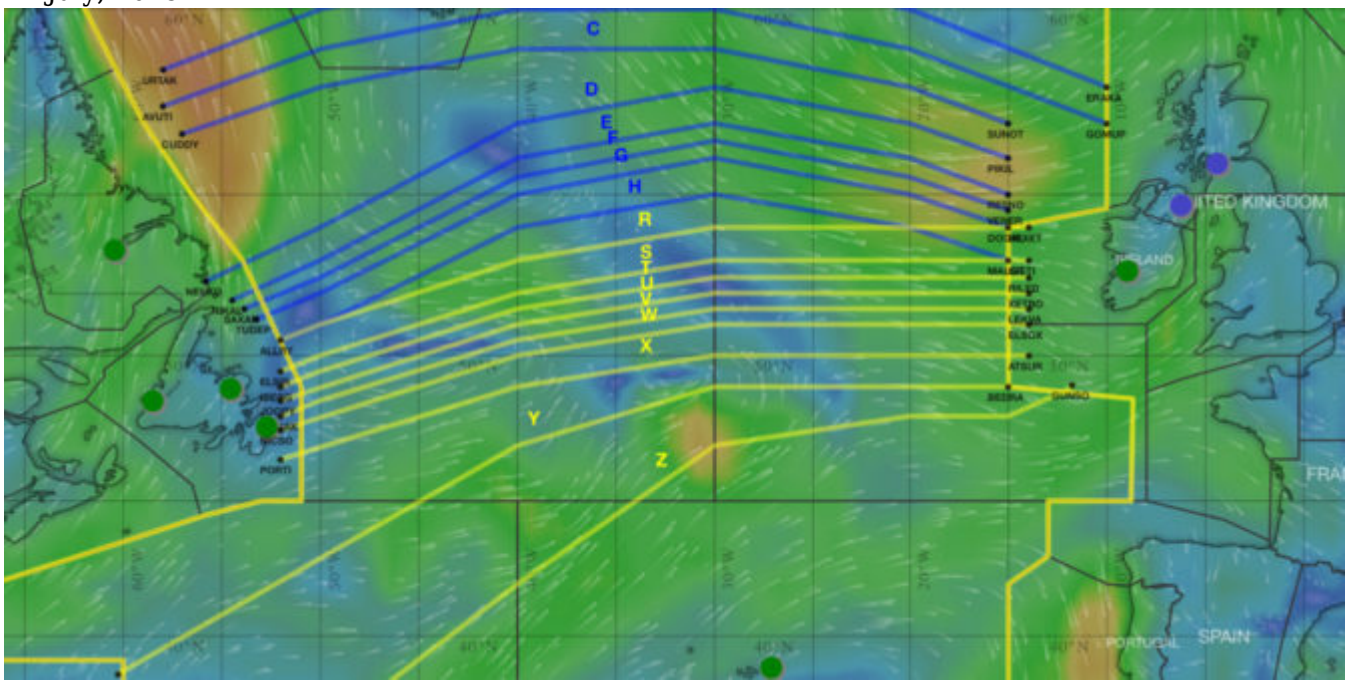
July 2019 North Atlantic Update

David Mumford
17 July, 2019



There are **four new things** to tell you about the North Atlantic, following the flurry of new and updated NAT Bulletins that ICAO issued last week. Get ready for some acronyms! Here's a summary:

1. OWAFS

Operations Without an Assigned Fixed Speed
ICAO NAT Bulletin 2019_001

We wrote about this before. This Bulletin just formalises the practice that has already been in place since April 2019 in the Shanwick, Santa Maria, and New York Oceanic FIRs (not WATRS).

Here's how it works: You'll get a normal oceanic clearance, with a fixed Mach Number, like you always did. But then somewhere after the Oceanic Entry Point, you may get a CPDLC message saying **RESUME NORMAL SPEED**. You should reply with **WILCO**. What that means is: **Fly ECON, or a Cost Index with Variable Mach**. You can fly within 0.01 up or down of your cleared Mach, but if it varies by 0.02 or more you must advise ATC.

2. ASEPS

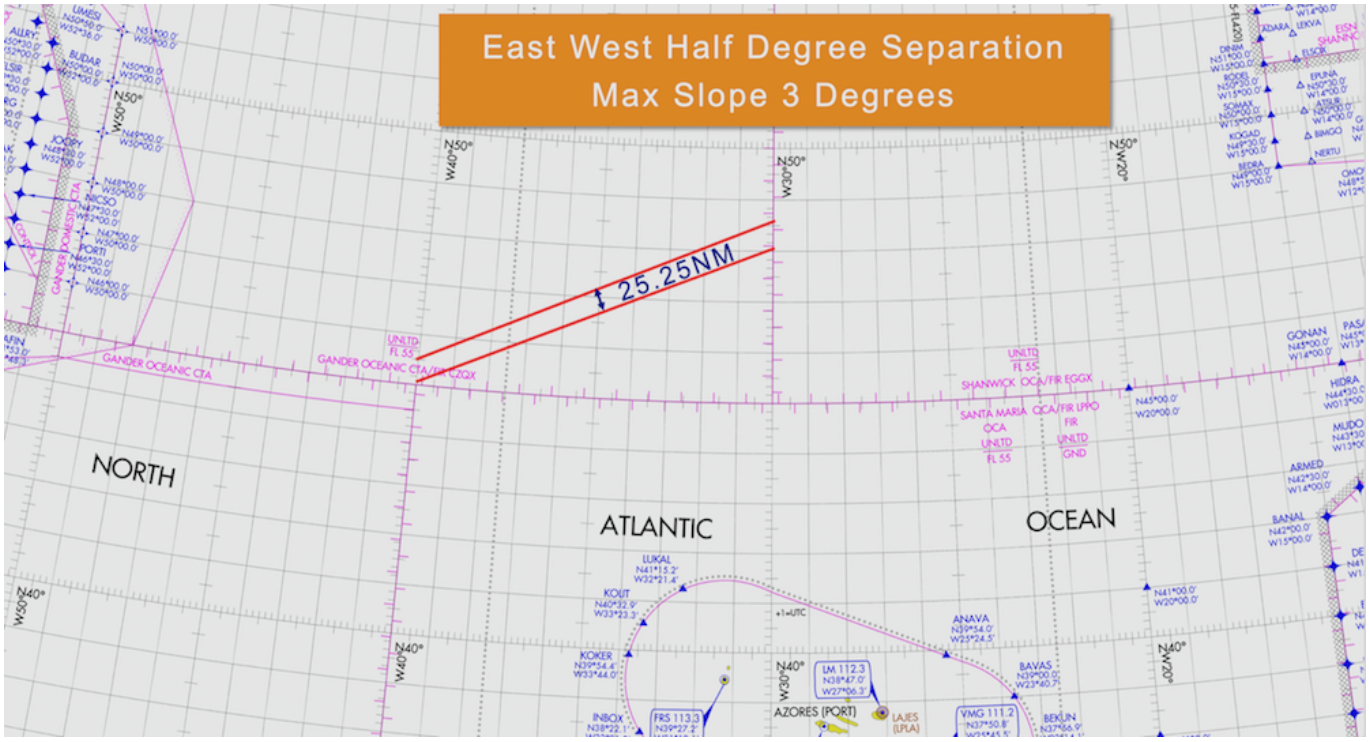
Advanced Surveillance Enhanced Procedural Separation
ICAO NAT Bulletin 2019_002

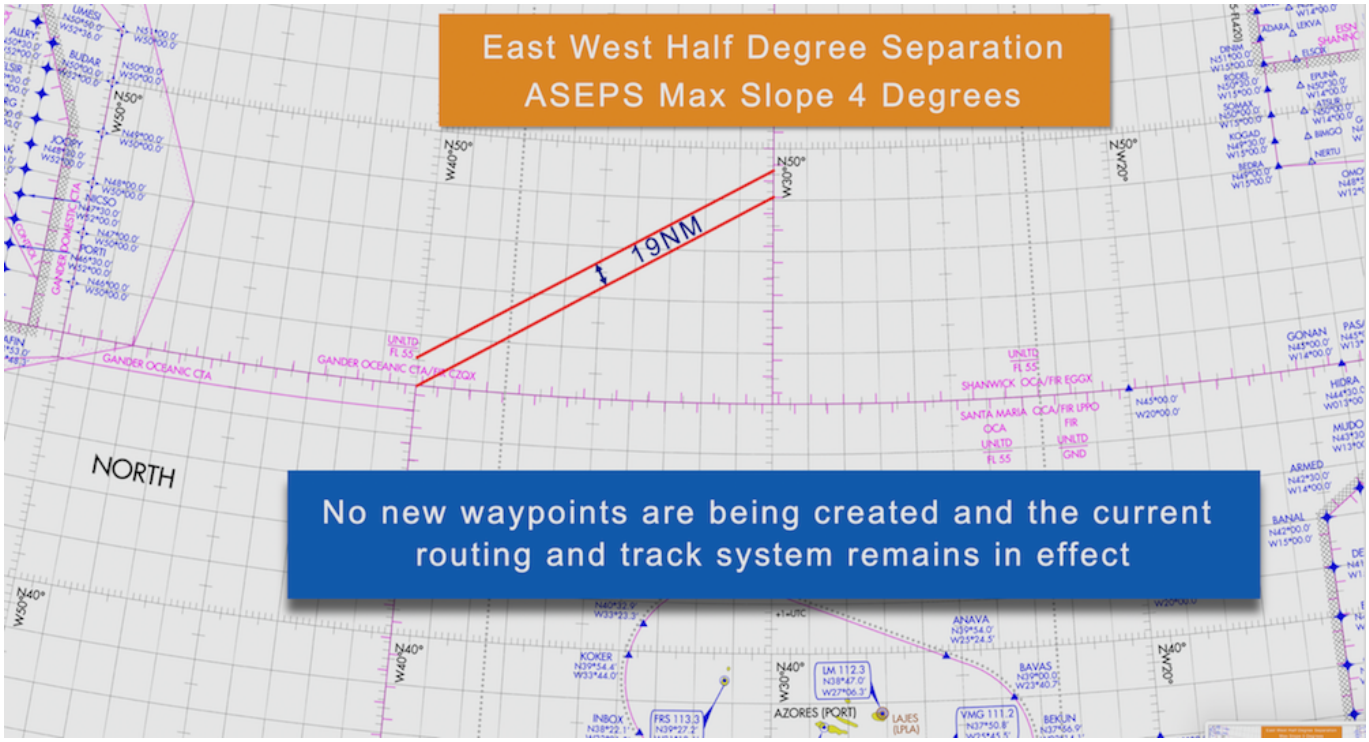
ASEPS was another trial that started in April 2019 – this time in the Shanwick, Gander and Santa Maria FIRs.

So far it has only been for **longitudinal separation**, which can be brought down to as close as **14NM** for compliant aircraft (RVSM/HLA approval, ADS-B, and fully PBCS compliant – which means meeting the specifications of RNP4, RCP240 and RSP180).

But in the new Bulletin, from October 2019 they plan to reduce **lateral separation** for compliant aircraft as well – down to **19NM** from the previous limit of 25NM.

There are no plans to change the design of the NAT Tracks, which will continue to be spaced 25NM apart. The initial benefit of the 19NM lateral separation will basically just be that steeper route angles will now be available for pairs of aircraft flying parallel routes outside of the NAT Track system – the current "gentle sloping turn" limitation is 3 degrees latitude between 10 degrees of longitude, but on 10th October 2019 that will change to a limitation of 4 degrees latitude between 10 degrees of longitude. The result of this will be a lateral separation of 19NM on the steeper turning routes.





Images courtesy of 30WestIP

3. Data Link Performance Improvement Options

ICAO NAT Bulletin 2019_003

Nothing to worry about, this is just a list of common datalink errors and what to do about them.

Two key take-aways:

1. Update your aircraft avionics software as soon as updates are available.
2. Answer your messages within 60 seconds or send a Standby message (recent data indicates Business Aviation operators are very bad at this).

4. NAT DLM – The North Atlantic Data Link Mandate

ICAO NAT Bulletin 2017_001_Revision 04

This one is just a slight revision to the plans for the datalink mandate. Datalink is currently required between **FL350-390** in the NAT region, and from 30th Jan 2020 this mandate will be extended to between **FL290-410.**

So with this revised Bulletin, the **change** is that they have decided they will **cap it at FL410** – whereas previously there were no plans for any upper limit at all. This will basically match the NAT HLA and RVSM vertical limits and makes sense. This will allow non-compliant aircraft to continue to operate at FL430 and above – mostly GA/BA operators.

Further reading:

- **OPSGROUP members** can watch the replay of Member Chat #9, where we discuss all these changes in more detail.
- The last round of important changes on the NAT went into effect on 29th March 2019: the PBCS tracks were expanded; real-time Space-Based ADS-B surveillance and reduced longitudinal separation standards were introduced; and the contingency and weather deviation procedures were changed.
- Check out our NAT Plotting & Planning Chart – updated for July 2019.

*Special thanks to Mitch Launius at **30WestIP.com** for help with this post. For assistance with international procedures training for business aviation crews worldwide, check out the website.*

Your top three PBCS questions answered

David Mumford
17 July, 2019

PBCS has been an ongoing PITA for some time now. We **wrote about it back in March**. Here are the top three questions we've had on it since then – and now we finally have some answers!

Question 1: What happens if I still haven't received my updated A056 LOA?

After the PBCS tracks were introduced in March 2018, **the FAA published a Notice** requiring all N-reg operators to update their A056 LOA authorization – regardless of whether or not they intended to fly these PBCS tracks. For private (Part 91) operators, the deadline to submit the application was 30th September 2018.

There was a barrage of applications, and the FAA still seem to have a bit of a backlog, as even now some operators have still not received their updated approvals.

The FAA's unofficial policy is that as long as you have applied for a revised LOA, you can continue to use your old authorization after September 30th, while you wait for the new one to be issued.

Bottom line: This means you are allowed to keep flying in the **North Atlantic**, just not on the PBCS tracks.

Question 2: What about that problem with aircraft with Honeywell systems installed?

Back in March, a latency timer issue with certain Honeywell FMS systems meant that there were bunch of aircraft which weren't able to get the PBCS approval.

In June, Honeywell issued a service bulletin fix for the issue, available at varying times for different aircraft. Since then, the FAA has been issuing the updated A056 LOA approvals to those aircraft with the Honeywell systems that reflect the new capabilities but the still don't meet the PBCS requirement of RCP240 due to the latency timer issue.

Bottom line: Now those affected aircraft are able to receive the updated A056 LOA approvals, just with a PBCS restriction – meaning they can continue to operate in the North Atlantic, just not on the PBCS tracks.

Question 3: What the heck is PBCS anyway?

PBCS stands for 'performance-based communication and surveillance'.

PBCS involves globally coordinated and accepted standards for Required Communication Performance (RCP) and Required Surveillance Performance (RSP), with the goal being to allow the application of reduced lateral and longitudinal separation to aircraft which meet the criteria.

To be PBCS compliant, you basically need CPDLC capable of RCP240 and ADS-C capable of RSP180; this effectively means having a 4 minute comms loop, and 3 minute position reporting.

PBCS has been implemented in various different chunks of airspace around the world, but most notably in the North Atlantic, where the three core daily NAT Tracks are assigned as PBCS tracks between FL350-390. To fly those, you will need to be PBCS compliant (read above) but also have RNP4 (the rest of the NAT only requires RNP10).

Feeling queasy? That's okay, reading about PBCS makes us feel that way too. If you're still hungry for more though, check out our recent **article on all things PBCS!**

More questions? **Get in touch!**