

PBCS: New rule on the NAT from March 29, 2018 - RCP240 and RSP180

David Mumford
2 February, 2018



Update March 16th, 2018: PBCS is turning into a PITA. After OPSGROUP input, we have an update on the latest status including rumours of delays, A056 LOA's, and Aircraft that have failed to comply with PBCS.

For the **latest changes and updates on the North Atlantic**, including our most recent **Guides and Charts**, use our NAT reference page at flightservicebureau.org/NAT.

ICAO is introducing another acronym in the North Atlantic Region. This time, it's PBCS (Performance Based Communication and Surveillance), and from March 29th 2018 you will need to be compliant if you want to fly on the half-tracks between FL350-390.

Initially, there will only be a maximum of three daily tracks where you will need to be PBCS-compliant between FL350-390. These will likely be the same tracks as we currently see being assigned as 'half-tracks' each day.

This requirement will eventually be extended to all the NAT tracks between FL350-390, but we understand that will only happen when the filing of PBCS designators on flight plans reaches the 90% mark, or 28th March 2019 - whichever comes first. Either way, the 'transition period' for this PBCS implementation is set to last six months, so the roll-out of the requirement to all the tracks won't happen until Oct 2018 at the earliest!

But from March 29th 2018, Shanwick and Gander will basically just continue the concept used in the

RLatSM trial – whereby daily tracks spaced at less than 60nm from an adjacent track will be specified as a ‘PBCS Track’ and will be notified in the Track Message Remark-3.

So what is PBCS?

PBCS is the thing that will replace two trials in the NAT which are both coming to an end on March 29th:

- **RLAT – Reduced Lateral** Separation Minimum: where a reduced lateral separation of 25 nm has been implemented on the tracks between FL350-390 (so now there are extra “half tracks” each day, spaced by one-half degree of latitude)
- **RLong – Reduced Longitudinal** Separation Minimum: in the Shanwick Oceanic Control Area (OCA), longitudinal separation has been reduced to 5 minutes between aircraft following the same track.

When these trials end, PBCS standards will be introduced to continue to allow the application of both reduced lateral and longitudinal separation for aircraft that meet the Required Communication Performance (RCP) and Required Surveillance Performance (RSP) specifications.

How do I comply with PBCS standards?

To operate on the PBCS tracks between FL350-390, you will need to be RNP4 compliant, with CPDLC capable of RCP240, and ADS-C capable of RSP180.

But watch out! Some aircraft do have ADS-C and CPDLC but have never demonstrated RCP or RSP, and have no statement of compliance (e.g. most Honeywell Primus aircraft and several early Boeing aircraft). These aircraft may struggle to get approval to operate in PBCS airspace. Which brings us neatly on to...

Do I need PBCS approval from my state of registry?

PBCS approval will differ depending on which country operators are from.

For UK operators, check the requirements **here**.

US operators will need to update their LOA for Data Link Communications (A056). **The FAA have published a new guide**, which tells operators exactly what they need to do to get this authorisation, namely:

1. Submit an AFM Statement of Compliance for PBCS, showing exactly what data link communication systems your aircraft has, along with the selected performance
2. Since July 2016, various oceanic FIRs have been collecting data on whether certain aircraft meet RSP and RCP criteria. You need to make sure your aircraft isn’t already listed as having failed to meet these criteria, by checking here:
https://www.faa.gov/air_traffic/separation_standards/pbcs_monitoring/

What new codes do I need to put down on my flight plan?

- FANS 1/A CPDLC equipped aircraft planning to operate in the NAT HLA shall insert the appropriate designator (J2, J3, J4, J5 and/or J7) in Item 10a of the flight plan.
- FANS 1/A CPDLC RCP 240 compliant aircraft intending to operate in the NAT HLA shall insert the designator P2 in Item 10a of the flight plan.

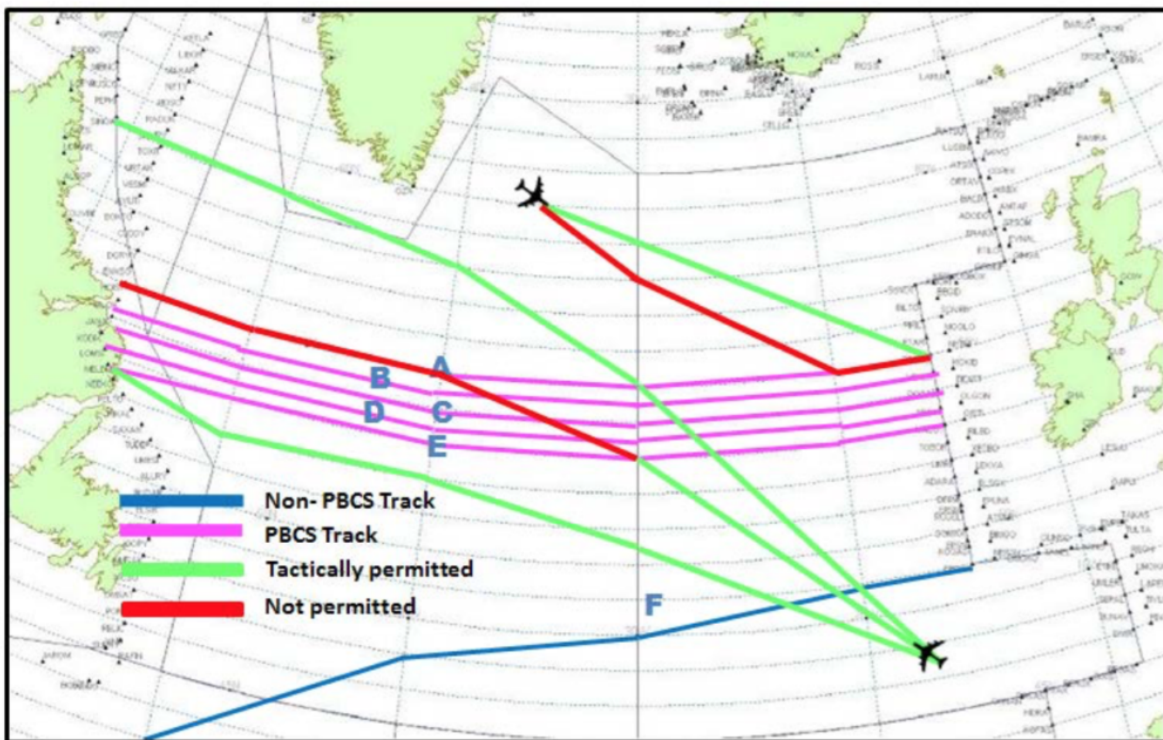
- FANS 1/A ADS-C compliant aircraft planning to operate in the NAT HLA shall insert the designator D1 in Item 10b of the flight plan.
- FANS 1/A ADS-C RSP 180 compliant aircraft planning to operate in the NAT HLA shall insert SUR/RSP180 in Item 18 of the flight plan.
- RNP 4 compliant aircraft planning to operate in the NAT HLA shall insert PBN/L1 in Item 18 of the flight plan.

If I'm not eligible for PBCS, where can I go?

ATC may allow you to do either of the following, depending on how stressed/busy they are (i.e. decided on a 'tactical basis'):

- You can infringe on the daily PBCS tracks between FL350 - FL390 at only one point (including Oceanic Entry/Exit Point) i.e. cross but not join an NAT PBCS track
- You can climb or descend through levels FL350 - FL390 on a PBCS track provided the climb or descent is continuous.

In their **NAT OPS Bulletin 2018_001**, ICAO have published a handy little picture to demonstrate this:



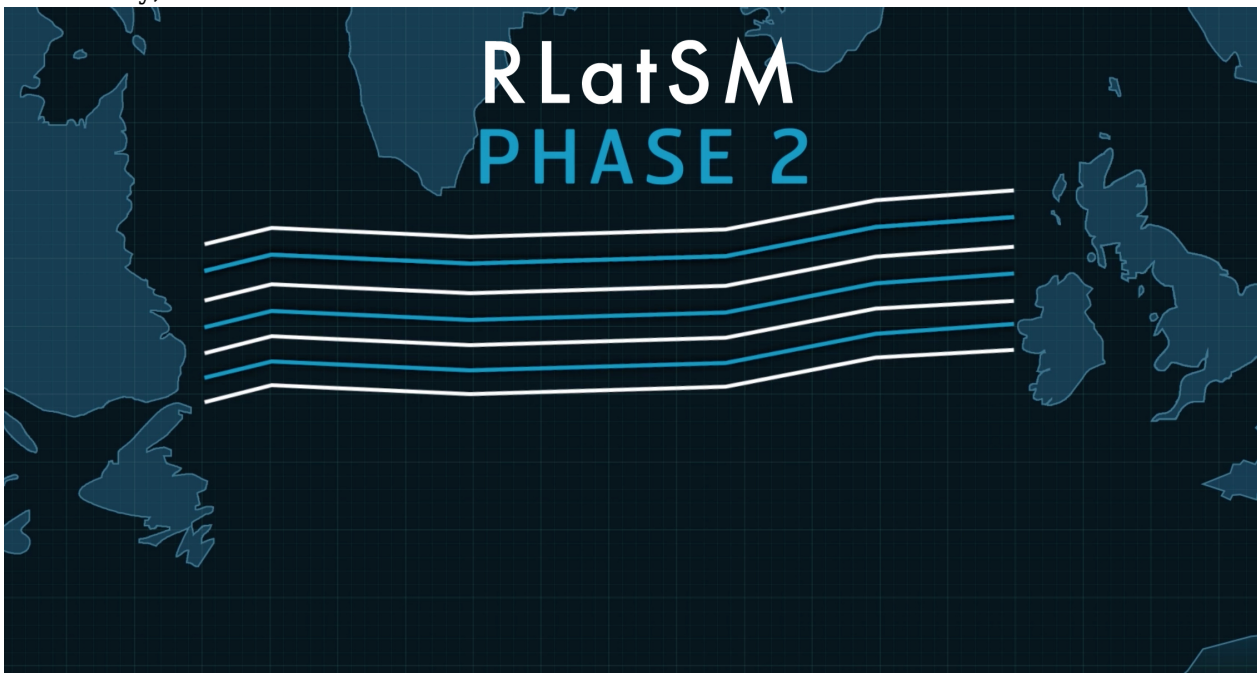
Further information:

- For a great FAQ on all things PBCS, check out the latest FAA document [here](#).
- For more info on the PBCS implementation, check out the full UK AIC [here](#).
- To figure out where you are welcome on the NAT, depending on what equipment and training you have, check out our quick reference guide [here](#).

- *Special thanks go to Mitch Launius at 30westip.com for help with this post. For assistance with international procedures training for business aviation crews worldwide, and to watch an excellent webinar about all things PBCS-related, check out the **30westip**.*

More NAT half-tracks are coming

David Mumford
2 February, 2018



Update Jan 23: The current phase of the trial for RLatSM Tracks will come to an end on March 29, when PBCS standards will be introduced for the NAT tracks. More info on that **here**.

Since Dec 2015, there have been three daily NAT tracks spaced by one-half degree between FL350-390. These are officially called 'RLatSM Tracks' (Reduced lateral separation minima), but we all just prefer to call them 'Half-Tracks'.

Separating flights by one-half degree of latitude rather than the standard one degree means that aircraft can be separated laterally by 25nm, which helps improve the efficiency of North Atlantic operations.

In Jan 2018 the Half-Tracks will be expanded from the three that now run each day, first by one additional track and then (maybe) to all NAT Tracks between FL350-390 inclusive. Jan 4 is the earliest day that this might happen, but because they will be decided tactically, it will most likely be the first busy day after Jan 4.

If you want to operate on the RLatSM tracks, you're going to need CPDLC, ADS-C, and RNP4; along with the other standard pre-requisites for operating in the NAT HLA between FL350-390: an HLA approval, TCAS 7.1, RVSM approval, two LRNS, and a working HF radio. To figure out where you are welcome on the NAT, depending on what equipment and training you have, check out our quick and dirty guide **here**.

One thing to be cautious of when using the half-degree tracks – most aircraft FMC’s truncate lat/long waypoints to a maximum of 7 characters, so it will often show up as the same waypoint whether you’re operating along whole or half degree waypoints. So when operating on the half-tracks, just remember to double-check the full 13-character representations of the lat/long waypoints when you enter them into the FMC.

For more details about the new RLatSM procedures, have a read of the UK AIC 087/2017 [here](#).

NAT changes slow down

Declan Selleck
2 February, 2018

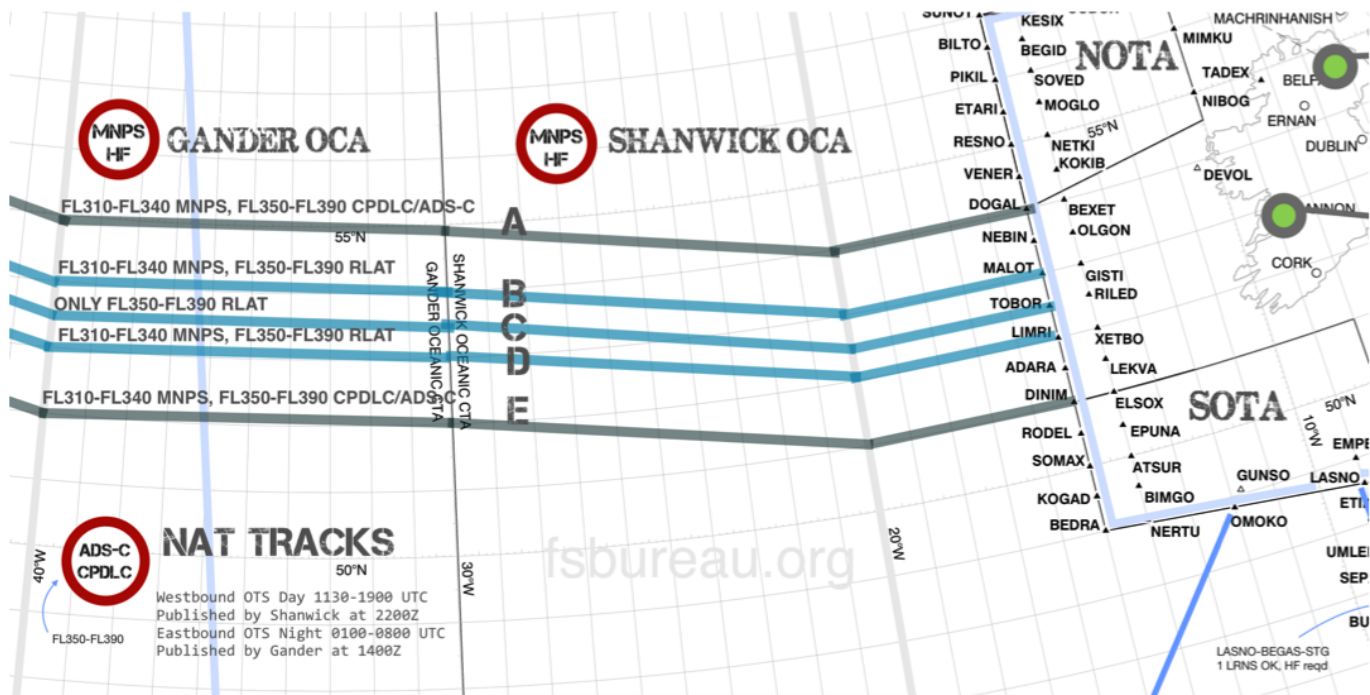
Last week, we updated OpsGroup members with the **changes on the NAT in the last 12 months** with a special briefing. There have been many – MNPS being renamed HLA, new requirement for RNP4/10, new waypoints, airspace changes, the addition of Bodo to MNPS/HLA, and the introduction of RLAT – Reduced lateral separation: that is, half-track spacing for the first time.

The initial Phase of RLAT was introduced in December last year. Since then, there has been the option for suitably equipped aircraft (ADS, CPDLC and RNP4) to use one of the three new daily RLAT tracks, where aircraft are operating 30nm apart instead of 60nm.

The NAT plan at large called for Phase 2 to follow this coming November, where the NAT Tracks would be ‘squashed together’ and all tracks would be RLAT above FL350, leaving only a couple of available tracks – spaced at 60nm, for everyone else.

However, we have been advised this week by the NAT working groups that this implementation in November **will not go ahead as planned**. There are some issues that Gander, Shanwick, and Iceland have to work through before their systems are ready to handle the next stage – meaning that the implementation of “RLAT only” is pushed out until, most likely, sometime next year.

So, for now, RLAT will stay on a maximum of three tracks – thereby slowing down the rate of change on the NAT, which probably comes as good news to operators. We’ll keep you posted.



NAT Changes in the last 12 months

Declan Selleck
 2 February, 2018

A constantly evolving airspace: It's been busy on the NAT! And not just traffic wise - **there have been a record number of procedural and regulatory changes in the last 12 months.** Here they are, in order of significance:



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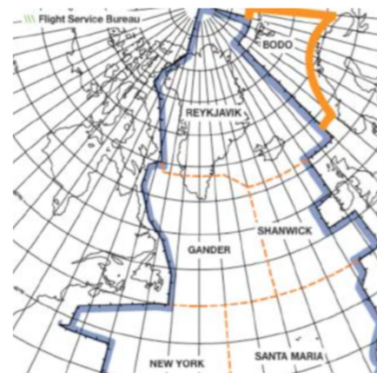
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MNPS replaced by HLA February 2016

In 1977, as the ocean got busier, MNPS was introduced to make sure that pilots (and aircraft) flying in the NAT region were up to scratch. In other words, be able to understand and fly an Oceanic Clearance, and make sure the aircraft navigation is up to the job of flying that clearance. The term was a mouthful – but the purpose was simple – know what you're doing. MNPS required **crew** to be trained, and the **aircraft** to be able to perform to a minimum standard.

In February 2016, the new term for MNPS is **NAT HLA – High Level Airspace**. Bodo Oceanic joins the airspace.

References



More reading:
- FSB NAT HLA Map (Feb 2016)

- **OPSGROUP membership** is required to access this briefing
- **Join today** and receive full Welcome Pack
- Contact subs@opsgroup.co for any membership questions or read more at opsgroup.co

Monday Briefing: NAT Track Changes, Russia-Ukraine airline ban

Declan Selleck
2 February, 2018

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26OCT2015 In around two weeks time, significant changes will occur to the design and structure of North Atlantic Tracks (NAT OTS), which have existed in their current lateral structure since the OTS introduction in 1965. The key changes are: a reduction in separation to **'half-track'** compared to the existing structure, introduction of **24 new Oceanic Entry Points (OEP's)**, and a new requirement for **RNP4**. A special briefing on these changes is below.

26OCT2015 With effect from yesterday, almost all Ukrainian and Russian airlines are barred from each others airports and airspace. Ukraine issued a sanctions list in September barring all except one Russian airline from operating, and in return Russia banned the three Ukrainian airlines from operating to Russia. GA, Business Aviation, and non-scheduled flights are not affected.

EGPX/Scottish FIR High delays this morning 26OCT in Scottish airspace due to ATC radio system failure. EGPF/Edinburgh airport departures were suspended, now resumed, with enroute traffic rerouted to avoid Antrim, Galloway, Tay, and Talla sectors. Situation is slowly improving but potential for afternoon delays exists.

KORD/Chicago O'Hare There will be a TFR in effect for Oct 27 and Oct 28 due to VIP movement. Please see NOTAM 5/1931 for further details.

MMXX/Mexico The impact of Hurricane Patricia was less than feared. MMPR/Puerto Vallarta Airport, MMZH/Ixtapa, and MMZO/Manzanillo have all reopened and are operating normally.

KXXX/USA Current runway closures: BWI-RWY 10/28 CLOSED, IAD-RWY 01R/19L CLOSED, DTW-RWY 03R/21L 09L/27R CLOSED, SEA-RWY 16C/34C CLOSED

NAT/North Atlantic ASD15 Exercise Trident Juncture (At Sea Demonstration) military exercise until 31OCT. The designated firing areas incorporate elements of Scottish FIR/UIR, Shanwick and Reykjavik FIR as well as notified UK Danger areas. Flight planning restrictions will be applied affecting NAT Traffic on northerly routes, monitor NOTAMs.

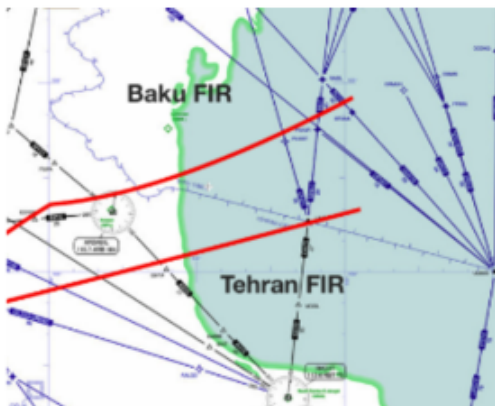
South Pacific Tropical Cyclone Season 2015-16 begins on 01NOV. Tropical cyclone warnings in the South Pacific region, please consult the Joint Typhoon Warning Center, Fiji's regional meteorological center responsible for tropical cyclone warnings in the South Pacific region, or Australia's Bureau of Meteorology.

View the full International Ops Bulletin for 26OCT2015.

Monday Briefing: North Atlantic Changes, Caspian Sea Missiles

Declan Selleck
2 February, 2018

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19OCT2015 Flight operations in the NAT region will see significant changes in around three weeks time, including new 'half-degree' NAT tracks, new Entry Points in Gander and Shanwick OCA's, and several procedural changes. A Special Bulletin with plotting chart, summarising the changes, will be issued by Flight Service Bureau next week.

19OCT2015 Last week 26 cruise missiles were launched across International air routes in Azerbaijan, Iraq, and Iran, with reports suggesting 4 did not travel as intended. The risk to aircraft operators is summarised in our International Ops Notice 10/15, see below for details.

RPHI/Manilla FIR, Philippines Typhoon Koppu has maintained its strength as it continues to move northward with slightly increasing forward speed along the shores of Ilocos Sur, Luzon. Current location

(1200Z Monday) is to the west of RPLI/Laoag Airport. It is forecast to weaken to a Tropical Storm within 24 hours. No reports of airports affected so far.

OMDW/Dubai World hosts Dubai Airshow 08-12NOV. Landing Permit required for all flights, 3 days processing, standard documents and requirements. Slot required for OMDW, window +/- 5mins. Show details at www.dubaiairshow.aero

OPRN/Islamabad, Pakistan closed 1300-1800 daily due runway works 18-28OCT.

SEXX/Ecuador A new DGAC resolution now effective permits non-scheduled aircraft to land without a Landing Permit as long as the aircraft is operating under private ops, will not stay longer than 72 hours in Ecuador, and visits only one location in Ecuador. The official document is here (in Spanish).

VHHH/Hong Kong with effect 25OCT (IATA Winter 2015) will amend slot issuing procedures to give priority to operators with higher capacity aircraft, and where same types conflict for the same slot time, lower noise levels.

LIXX/Italy ATC Strike confirmed for 24OCT (Saturday) 0800-1600, service will be provided to Overflights and Intercontinental flights only.

LTXX/Turkey Traffic operating through the south eastern part of Turkish airspace to/from Tehran and Baghdad FIRs should check Notams for restrictions. Several restrictions up to FL310 due to military operations.

EGXX/Shanwick Large scale Military Exercise 'At Sea Demonstration' ASD15 affecting OEP's ERAKA and GOMUP starts on 19OCT.

LFxx/France Datalink implemented from 22OCT LFRR/Brest and LFBB/Bordeaux ACC from 0900L. Initial phase, no ACL (Clearance via CPDLC), and aircraft must be on Eurocontrol whitelist. Ref France AIC A22/15.

VNXX/Nepal continues to experience shortages of fuel due to a halt in shipments coming from India. Available fuel for domestic airlines is rapidly decreasing, and authorities worry that domestic flights will soon be unavailable. The Nepalese government has requested that international airlines carry return fuel or refuel at airports en route, as Tribhuvan International Airport (VNKT/KTM) has no available fuel.

View the full International Ops Bulletin for 19OCT2015.