Feb 2021 North Atlantic Changes

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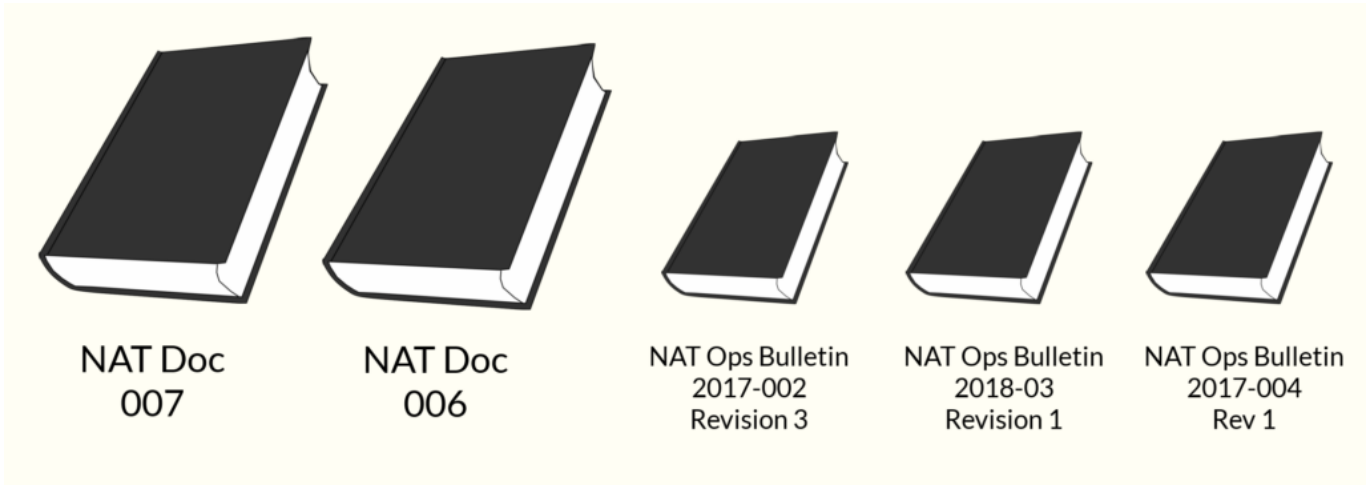
24 February, 2021

2021 is off to a flying start again with **NAT changes aplenty!**

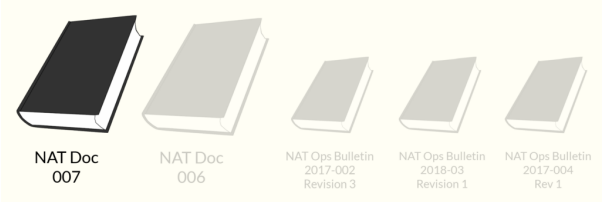
We've got a new edition of the **NAT Doc 007** (the big one with pretty much everything you need to know in it), **Nat Doc 006** (the one which tells you what happens when things go wrong – also pretty big), and **three updated NAT Ops Bulletins** (the small-to-medium-sized ones which give more info about specific topics).



Words-words-numbers-numbers…

This image shows the docs which have changed – lots of meaningless letters and numbers in there. Fear not, we'll go through each one and explain **what it is**, and **what has changed**…

NAT Doc 007



NAT Doc 007 is **the Bible of the North Atlantic**. It's full of NAT goodness – all the specifics about how to operate your aircraft safely through the complex airspace of the region is here. And they've just published a new edition – effective Feb 2021.

As aviation documents go, it's written in pretty digestible language. **There's just a lot in it.** But the latest release is slightly more user-friendly than previous updates, as ICAO have now included **a little summary document which explains all the changes.**

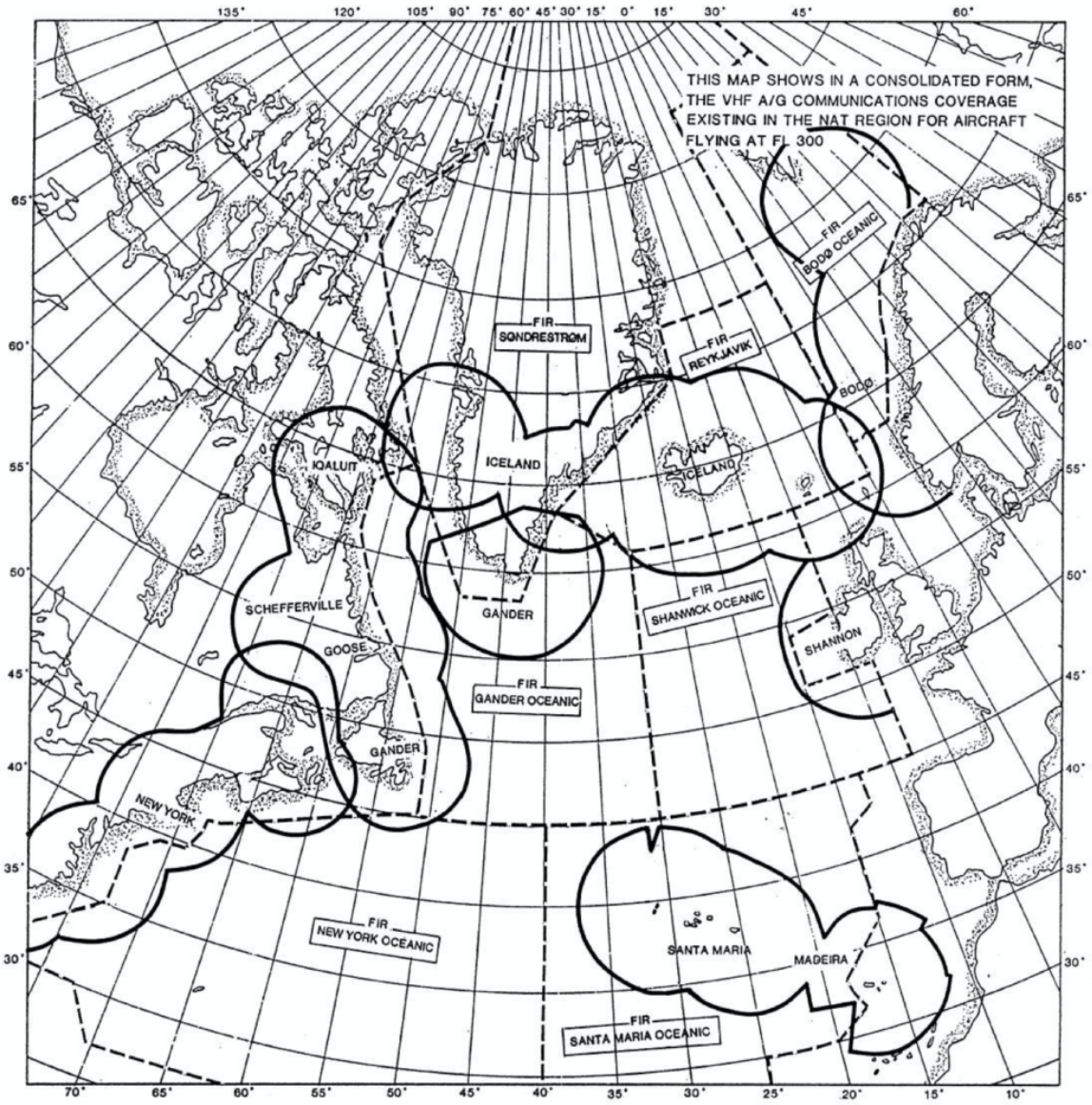
You can download a pdf of the **new NAT Doc 007 here.**

And you can get **the little explainer doc here.**

We've been looking at this latest edition for 12 hours or so now, and we think the changes are **minor**. We use that word with trepidation. **The most significant changes** seem to be as follows:

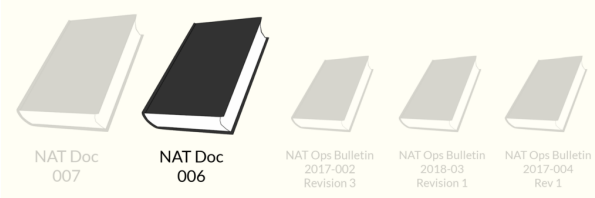
1. **No more NOROTS** – these were a system of domestic westbound tracks published daily by Nav Canada for aircraft transiting between Europe and the Northwestern US. These have been disbanded.
2. **Mach Number Technique** – they want any aircraft capable of maintaining a mach number to flight plan their requested number (not just turbojets).
3. **The southerly Blue Spruce route** which used to start/end at "HO" now does so at "PORGY" instead. HO/Hopedale NDB has been removed from service.
4. **Some clarification on Comms requirements.** Basically two long-range comms systems are needed throughout the NAT if outside of VHF coverage. One must be HF. The other may be CPDLC/Sat Voice but Inmarsat systems do not count when you're really really far north (north of 80N).

Here is latest VHF coverage chart they refer too in Doc 007 (although it says it needs updating):



Relief from the HF requirement is available for flights going for repairs, ferry flights, and special cases. This requires permission from each and every Oceanic Area Control Centre you're passing through (i.e. Gander, Shanwick, etc). Include your approval in Item 18 of your flight plan.

NAT Doc 006



Also known as the **Air Traffic Management Operational Contingency Plan – North Atlantic Region.**

Also known as the **ATMOCP-NAR.**

The dreaded ATMOCP-NAR, spotted on an aircraft wing somewhere over Greenland.

Not really. There's no such thing as an ATMOCP-NAR.

NAT Doc 006 is about a different kind of monster – it tells the tale of **what happens on the North Atlantic when ATC goes down for any reason**. It's the official go-to manual to check the Contingency Plan they put in place during these so-called "ATC Zero" events.

You can download a pdf of the **new NAT Doc 006 here.**

And you can get **the little explainer doc here.**

Summary of what's changed:

- They have updated the section talking about contingency plans for the Gander Oceanic FIR. There is basically some updated contact info, updated contingency routes in the event of Gander Evacuations, and some wording changes clarifying the procedures to be used in event of a comms disruption or full loss of ground-air comms capability.
- The plan only applies to Gander Oceanic FIR, and has removed the ADS-B designated airspace over Greenland because Gander no longer provide ground based ADS-B separation.

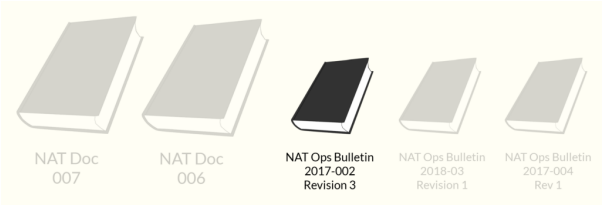
For a breakdown of each of the big changes in this NAT Doc 006, in chronological order (i.e. following the order they appear in the NAT Doc 006 guidance doc!), check out our separate article here.

So **NAT Doc 007** and **006** are the "big ones" that have changed.

But remember, there are some changes to **three NAT Ops Bulletins** too!

Here’s the lowdown:

1. The “How Not To Make Oceanic Errors” NAT Ops Bulletin



Real name: “ICAO NAT Ops Bulletin 2017-002 Revision 3. Subject: OESB – Oceanic Errors”.

Download it here.

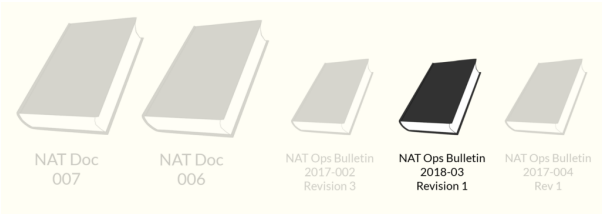
This is the one which has all the advice for operators on how to avoid the common mistakes when flying the North Atlantic. These include: Gross Nav Errors, Large Height Deviations, and Longitudinal Separation busts. There’s also some advice on Flight Planning, SLOP, and some CPDLC things to watch out for.

The changes in this latest version:

- It now has up-to-date guidance on Contingency and Weather Deviation Procedures, to reflect the new procedures that were introduced on the NAT in March 2019 and then extended to all oceanic airspace worldwide in Nov 2020.

Click here for our article which has more info on all this.

2. The “How To Punch In Waypoints Correctly” NAT Ops Bulletin



Real name: “ICAO NAT Ops Bulletin 2018-03 Revision 1. Subject: Waypoint Insertion / Verification Special Emphasis Items”.

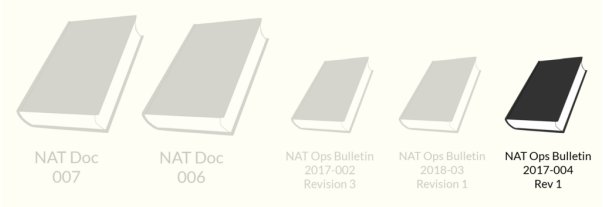
Download it here.

There are some specific procedures to know when it comes to proper waypoint insertion and verification. This is considered a critical method of mitigating the risk associated the rapidly changing procedures (contingency) as well as reduced separation operations (ASEPS and PBCS) within the North Atlantic.

The changes in this latest version:

- Oceanic Clearances containing a re-route issued by voice/OCL may include half-degree waypoints. Operators should ensure that their flight crew procedures and associated training are sufficiently robust to mitigate against navigational error due to waypoint insertion errors.
- Flight Crews are reminded they have the option to respond “UNABLE” to an oceanic re-route and negotiate with ATC accordingly.

3. The “How To Use Datalink Properly” NAT Ops Bulletin



Real name: “ICAO NAT Ops Bulletin 2017_004_Revision 1. Subject: NAT Data Link Special Emphasis Items”.

Download it here.

This Bulletin basically gives a tonne of guidance to operators on how to follow the correct datalink procedures in the North Atlantic.

The changes in this latest version:

- It now includes a new section on the use of CPDLC route clearance uplinks:

4. CPDLC Route Clearance Uplinks

4.1 CPDLC route clearance uplinks are used by ATC to amend oceanic routing.

4.2 If a clearance is received that can be automatically loaded into the FMS (e.g. via a LOAD prompt), the flight crew should load the clearance into the FMS and review it before responding with WILCO.

4.3 Flight crews must be familiar with the proper loading and execution of the following CPDLC route clearance uplinks;

a) PROCEED DIRECT TO (position)
   I. Instruction to proceed directly to the specified position

b) CLEARED TO (position) VIA (route clearance)
   I. Instruction to proceed to the specified position via the specified route
   II. This uplink may not show the “VIA ROUTE CLEARANCE” until it is loaded
   III. This is not a “direct” to the CLEARED TO waypoint. It is a clearance to the waypoint via the route specified.

c) CLEARED (route clearance)
   I. Instruction to proceed via the specified route
   II. This uplink may not show the “ROUTE CLEARANCE” until it is loaded

d) AT (position) CLEARED (route clearance)
   I. Instruction to proceed from the specified position via the specified route
   II. This uplink may not show the “ROUTE CLEARANCE” until it is loaded

Note. — Experience shows that flights crews often misunderstand the uplink message CLEARED TO (position) VIA (route clearance) when they fail to load the message and incorrectly fly directly to the CLEARED TO position. Or, even after loading, they perceive the clearance as “direct” to the “CLEARED TO” position.

Note. — FMS waypoint weather data (winds and temperature) may be lost depending on the route clearance message received. Flight crews should verify the weather data as they may need to re-enter the weather data for proper FMS predictions.

So as far as the ICAO NAT Ops Bulletins go, the full list of **current Bulletins** is as follows:

NAT OPS BULLETIN CHECKLIST

NAT OPS Bulletin Checklist		Issued: **23 February 2021**
Serial N°	**Subject**	**Effective date**
2020_002	Surveillance Service in the NAT / Flight Crew Operating Procedures	08 July 2020
2020_001	ACARS Data Link Oceanic Clearance Flight	06 April 2020
2019_003	Data Link performance improvement options- **Revision 2**	08 July 2020
2019_001	Operations Without an Assigned Fixed Speed in the NAT (OWAFS) Special Emphasis Items (SEI)	09 July 2019
2018_005	Special Procedures For In-Flight Contingencies in Oceanic Airspace **Revision 1**	28 March 2019
2018_004	Implementation of Performance Based Separation Minima-Expanded Publication of PBCS OTS	28 March 2019
2018_003	Waypoint Insertion / Verification Special Emphasis Items – **Revision 1**	23 February 2021
2018_002	CPDLC Uplink Message Latency Monitor Function – **Revision 1**	04 June 2018
2017_005	Revised Sample Oceanic Checklists	07 December 2017
2017_004	NAT Data Link Special Emphasis Items – **Revision 1**	23 February 2021
2017_002	Oceanic Errors - **Revision 03**	29 January 2021
2017_001	NAT common DLM AIC – **Revision 4**	09 July 2019
2013_005	New Service Notification for Gander Oceanic Control Area	21 November 2013
2013_002	Publication of "Track Wise – Targeting Risk within the Shanwick OCA" – updated 29 April 2013	29 April 2013

You can download each Bulletin from the ICAO page here.

And that's it!! That's all the changes!! At least, we think so. If you have spotted any biggies not listed here, send us an email at: news@ops.group

And if all this is not enough for you, and you want a comprehensive timeline of **all the old significant changes on the North Atlantic** stretching back to the dawn of time (2015, actually), then click here.