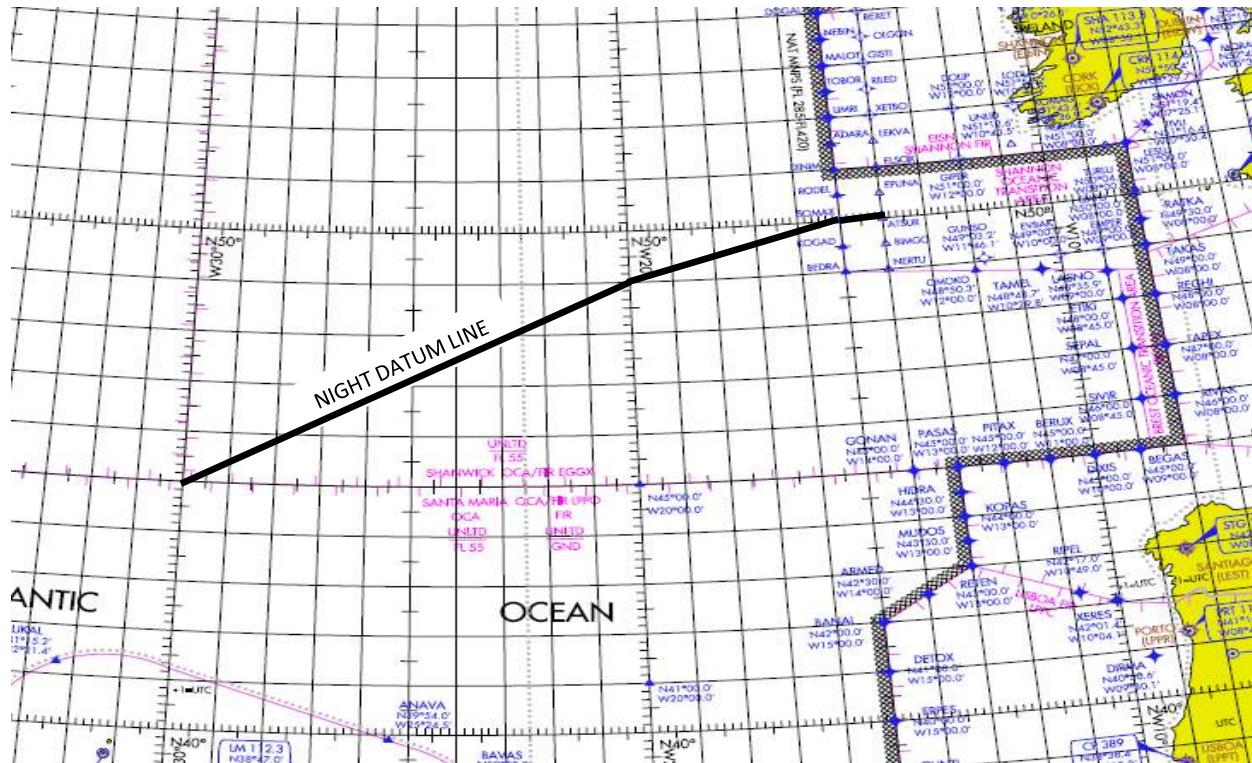
Night Datum Line, is established with the following coordinates:

45N030W 49N020W SOMAX ATSUR.

North of the Night Datum Line FL 340 and FL 380 are delegated to Gander OAC for eastbound traffic.

South of the Night Datum Line FL 340 will not be used for Gander OCA eastbound traffic.

To the south of the Night Datum Line or the eastbound OTS, whichever is further south, FL 340 and FL 380 will not be used for Gander OCA eastbound traffic.

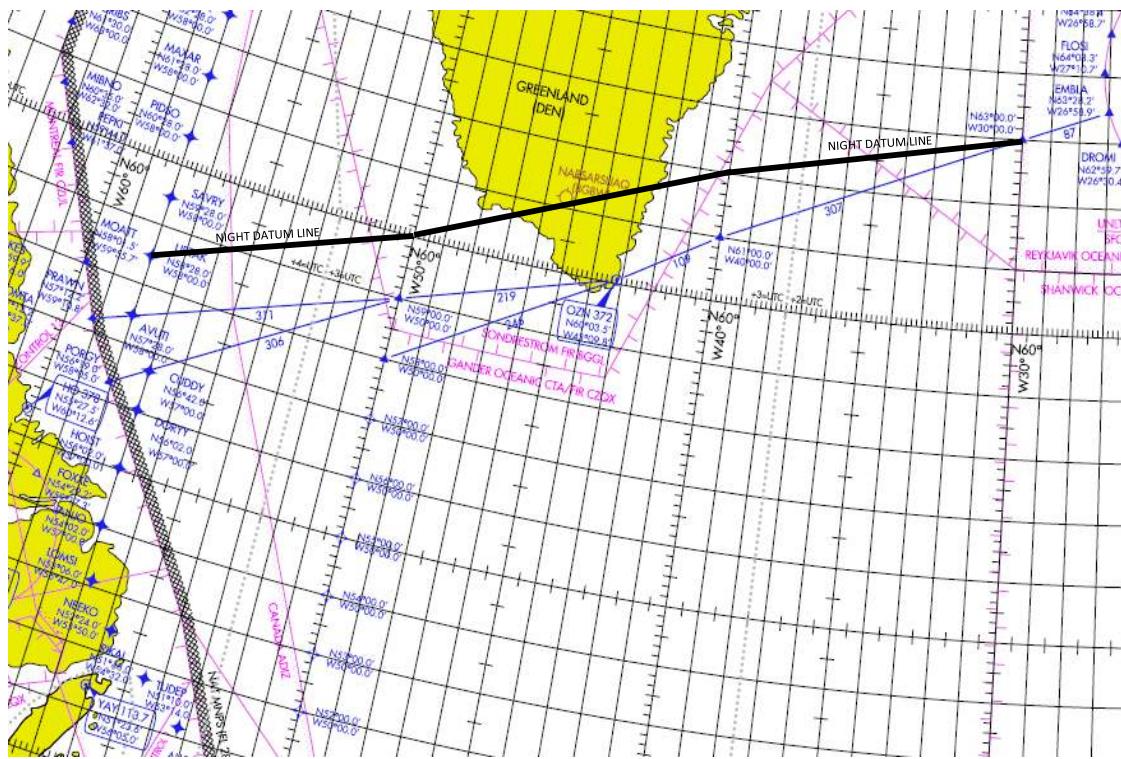


North Datum Line, is established between 0300 UTC and 0700 UTC with the following coordinates:

URTAK 60N050W 62N040W 63N030W

On and north of the North Datum Line FL 380 is delegated to Reykjavik OAC for westbound traffic.

In the event of a high volume of North Random Flights and/or OTS tracks the North Datum Line may be suspended to accommodate the dominant eastbound flow.



4. Eastbound Traffic originating in New York/Santa Maria, during the eastbound OTS

Eastbound traffic routing, both south of the Night Datum Line, and the main OTS, should flight plan using FL 310, FL 340, FL 360 or FL 380.

Eastbound traffic remaining south of the Night Datum Line should flight plan using FL 310, FL 340 FL 380 or FL 400.

The flight levels allocated to New York tracks entering Shanwick OCA which cross, or route south of, the Night Datum Line, may be any combination of FL 310, FL 340, FL 360, FL 380, or as otherwise agreed between Santa Maria OAC and New York OAC. Additional levels will be allocated to New York tracks if the core OTS is located in that area.

For this procedure, "New York Tracks" are any eastbound OTS tracks which originate in the New York area and enter Gander or Shanwick OCAs.

OTS Design & Use

For all westbound tracks which landfall at or north of AVUTI, FL340 shall be omitted from that track to allow profiles for aircraft originating in the Reykjavik OCA.

FL320 on eastbound OTS lying south of Shannon Oceanic Transition Area (SOTA) and which exit the Shanwick OCA at positions OMOKO or south, will be published as not being available as track levels after 0600 UTC at 30W.

Note that Shanwick OAC may tactically release FL320 back to Gander OAC should there be insufficient demand on the TANGO routes, or that the demand on the eastbound tracks is sufficiently greater.

5. Summary

The availability of RVSM flight levels, between 0100 UTC and 0800 UTC (at 30W), is summarised in the following diagrams.

Diagram 1 below illustrates the use of the Night Datum line (coloured red) in a situation when there are no Gander eastbound NAT tracks in the vicinity.

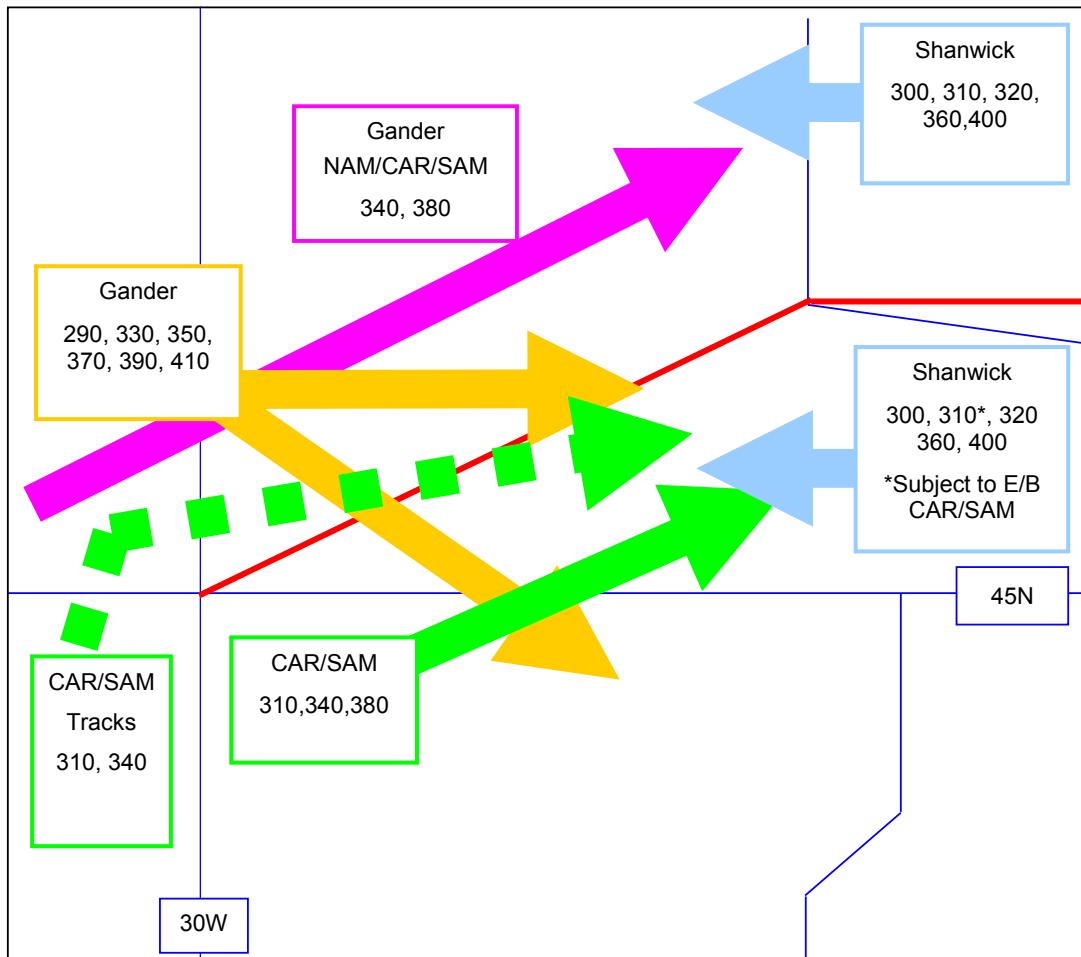


Diagram 1

Diagram 2 illustrates the situation when there are Gander eastbound NAT tracks in the vicinity.

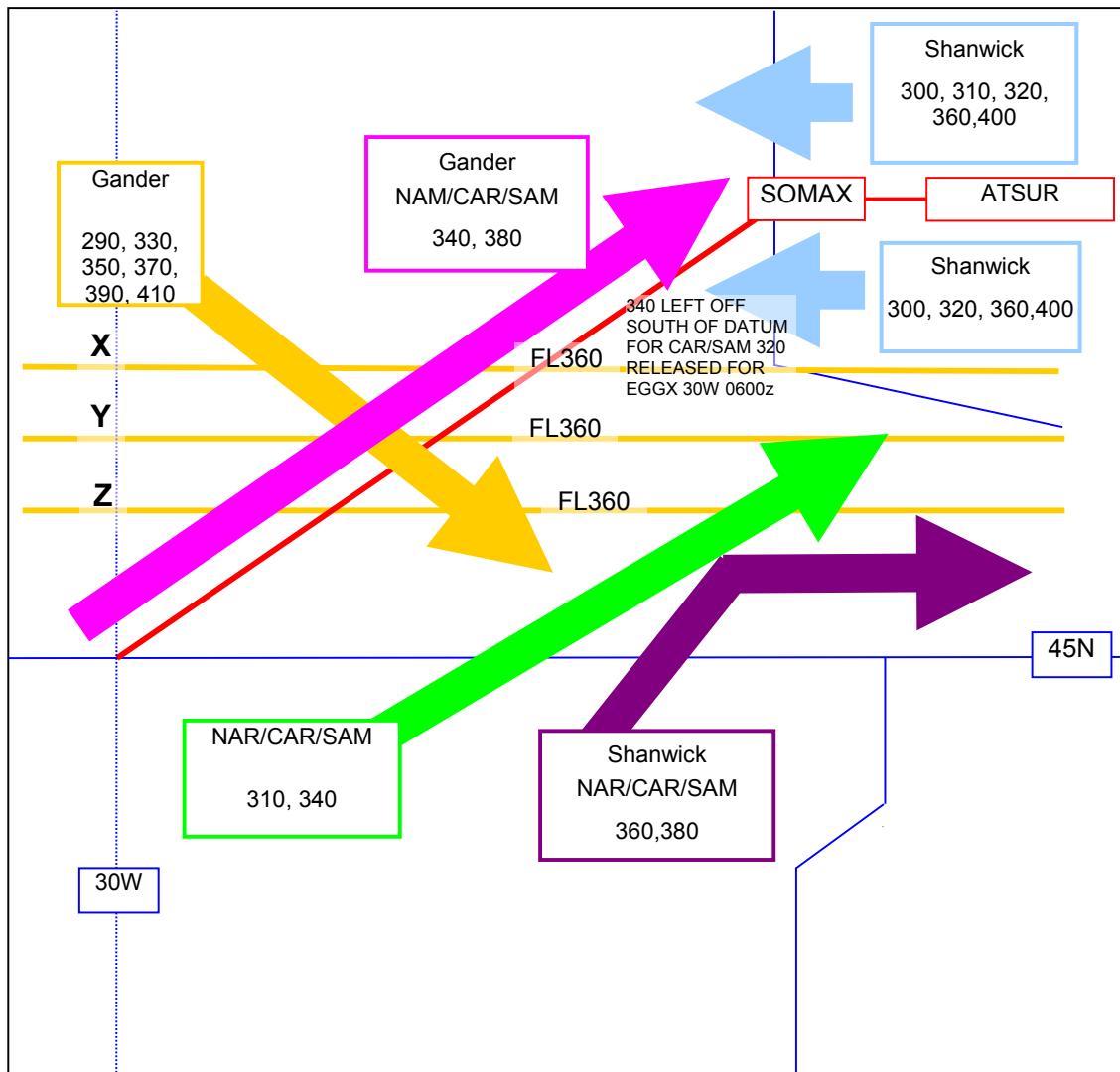


Diagram 2

6. *Transition Periods*

The time period between one set of OTS expiring and another set commencing is known as the transition period. The following procedures are in place to accommodate the majority of aircraft:

7. *Basic Principles:*

All times relate to 30W.

OTS Transition rules apply between 0801 UTC to 1129 UTC and 1901 UTC to 0059 UTC. During these times flight levels shall be applied in accordance with direction of flight other than as stated below.

8. *General principles:*

Westbound traffic crossing 30W, 2230 UTC to 0059 UTC, shall remain clear of the incoming OTS and shall not use delegated ODLs (FL 340 and FL 380). After 2230 UTC, the OTS and ODLs (FL 340 and FL 380) are released to Gander OAC, who may clear eastbound aircraft, taking cognisance of, and giving priority to,

already cleared westbound aircraft.

Eastbound traffic crossing 30W 1000 UTC to 1129 UTC, shall remain clear of the incoming OTS at FL 350 and shall not use delegated ODL (FL 330). After 1000 UTC, the OTS (at FL 330 and FL 350) and ODL (FL 330) are released to Shanwick OAC, who may clear westbound aircraft, taking cognisance of, and giving priority to, already cleared eastbound aircraft.

Eastbound traffic, at FL 370 and FL 390, crossing 30W 1030 UTC to 1129 UTC, shall remain clear of the incoming OTS. After 1030 UTC, the OTS (at FL 370 and FL 390) are released to Shanwick OAC, who may clear westbound aircraft, taking cognisance of, and giving priority to, already cleared eastbound aircraft.

At the day-OTS end-time, Westbound aircraft crossing 30W up to 1900 UTC, at ODL (FL 330) or on the OTS, shall have priority over eastbound aircraft. Eastbound aircraft shall be cleared, taking cognisance of, and giving priority to, already cleared westbound aircraft.

At the night-OTS end-time, Eastbound aircraft crossing 30W up to 0800 UTC, at ODLs (FL 340, FL 380) or on the OTS, shall have priority over westbound aircraft. Westbound aircraft shall be cleared, taking cognisance of, and giving priority to, already cleared eastbound aircraft.

The table below summarises the above:

Level	Time (UTC)	Direction
FL430	H24	Westbound. May be Flight Planned as eastbound by non-RVSM aircraft.
FL410	H24	Eastbound.
FL400	0801 – 2229 2230 – 0059 0100 – 0800	Westbound. Westbound (avoiding OTS). Eastbound OTS (subject to westbounds). Westbound (avoiding OTS). Eastbound (OTS).
FL390	1901 – 1029 1030 – 1129 1130 – 1900	Eastbound. Eastbound (avoiding OTS). Westbound OTS (subject to eastbounds). Eastbound (avoiding OTS). Westbound (OTS).
FL380	0300 – 0700 0801 – 2229 2230 – 0059 0100 – 0800	Westbound (ODL, on and to the North of the North datum line). Westbound. Eastbound (subject to westbounds). Eastbound (OTS and ODL).
FL370	1901 – 1029 1030 – 1129 1130 – 1900	Eastbound. Eastbound (avoiding OTS). Westbound OTS (subject to eastbounds). Eastbound (avoiding OTS). Westbound (OTS).
FL360	0801 – 2229 2230 – 0059 0100 – 0800	Westbound. Westbound (avoiding OTS.) Eastbound OTS (subject to westbounds). Westbound (avoiding OTS). Eastbound (OTS).
FL350	1901 – 0959 1000 – 1129 1130 – 2000	Eastbound. Eastbound (avoiding OTS). Westbound OTS (subject to eastbounds). Eastbound (avoiding OTS). Westbound (OTS).
FL340	0801 – 2229 2230 – 0059 0100 – 0800	Westbound. Eastbound (subject to westbounds). Eastbound OTS (subject to westbounds). Eastbound (OTS and ODL).
FL330	1901 – 0959 1000 – 1129 1130 – 1900	Eastbound. Westbound (subject to eastbounds). Westbound (OTS and ODL).

Level	Time (UTC)	Direction
FL320	0801 – 2229	Westbound.
	2230 – 0059	Westbound (avoiding OTS). Eastbound OTS (subject to westbounds).
	0100 – 0800	Westbound (avoiding OTS). Eastbound (OTS).
FL310	H24	Westbound. (ODL).
FL300	H24	Westbound.
FL290	H24	Eastbound.