

VATEIR OCEANIC PROCEDURES



Kilian Thornton
ACCIRL5

Flying Oceanic

Crossing the Atlantic is synonymous for its differences to conventional flying. The biggest of these is lack of radar coverage for most the oceanic crossing. From 15w to 30w is Controlled by Shanwick Radio (In real life, the controllers are located in Prestwick, Scotland while the radio officers are located in Ballygireen near Shannon). The remainder to 45w is controlled by Gander Radio.

The system of achieving and maintaining separation across the ocean is based upon a simple principle of having 10 minutes, or more separation between 2 aircraft on the same routing. Of course, aircraft at different flight levels or different routes, separation manifests itself and looks after itself. The way in which separation can be achieved is, flight level, Mach speed or routing.

Routings Through The OCA

There is a common misconception, that a pilot MUST file a NAT when flying across the ocean. That is incorrect. On VATSIM at least, you are most welcome to use either a NAT or a random routing. But something else people do not realise is that, westbound NATs are only valid 1130z-1900z. Outside of that time you are welcome to fly the same routing as the NAT but it is regarded as a random routing! Likewise, eastbound NAT are only valid 0100-0800z.

A random routing is, in some cases, a more direct and more logical routing. For example, if you are flying from Dublin to Juliana, or Punta Cana, a NAT would add a significant distance; therefore a random routing is preferred in such cases. Similarly, a route which its great circle routing falls outside a NAT (e.g EIDW-KSFO, KORD-UUEE etc), a random routing is preferred.

There are also 2 "airways" through the OCA, which sometimes you may find yourself using, unaware that they are really oceanic routes. These are the T9 and T16 airways, mostly used for Ireland/Scandinavia/UK to Spain/Canaries/Portugal flights. The procedure is the same though as any other route, however instead of requesting via "NAT A", use via "T16" etc. Shanwick only covers half of the T16.

So, how does this affect me as a pilot?

- In your pre-flight planning you should keep in mind the validity of the NATs (times)
- Remember to include the TMI (Track Message Identifier), that is, the day in which the NATS are issued in your flight plan. (It's a number from 1 to 365)
- SELCAL, (Selective Calling) is recommended.

Who Covers What?

It's quite simple. The positions you will see online on VATSIM, outside of major events that are of interest:

- **EGGX_FSS** - Shanwick Radio. This covers the Shanwick OCA, and if Gander is offline, it covers that too.
- **CZQX_N_FSS** - Gander Radio. Covers Gandar OCA, and Shanwick if offline.
- **LPPO_FSS** - Santa Maria. Covers entire Santa Maria OCA, not including Azores TMA.
- **BICC_FSS** - Iceland Radio. Covers non-domestic sectors of Iceland, including North Pole. Also covers Greenland, and may be sectorised with Sondestrom radio (Neither are online regularly).

Oceanic Clearance

Oceanic clearances are issued by Shanwick Radio. Normally, pilots will be handed off to Shanwick by Shannon Control, and on receiving their clearance will be instructed by Shanwick to contact Shannon Control again.

Example Of A Clearance Request

Pilot: "Shanwick, good morning, Shamrock triple one with oceanic clearance request"

ATC: "Good morning, go ahead"

P: "Shamrock 111 requesting clearance to JFK, via NAT Alpha, estimating RESNO time 1203 Zulu, flight level 380, Mach decimal eight-zero, SELCAL ABCD"

ATC: "Shanwick clears triple-one to JFK, via NAT Alpha. Cross RESNO not before time 1158z, not after time 1208z, maintain FL380 Mach .80 "

P: "Roger, cleared to JFK via NAT A, cross RESNO not before time 58, not after time 08, FL380 Mach .80, Shamrock 111"

ATC: "Shamrock 111, readback correct, continue with domestic, bye"

P: "Domestic, bye now, 111"

If, a time restriction is issued, it means you can't cross the waypoint before or after that time. If your estimate is inside those times there is no need to panic. Otherwise, you'll need to slow down to meet the time or ask for a new clearance.

After that, all that is left to do is make position reports across the ocean. You will be handed off by domestic to Shanwick at your first fix.

Example Position Report

Pilot: "Shanwick hello again, Shamrock 111 with position"

ATC: "111 hello again, go ahead"

P: "Shamrock 111, over RESNO at time 1203z, FL380, M.80, estimating 55 north, 20 west at time 1245z, 55 north 30 west thereafter"

A: "Shanwick copies position RESNO at 1203z, FL380, M.80, estimating 55 north, 20 west at time 1245z, 55 north 30 west next"

P: "Correct"

The times are as follows, your current time over CURRENT waypoint. Your estimated time for your NEXT waypoint. And the NAME ONLY of the following/thereafter waypoint.

After you have crossed oceanic airspace, you will be handed over to radar control again.

Remember!

- You are expected to obtain your clearance around 40 mins before entering the OCA.
- If a domestic sector is online (Shannon, Scottish, Brest etc.) they will hand you over to Shanwick for your clearance. Do NOT leave the frequency to do so without asking!
- If there is no domestic online, contact Shanwick/Gander for clearance at your own discretion - they will probably send you a PM.
- Aircraft at Shannon, Dublin or Glasgow can receive clearance on the ground before departure due to close proximity with the OCA.

You'll Need The Following On Hand

- Firstly if you are flying a NAT, within the valid times, there is no need to read out the routing. Just "NAT A" etc. If there is a random routing, you MUST read out the ENTIRE oceanic portion!
- Have the TMI on hand
- Have your estimate for your first waypoint in Zulu time ready.
- Know your Mach speed, your requested flight level and max possible flight level.