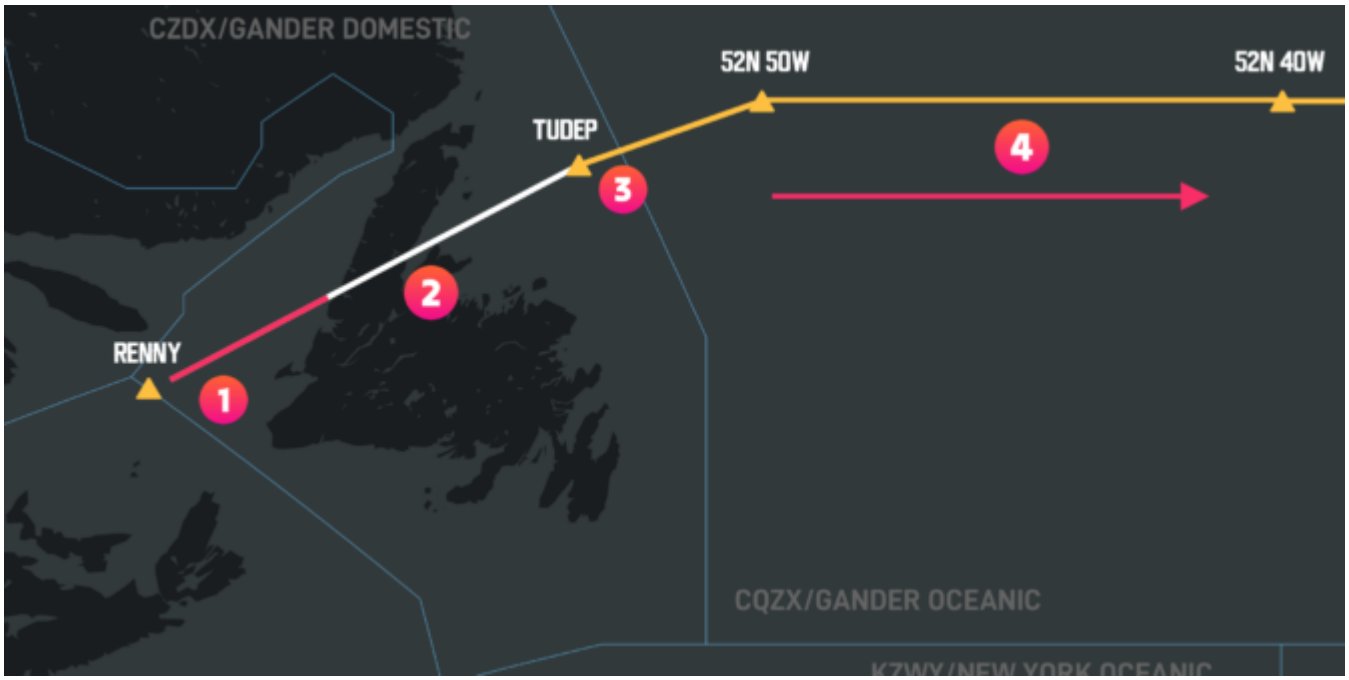
High levels of Pilot Error with NAT RCL: New Briefing and Checklist

OPSGROUP Team
12 December, 2024

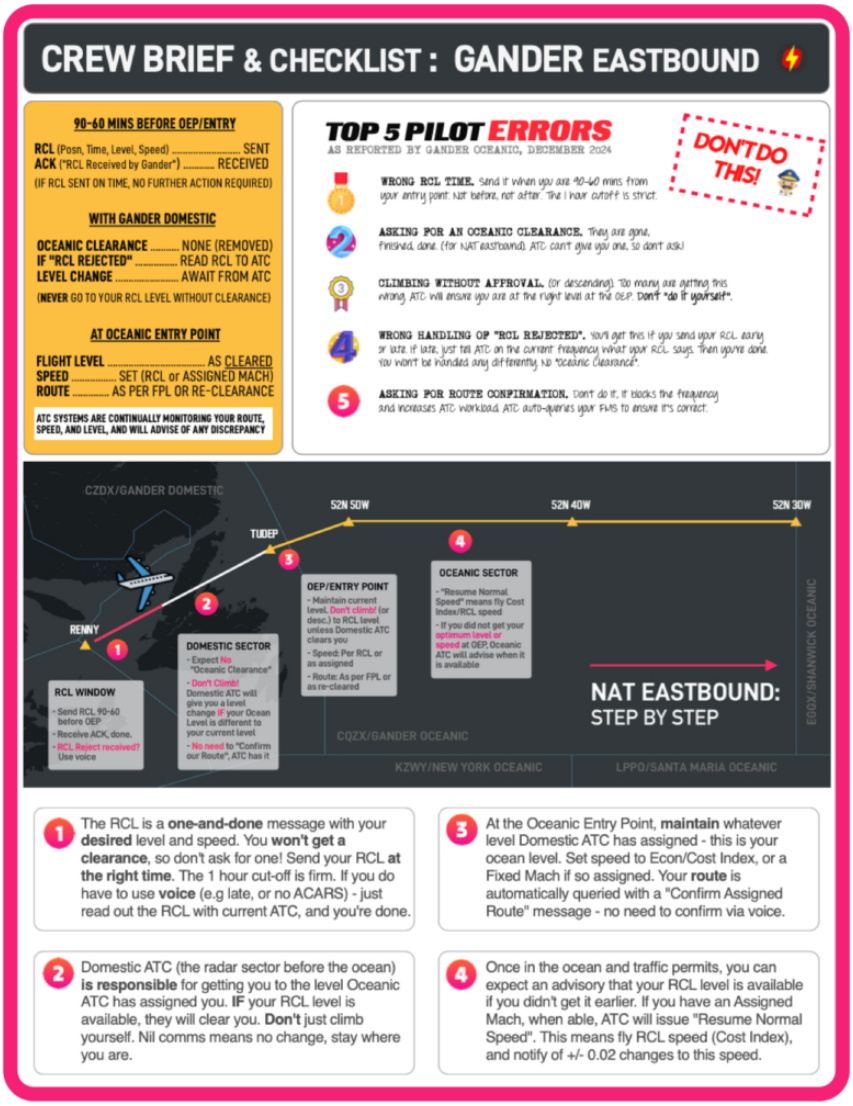


The number of **pilot errors** following the introduction of the new "*No Oceanic Clearance*" procedure is turning out to be far higher than expected. As a result, Gander have had to implement an evening Airspace Flow Program (AFP), restricting eastbound traffic.

Since December 4th, Oceanic Clearances are no longer being issued by Gander for eastbound flights, and a **new procedure** is in place using an RCL message to send your desired time, level and speed at the Oceanic Entry Point (OEP).

However, the **very high level** of non-compliance with this new procedure is surprising and troubling. Errors by flight crew fall into a number of different categories, but can be summed up in a "Top 5", including sending the RCL at the wrong time, asking for an Oceanic Clearance, "DIY" level changes, wrong handling of RCL Rejected messages, and repeated voice requests for "route confirmation" blocking active ATC frequencies.

A new **Crew Brief and Checklist** has been published today, which you can download below. **Please save a copy, and send to your crew and colleagues**!

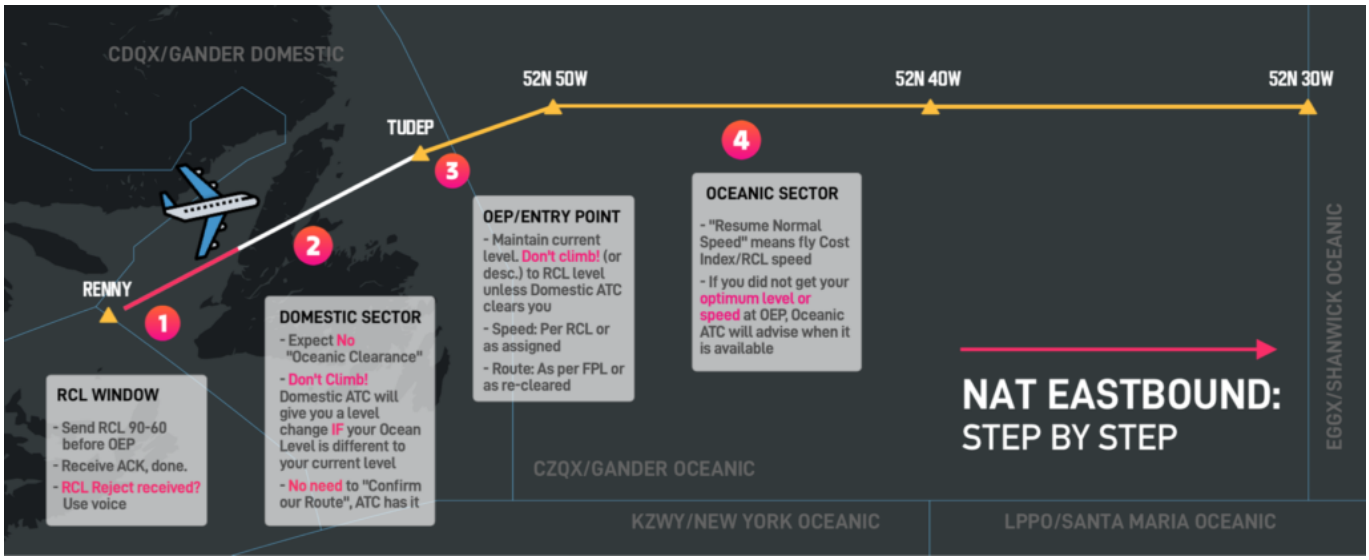


Download the **Gander RCL Crew Brief and Checklist** (PDF, 1Mb)

Top 5 Pilot Errors

1. **WRONG RCL TIME**. Send it when you are 90-60 mins from your entry point. Not before, not after. The 1 hour cutoff is strict.
2. **ASKING FOR AN OCEANIC CLEARANCE**. They are gone, finished, done. (for NAT eastbound). ATC can't give you one, so don't ask!
3. **CLIMBING WITHOUT APPROVAL**. (Or descending). Too many are getting this wrong. ATC will ensure you are at the right level at the OEP. **Don't "do it yourself".**
4. **WRONG HANDLING OF "RCL REJECTED"**. You'll get this if you send your RCL early or late. If late, just tell ATC on the current frequency what your RCL says. Then you're done. You won't be handled any differently. No "Oceanic Clearance".
5. **ASKING FOR ROUTE CONFIRMATION**. Don't do it, it blocks the frequency and increases ATC workload. ATC auto-queries your FMS to ensure it's correct.

Notes on the RCL process



1. **The RCL is a one-and-done** message with your desired level and speed. You won't get a clearance, so don't ask for one! Send your RCL at the right time. The 1 hour cut-off is firm. If you do have to use voice (e.g late, or no ACARS) – just read out the RCL with current ATC, and you're done.
2. **Domestic ATC** (the radar sector before the ocean) **is responsible** for getting you to the level Oceanic ATC has assigned you. IF your RCL level is available, they will clear you. Don't just climb yourself. Nil comms means no change, stay where you are.
3. At the Oceanic Entry Point, **maintain** whatever level Domestic ATC has assigned – this is your ocean level. Set speed to Econ/Cost Index, or a Fixed Mach if so assigned. Your route is automatically queried with a "Confirm Assigned Route" message – no need to confirm via voice.
4. **Once in the ocean** and traffic permits, **you can expect an advisory** that your RCL level is available if you didn't get it earlier. If you have an Assigned Mach, when able, ATC will issue "**Resume Normal Speed**". This means fly RCL speed (Cost Index), and notify of +/- 0.02 changes to this speed.

Worried about getting it wrong?

Of course, it always makes sense to double check any uncertainties, but if you can keep it off the frequency, that's very helpful for ATC. At the moment, there is a **high volume** of extra requests (which makes life hard for the controller). **Remember one key point**: ATC systems are continually monitoring your route, speed, and level, and will advise of any discrepancy. Your route in the FMS is queried by a UM137 message ("CONFIRM ASSIGNED ROUTE"), to ensure both you and ATC have the same understanding of your track, or random route acoss the Ocean.

If you're not certain about how the procedure works, use the Crew Brief and Checklist (developed specifically for Gander Oceanic), and refer to NAT Ops Bulletin 2023_001 Rev 4, and NAT Doc 007.

Can you share? Please do.

The quicker we can get this information out to all NAT crews, the better. **Please share** with your flight department, fleet, or operation – just **download** the Crew Brief and Checklist and pass it on.

Questions? Can we help?

If you have a question about the new RCL process, just comment below or **send us an email**. We want to help make sure that we are all on the same page!

US FAA Improves Flight Tracking Privacy

Chris Shieff
12 December, 2024

Dec 2024 Update:

- The FAA's Privacy ICAO Address Program (PIA) has been updated. **CPDLC services are now available for flights using a PIA.** To receive it, pilots must file the PIA ICAO 24-bit address and N-reg in the flight plan.
- Two other important changes – aircraft info held by the FAA and associated with a PIA are **exempt from the Freedom of Information Act**, and pilots can now **request a new PIA every twenty days** if they want. You view the updated FAA Privacy page here.

Feb 2024 Update:

- The FAA's Privacy ICAO Address program has been **expanded to include some new oceanic and Gulf of Mexico routes.**
- Check below for exactly which routes this program now applies to, and our **Opsicle with**

steps on how to register.

If you're not familiar with this program, it prevents users' aircraft registration from being tracked by third parties using ADS-B output during US domestic flights. We wrote about it before here. But to explain what this program is and how it works in two sentences:

All Mode S equipped aircraft are assigned a unique ICAO 24-bit address – this is uniquely identifiable to your aircraft's registration. The FAA's PIA program assigns you another one to use that renders you secret-squirrel.

To participate, you must tick all three of these boxes:

1. Operating an **US-registered aircraft which is ADS-B equipped**
2. Using a **third-party call sign**
3. Flying in **US territorial airspace** (the mainland, Alaska, Hawaii, and other US territories). Additionally, the PIA has been expanded to include US oceanic FIRs too – those more than 12nm from shore.

After news broke the program had been improved, we struggled to find a summary of the changes and got in touch with the FAA directly.

They advised while there is no 'master list' of the newly included routes, they have updated their website to include some valid examples including:

- **NYC to LA**
- **Miami to Houston (via the Gulf of Mexico)**
- **LA to Hawaii**
- **Boston to Miami (with offshore routes more than 12nm from shore).**

If you have an enquiry about a specific route, you can reach them on adsbprivacyicao@faa.gov. Chances are, as long as you stay **within US jurisdiction**, your route will be valid.

How to apply?

So, you want in? We've put together this little Opsicle with steps on how to register.

More questions?

The FAA has quite a good FAQ section on the PIA which you can access here.

South Atlantic Bulletin: CPDLC Warning

Chris Shieff
12 December, 2024

There's been a lot of noise lately from the NAT, especially as we all come to grips with the **removal of oceanic clearances.**

But it's important not to forget about the SAT – or **South Atlantic**. And it seems a CPDLC issue has been regularly occurring in the Abidjan Area Control Center – a large chunk of airspace found south of Africa's Ivory Coast.

The issue arises from the fact that while the **Abidjan ACC** is geographically constrained by the much larger **Dakar FIR,** it is responsible for its own control.

It seems that pilots have been incorrectly logging onto **GOOO/Dakar** rather than **DIII/Abidjan** when transiting this airspace. ATC are concerned, and so a new SAT Ops Bulletin has been published. Here's a closer look at what it contains, and how to mitigate this error on your next crossing.

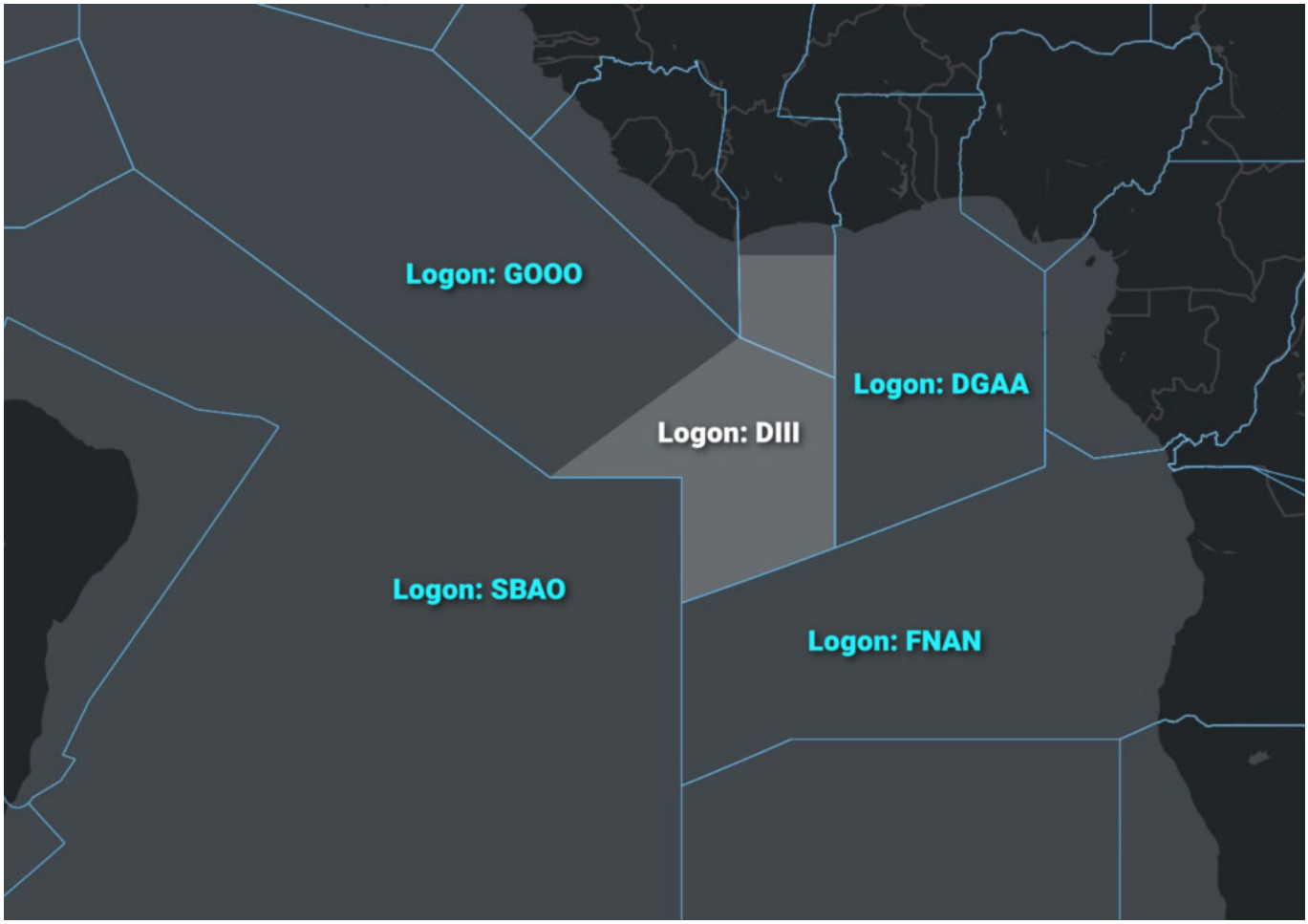
The Airspace Picture

Part of the problem may be that pilots crossing the SAT are **far less familiar** with the airspace picture than they are of its big brother, the NAT. So, he's a quick crash course.

Over the South Atlantic lies the '**Atlantic Ocean Random Routing Area**', or AORRA.

This is essentially a volume of airspace between FL290 – FL410 within the Atlantico, Accra, Comodoro Rivadavia, Dakar, Dakar Oceanic, Ezeiza, Johannesburg Oceanic, Luanda and Montevideo FIRs.

This article is concerned with the Eastern Side of the AORRA – specifically the **DIII/Abidjan ACC** (Ivory Coast) which is contained within the much larger **GOOO/Dakar FIR** and where the confusion is occurring. Aircraft on routes that transit between South America and Sub-Saharan Africa will likely overfly this airspace.



The folk at the South Atlantic Steering Group (SAT SG for short) have reported more and more instances of transiting aircraft **incorrectly logging onto GOOO when they should be logging onto DIII** while in Abidjan's airspace.

This then creates communication issues for ATC.

Panic Slowly

While this is cause for concern, SAT SG are quick to explain that in most cases this can be managed safely but vastly **increases workload** for controllers who must manually resolve the mis-connection.

But occasionally the loss of comms has led to the activation of something called **INCERFA** – a top-secret ICAO catchphrase for where uncertainty exists as to the safety of an aircraft or its occupants. **This alert phase carries its own protocols for ATC.**

And so, the key message from the bulletin is this:

'While Abdijan Airspace is geographically included within the Dakar FIR, it is essential that it is treated as a separate sector for CPDLC logon purposes…'

Simple!

What to do

None of us like unexpected paperwork. So, the SAT SG has also provided us with **flight crew procedures** to prevent communication problems when overflying Abidjan airspace. Check the SAT Ops Bulletin for these in full, but here's the lowdown:

Before Entering: Check logged onto Abidjan ACC using correct code (DIII). Confirm logon active by checking uplink message response. Don't log onto Dakar (GOOO) by mistake.

Failed Logon: Manually log on to DIII if auto fails. Notify Abidjan by voice ASAP if unable to establish CPDLC connection. If practical, trouble shoot before entering.

Transition between Dakar and Abidjan: Monitor handoff carefully. Ensure CPDLC switches before crossing the boundary. Verify correct CPDLC connection is active, especially entering Abidjan airspace.

Have more questions about the SAT?

You can reach the **ICAO EUR/NAT** office directly via icaoeurnat@icao.int.

For ops in the region, you might also be interested in this little guide on the **South Atlantic Corridor** we wrote before. OPSGROUP members cash download it from the Dashboard here.

Winter Ops: Fun Fuel Facts

OPSGROUP Team
12 December, 2024

Fuel is to airplanes what coffee is to pilots – something you just cannot fly without. But just as there are different types of coffee, you're going to come across different types of fuel as well…

The Menu

Jet-A1 – The most traditional drink, it is straw coloured with a flash point of 38°C (100°F), and a freezing point of -47°C.

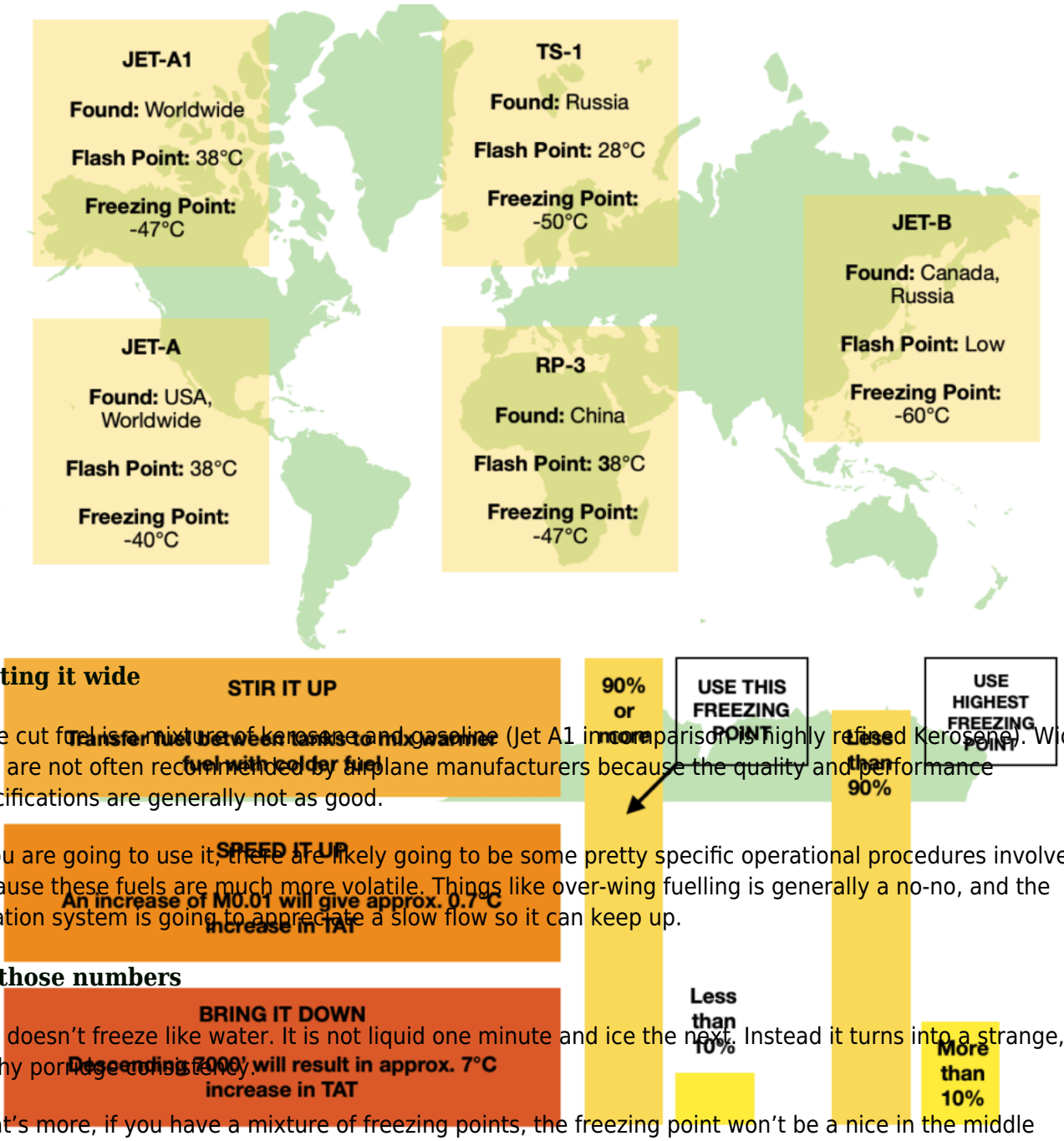
Jet A – Another tasty kerosine grade fuel which will work just fine. The flash point is the same but this turns into an icy slushie at only -40°C.

Jet B – A delicacy from the Northern Regions. This is a cocktail of kerosine and naphtha – the stuff dragons produce out their nostrils (ok, that is not true, but it might as well be because this stuff is hard to handle with its higher flammability). Wide cut, and only really used in colder climates, with its freezing point of -50°C.

TS-1 – A Russian cocktail, more flashy than most at 28°C, but with a freezing point of -50 °C. It is also sometimes called RT (which looks like PT when it is written in Russian). RT is a superior grade TS-1, but not widely available.

RP – Brewed in China, the RPs come in a variety of styles. RP-1 has a freezing point of -60°C, RP-2 -50°C, but it is RP-3 we really recommend because it is basically Western Jet-A1 produced at export grade.

Chip fat oil – Not literally, but if you fly into a remote airport in some regions you might find fuel is not of the standard required. Look out for anything that isn't straw coloured, doesn't smell right, or has things floating in it.



Cutting it wide

Wide cut fuel is a mixture of kerosene and gasoline (Jet A1 in comparison is highly refined Kerosene). Wide cuts are not often recommended by airplane manufacturers because the quality and performance specifications are generally not as good.

If you are going to use it, there are likely going to be some pretty specific operational procedures involved because these fuels are much more volatile. Things like over-wing fuelling is generally a no-no, and the filtration system is going to appreciate a slow flow so it can keep up.

All those numbers

Fuel doesn't freeze like water. It is not liquid one minute and ice the next. Instead it turns into a strange, slushy porridge consistency.

What's more, if you have a mixture of freezing points, the freezing point won't be a nice in the middle -44.5°C so the only reliable way to work this out when you've mixed a load together is to take a

measurement – assuming you're carrying your own Fuel Freezing Point Measuring Gadget…

If not, the next best method to use is this –

- **90% or more of your fuel is one type?** Use that freezing point.
- **89% or less of your fuel is one type?** Use the highest (worst case) freezing point.
- **You have 900 gallons of Jet A1 freezing at -47°C and 100 gallons of Jet A freezing at -40°C?** Then call it -47°C and be off on your merry way.
- **You have 899 gallons of Jet A1, and 101 gallons of Jet A?** Then take the highest freezing point which in this case would be Jet A at -40°C

Do we really care about freezing points of fuel?

Yes, very much so, especially if you are flying some long haul treks over the North Pole at high altitude in the winter.

With outside air temperatures lower than -60 degrees, freezing fuel can get you into some very hot water, (or cold fuel to be more accurate.)

In Jan 2008, British Airways Flight 38 crashed just short of the runway at EGLL/Heathrow after flying from Beijing, China. They had been cruising between FL350 and FL400, with OATs reported to be between -65 to -74°C. While the fuel itself never froze, it did become cold enough for ice crystals to form in the fuel system.

These pesky little ice particles blocked stuff up and reduced the fuel flow, starving the engines, and causing a big loss in thrust right when the pilots needed it.

What can we do about it?

Ultimately, you need to **turn up the temperature!** There are only a few ways to heat your fuel up if it starts getting too chilly:

Stir it Up – Unlike Bond who preferred his drinks shaken and not stirred, mixing cold fuel with warmer fuel makes it better. Some larger aircraft with complex fuel systems do this automatically, but if you are able to do so manually there will probably be a checklist and following it to avoid turning off the wrong pumps might be wise.

Speed it Up – Flying faster means more drag which means more energy converted into hotness. Not much though… an increase in Mach 0.01 will increase the TAT by around 0.7°C, and increasing your speed also increases your fuel burn.

Bring it Down – Warmer air will help, and by descending 7000' you can increase the TAT by around 7°C. In seriously cold air masses, descent to at least FL250 might be required, but this all means a much higher fuel burn.

Tanker? No thank ya…

Tankering fuel if you are operating into somewhere chilly might cause you some problems. The fuel is likely to get cold in flight, and up the likelihood of some frosty wings on the ground. So check the de-icing situation at your destination if you are tankering and it's cold out.

Some other useful info

- 1 imperial gallon = 1.2 US gallons.
- You can monitor the price of jet fuel here.

Swerving off the road: Why are pilots avoiding EMAS?

Chris Shieff
12 December, 2024

Update November 2024:

Over two years have passed since we first published this article on **EMAS**.

A recent report identified that **runway excursions** are still one the leading causes of business aviation accidents in the US – which has put this valuable technology back on our radar.

It's pleasing to see that the adoption of these life-saving blocks of crushable energy absorption has steadily continued to increase across the world including recent news that it is coming to Australasia for the first time.

The FAA now reports that EMAS is installed at 121 runway ends at seventy-one US airports and growing.

To date it has safely stopped twenty-two overrunning aircraft carrying 432 pax and crew – the latest, a Hawker 900XP at **KTEX/Telluride** back in July.

Outside of the US, a number of aviation authorities have introduced or are planning to install EMAS beds to **current US FAA standards** at airports in countries including the UK, Canada, France, Spain, China and

Taiwan.

A first for Australasia

Two promising pieces of news recently emerged from down under in recent months.

New Zealand is installing EMAS at two of its most challenging airports characterized by windshear, short runways and RESAs geographically constrained to the minimum 90 meters (295'). Both receive high volumes of jet traffic.

NZQN/Queenstown is currently in the process of installing EMAS at both runway ends. Work is happening at night and is expected to be completed soon.

Just last week, **NZWN/Wellington** announced it would follow suit, with major runway safety upgrades. It hopes to have EMAS in action by the end of March.

A familiar problem remains

If there is any doubt as to the effectiveness of EMAS, consider this. A typical EMAS installation in a 90m (295') RESA effectively increases its stopping power to the equivalent of 240m (787') – **that's nearly three-fold.**

And yet pilot awareness remains limited. There are no ICAO SARPs for EMAS. And the FAA's guidance is limited – the only advice for an imminent EMAS encounter is to maintain the extended runway centreline. And once stopped, don't try and taxi the aircraft.

The reality is that 90m from 70kts looks darn short – and vacant space on either side of the runway makes for an attractive option in the heat of the moment.

Pilots may simply not know it's there (how often do we brief EMAS?) or act out of instinct. Which means incidents are still occurring where we're **swerving to avoid it.**

More on that in our original article below.

Original Article:

Across the US alone, over one hundred runways at 71 airports have a safety critical system fitted to help prevent a major cause of aviation accidents – **runway overruns.**

It's called **EMAS**, or 'Engineered Materials Arresting System', which is a technical of way of using drag to safely stop an airplane when all else fails. And better yet, it has your back in **all runway conditions** – water, snow, ice, you name it. It's a proven life saver.

But the problem is there are still accidents happening where **pilots have actively avoided it**, instead choosing to veer off the runway.

Why?

IFALPA recently put out a new position paper which may provide some solid clues. And along with work that others have done, the reasons seem to fit into one of two camps:

- **Knowledge about what EMAS is and does.**
- **In the heat of the moment, pilots just didn't know it was there.**

For such an effective safety system that protects crew, passengers and even those on the ground, is it possible that we're just not giving it the attention it deserves?

Let's tackle both camps.

EMAS 101

Dip into the regs and you'll see that the US FAA requires all airports to have runway safety areas. They are typically 500 feet wide and extend 1000' past the runway end, and are clear of obstacles in case an aircraft either overruns, or undershoots. Sounds safe, right?

But what if there isn't enough space? Take KMDV/Chicago Midway for example. It's not always practical. That's where EMAS comes into it. It achieves a similar level of safety, only using a lot less room.

It is essentially a concrete bed (or 'arrestor pad') of increasing depth which contains thousands of blocks of crushable material that are designed to quickly slow down an aircraft with little or no damage – likely your nose wheel, and that's about it.

And it works really well too. In fact, it's so effective it can stop an aircraft travelling as fast as 70kts – which is a good thing as 90% of all overruns happen below this speed.

It's not even a big deal to replace it – it's *modular.* Only the blocks that have been damaged need to be changed out.

Grass and dirt

Some EMAS pads are only 150' long. When faced with obstacles like trees, buildings, and roads it's no wonder that **the instinct is to avoid ploughing straight ahead.**

Instead, the grass and dirt off the side of the runway begins to look like a very appealing option to slow an airplane down. And as the FAA itself once phrased it, *'there's a myth that if you take the dirt, you won't be on the news...'*

But the reality is that **EMAS will do a far better job** and with a safer outcome and less damage.

What about approach lights?

Lights on an EMAS arrestor pad are designed to break away and do **very little damage to your ride.**

You may not know it's even there

This is where IFALPA get really stuck in. **Some crew actively steered away from EMAS** simply because they didn't know, or forgot, that it was there.

Knowledge is one thing, but *you can't brief what you can't see.*

Yellow chevrons indicate an EMAS arrestor pad, but there is no standardised *signage* in place for it. Take a look a look again at the list of US airports with it installed – if you operate in and out of any of them, how often are you thinking about EMAS?

And the story doesn't end with signage either. What about approach and airport charts? Leading chart manufacturers indicate where EMAS is present on ground charts only. But not on approach charts – the argument is that it won't fit.

It seems as though the work hasn't been finished just yet. EMAS is really effective, but as an aircraft departs the runway, there just isn't enough time to figure out it's there or not. And that all starts with crew

awareness with the tools available when ops are normal.

Regulators in the US and abroad need to be doing more to illuminate this valuable piece of safety tech. At least five hundred lives have already likely been saved because of it.

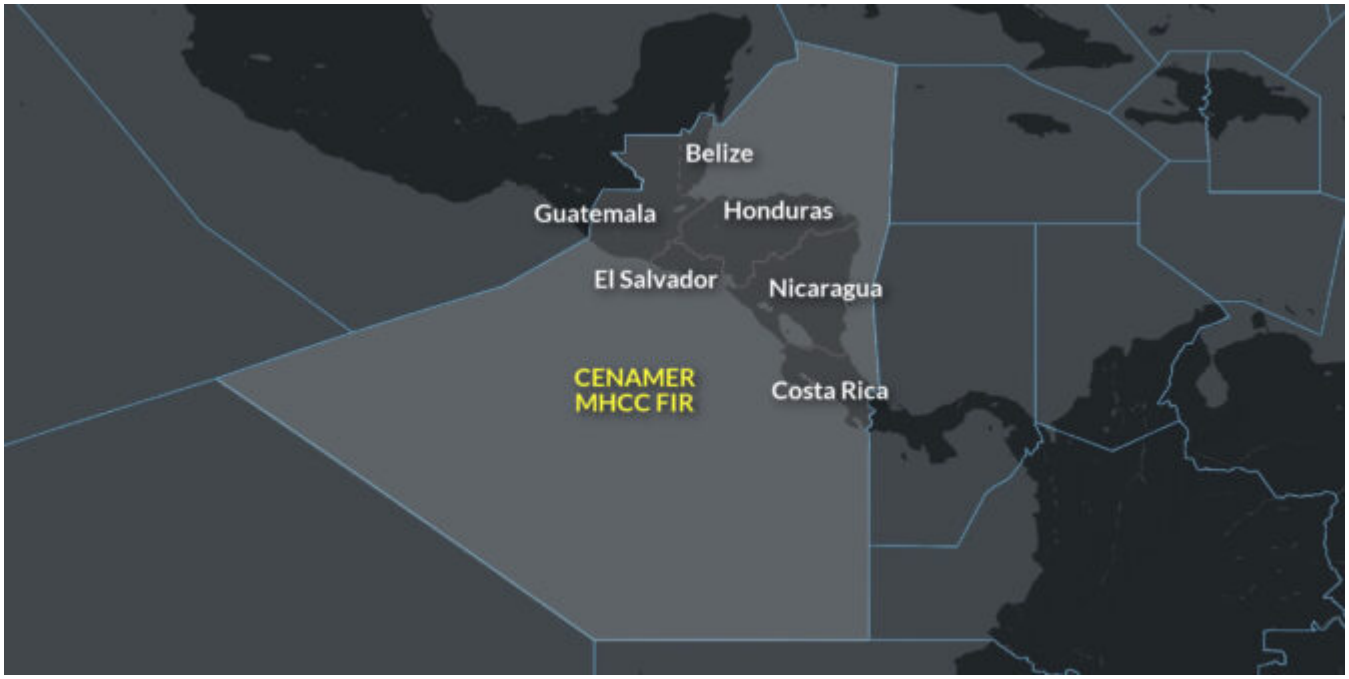
Knowledge is power

Which is certainly the case with EMAS. Combine both camps, and pilots (myself included) can understand how valuable an obscure sign that says 'EMAS' may be, and also know when it is available before you need it the most.

Only then will it live up to its full potential.

CENAMER Flight Planning Requirements

David Mumford
12 December, 2024



CENAMER is a combination of CENtral AMERican countries that work together as one for ATC Service. The controlling Authority is COCESNA. It's real name is the MHCC/Central American FIR – but most people just call it Cenamer. The actual controllers are in Tegucigalpa, Honduras, but control the airspace of **Belize, Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua.**

Recent Updates

- **Dec 2024: ADS-B Mandates.** Two of the six countries in the MHCC/Cenamer FIR are mandating ADS-B at the end of 2024. Guatemala will require it from Dec 31 (AIC 44/24), and El Salvador from Jan 1 (AIC 46/24). None of the other countries (Belize, Costa Rica, Honduras, Nicaragua) have published any ADS-B mandates yet. You can download the AICs here. *Note that the airspace above FL195 for all these countries is controlled by MHCC/Cenamer ATC based in Honduras.*
- **Dec 2021: New Honduras airport.** All scheduled international flights were transferred from MHTG/Toncontin to MHPR/Palmerola – the new international airport in Honduras which commenced commercial operations in Dec 2021. MHTG/Toncontin will now be used for domestic flights, but is still available for international bizav flights. Check our article for more info.
- **Oct 2020: New AFTN code when filing flight plans.** For flights through the MHCC/Cenamer FIR above FL195 you must include the AFTN address MHFPZYZX. This is the address of a new automated system they've got, which will check if you've written your flight plan properly (i.e. according to ICAO standards). If you have, you'll get an ACKNOWLEDGE (ACK) or ACCEPTANCE message, and the system will then fire it off to all of the individual countries within the MHCC/Cenamer FIR that you'll be overflying/flying to. If you've got it wrong, you'll get a REJECTED (REJ) or ERROR message, with the reason why, and you'll have to file it again.

The fabled "Cenamer Notification"

For flights intending to operate within the MHCC/Cenamer FIR **require notification**. Every FIR worldwide requires the same thing, but because of the grouping of countries, the process is a little different here. A

pre-formatted AFTN message must be sent containing the flight details and planned schedule, to both the AIS office, and to the various billing departments.

The latter is most important, because it give them the opportunity to warn in advance if airspace entry will be denied because of **unpaid Navigation Fees**. The Cenamer Notification confirmation is normally in the format MPTOXXXX192330, being the originating AFTN address and a date/time stamp.

Notification Requirements

Notification: All flights entering the MHCC/Cenamer FIR must send notification 48 hours prior to entry.

Documents Required: None.

Lead Time: Official requirement is 48 hours before flight. Notification can be made up to 1 hour prior to airspace entry, but there is a risk that not all departments will have had time to process the message. Assuming there are no billing issues, denial of entry into the airspace is unlikely.

Validity: Once notification is made, there is no need to revise it for a new schedule. The Notification can be considered valid for 72 hours.

Permit Format: Confirmation is normally in the format MPTOXXXX192330, being the originating AFTN address and a datetime stamp. FPL Field 18 entry is not mandatory, but you can include it as PERMIT/CENAMER NOTIFICATION MPTOXXXX192330.

Do I need AFTN access to make this happen?

They do have this website where you can **check whether an aircraft reg has any outstanding payments:** https://apps.cocesna.org/fycbilling/pages/fyc/fycbilling.jsp

It also allows you to calculate the approximate cost of a flight depending on the point of entry and exit into the airspace. Then you can calculate the total cost (any outstanding fees + the fees for your upcoming flight) and pay online.

You can also **contact COCESNA direct** (facturacionycobros@cocesna.org, invoices@cocesna.org), in good time prior to the flight, requesting details of any outstanding navigation charges and a copy of the invoice. But their office is only open from 8am to 4pm, Monday to Friday, so you might not receive a reply right away to say that everything is paid. In this case, you'll need AFTN to file the Notification and to follow-up with any countries which reply to say you owe them nav fees.

Also – if you **don't** receive an email reply and there **are** outstanding charges, you'll only know about it when you come to file your flight plan, at which point you'll receive a reply on AFTN from the specific country (or countries!) you owe money to. At this point, you're at their mercy as to whether they **accept or reject your flight plan** – and you may not have time to pay for any outstanding charges. These individual countries won't email you, they'll send you a message via AFTN (to the same address you use to file the Notification).

Bottom line, whoever files your Notification (and then, later, your actual flight plan) **will need access to the AFTN system** so that they are able to reply to these messages as they come through – and to check to make sure that your flight plan is accepted! This is where using a third party agent for overflights in this region can come in handy, as they should manage this whole process for you and communicate with all the relevant countries via AFTN.

Which AFTN addresses do I send messages to, and what should I say?

Your message should read something like this:

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CENAMER NOTIFICATION OF FLIGHT REF XXXX
PLEASE ADVISE IF ANY OBJECTION TO OPERATE

AIRCRAFT: XXXXX
CALLSIGN: XXXXX
TYPE: XXXXX
OPERATOR NAME: XXXXX
DATE OF FLIGHT: 20DEC2020

PLEASE CONFIRM RECEIPT OF THIS NOTIFICATION
PLEASE CONFIRM OK TO OPERATE BY AFTN TO (INSERT YOUR AFTN HERE)

SCHEDULE:
20DEC ETD KDEN1300 ETA SBGR2230

NAVIGATION FEES SETTLED BY: XXXXX
OPERATOR: XXXXX
EMAIL: XXXXX

COPY TO ALL CONCERNED:

MHCCYSYX/CENAMER CONTROL
MHCCZQZX/CENAMER CONTROL FPL
MHTGYAYX/HONDURAS CAA
MHTGYOYX/HONDURAS AIS
MHLMYGYX/HONURAS RCO
MROCYAYX/COSTA RICA CAA
MROCYOYX/COSTA RICA AIS
MROCYGYX/COSTA RICA RCO
MNMGYAYX/NICARAGUA CAA
MNMGYOYX/NICARAGUA AIS
MNMGYGYX/NICARAGUA RCO
MSLPYGYX/EL SALVADOR RCO
MSSSYAYX/EL SALVADOR CAA
MSSSYOYX/EL SALVADOR AIS
MGGTYAYX/GUATEMALA CAA
MGGTYOYX/GUATEMALA AIS
MGGTYGYX/GUATEMALA RCO
MZBZYAYX/BELIZE CAA
MZBZYGYX/BELIZE RCO
```

And here’s the list of AFTN addresses to send it to:

```
MHCCYSYX
MHCCZQZX
MHTGYAYX
MHTGYOYX
MHLMYGYX
MROCYAYX
MROCYOYX
```

MROCYGYX
MNMGYAYX
MNMGYOYX
MNMGYGYX
MSLPYGYX
MSSSYAYX
MSSSYOYX
MGGTYAYX
MGGTYOYX
MGGTYGYX
MZBZYAYX
MZBZYGYX

Is the Cenamer Notification the same as an Overflight Permit?

No. It's important to note that this is **not a permit**, this is just to ensure the Cenamer countries receive notification of your planned flight, and can check for any unpaid Navigation Fees. Each individual country in this region requires an **overflight permit** as well (except for El Salvador and Costa Rica, if you're operating a private flight).

For more information on permit requirements, OPSGROUP members can use the dedicated Permits App in your Dashboard. If you're not a member, you can get a copy of the same information in our Permit Book, or alternatively, join OPSGROUP here!

Dodging Danger: The Three Routes Through the Middle East

Chris Shieff
12 December, 2024

Navigating the airspace of the **Middle East** has become a major headache for international operators.

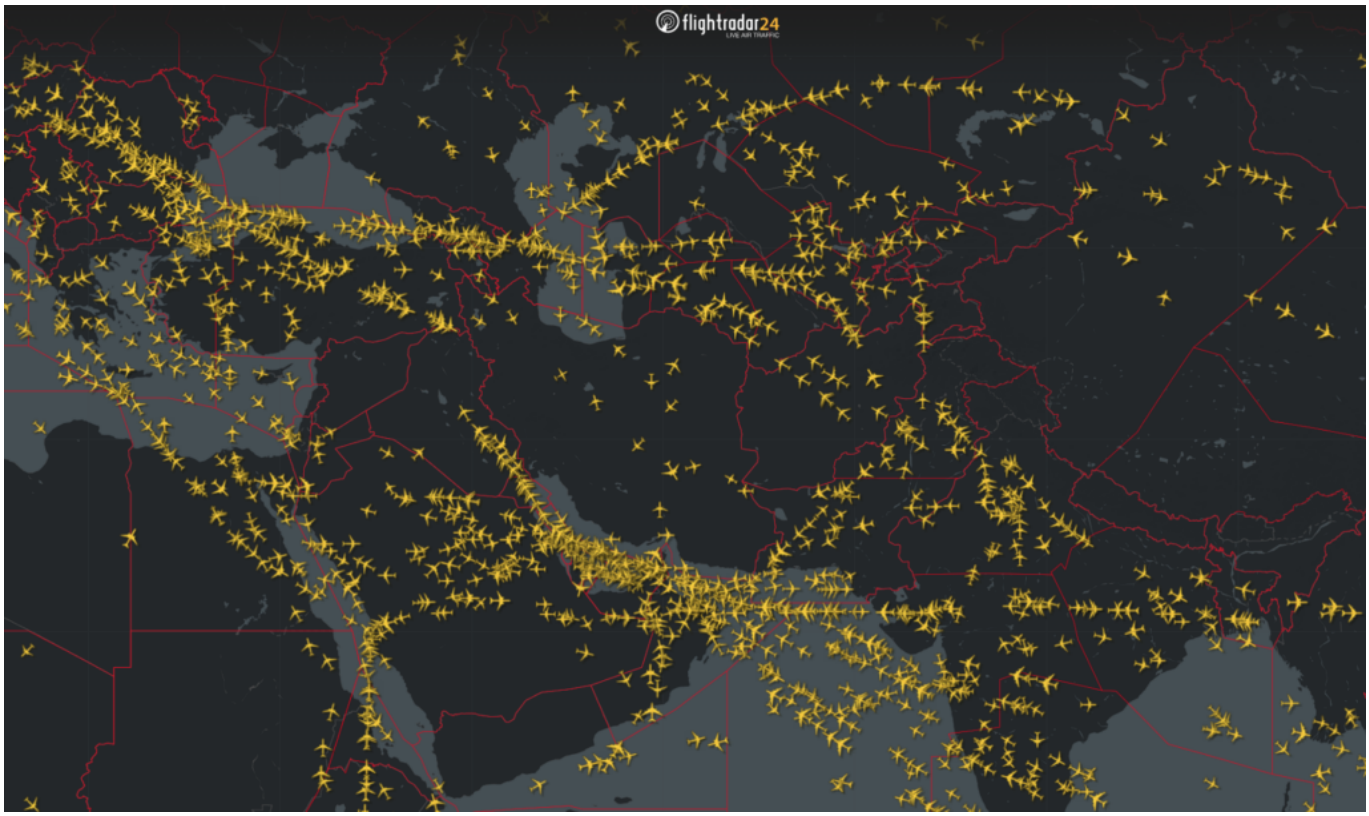
In recent times, risk to civil aviation in the region has changed at a pace we have never seen before.

Transits are now faced with a common conundrum: it no longer seems to be a simple question of *'is this route safe?'* but instead, of one's own appetite for known risks.

There simply is **no 'risk-zero' route available.**

Therefore, a common question that bizav operators are asking OPSGROUP is '*what are the major airlines doing?'* A snapshot of flight tracking right now shows that Middle Eastern transits are managing risk through the use of three distinct routes:

- **South** via Saudi Arabia and Egypt
- **Central** via Eastern Iraq and Turkey.
- **North** via the Stans and the Caspian Sea.



This article provides a **brief risk profile** for each of these routes to help operators carry out their own risk assessments when choosing a route to fly.

A Note About Risk

OPSGROUP also runs safeairspace.net – a database of all **state-issued airspace warnings**, along with risk briefings for each country in plain simple English.

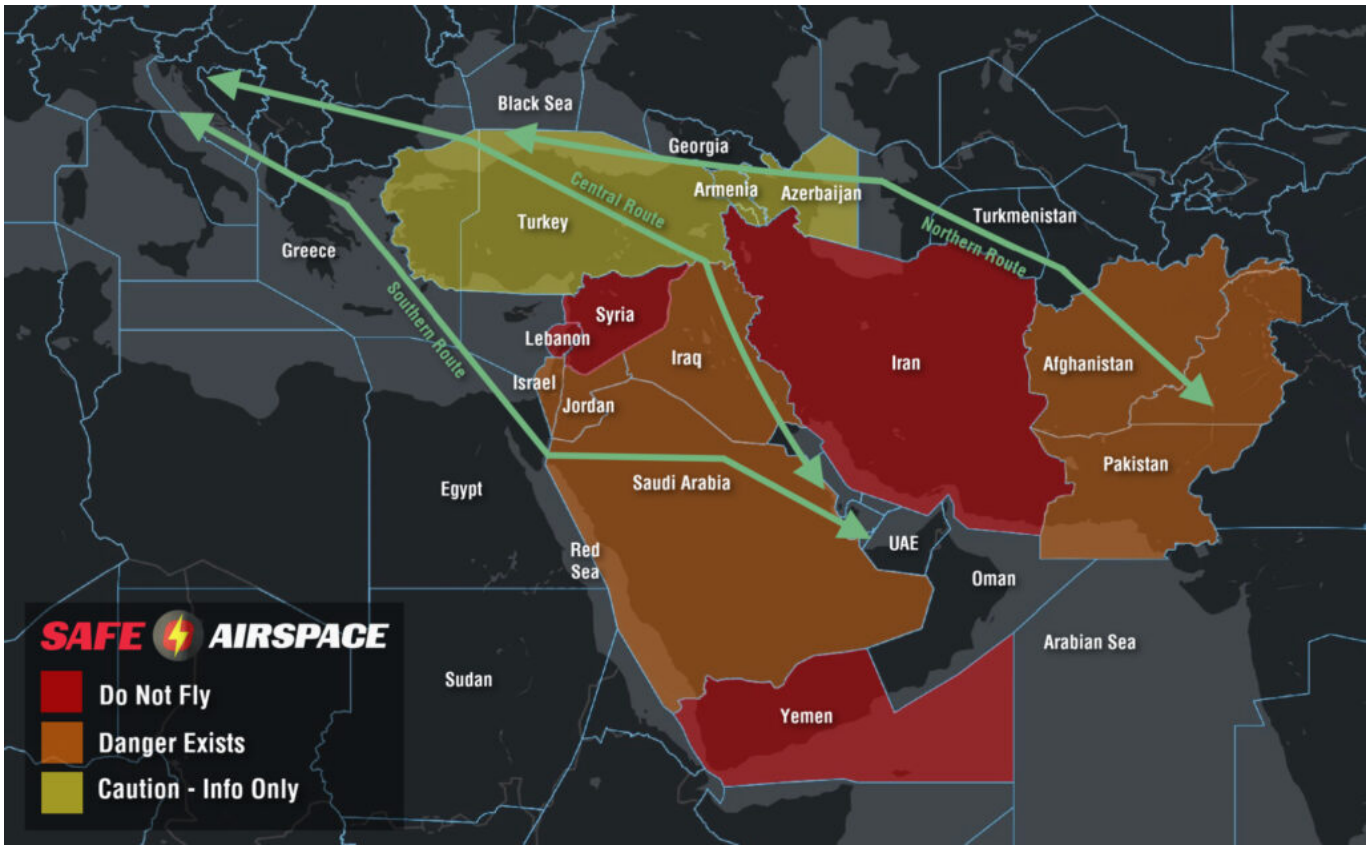
We take into account both official advisories, recent and past events, advice from other specialists and potential for emerging risk when making a risk assessment.

To keep things simple we have three levels:

- **Level 1 Do Not Fly (Red)**
- **Level 2 Danger Exists (Orange)**
- **Level 3 Caution (Yellow).**

None of the three routes above enter any country's airspace we have classified as 'Do Not Fly.'

For the rest, you'll see the map below is color coded according to the same risk profile.



The Southern Route

This route begins with a lengthy crossing of Saudi Arabia, steering clear of Israeli and Lebanese airspace to the north before crossing the Red Sea into Egypt.

It's considered advantageous because it keeps tracks miles down (compared to the Northern Route) and avoids the potential for a sudden escalation of hostilities between **Israel** and **Iran.**

From a contingency perspective, it also provides **safer diversion options** than a transit of Iraq.

But now for the more-risky stuff.

The Houthi Campaign:

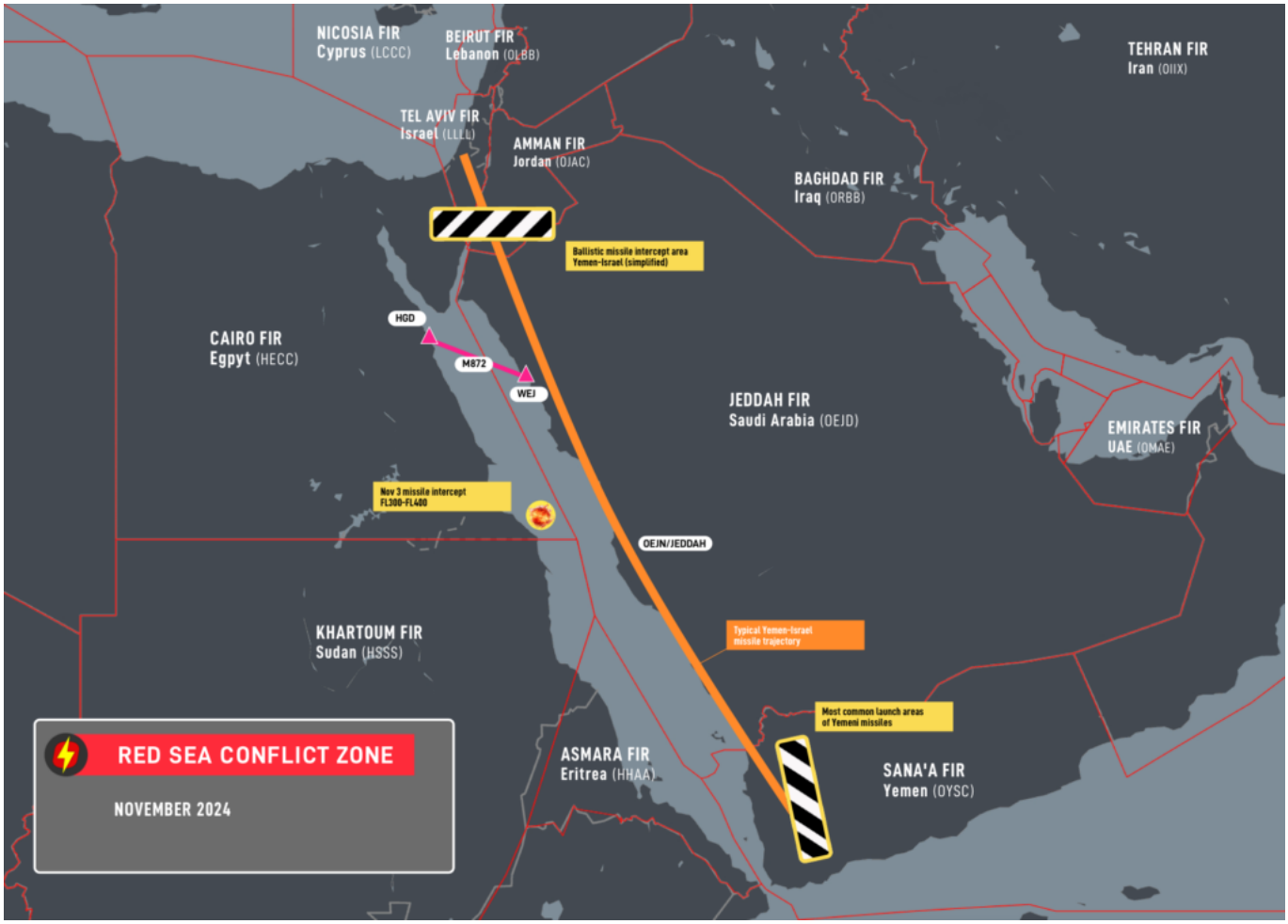
There is currently heightened risks to civil aviation in this area.

Houthi Rebels in **Yemen** are currently engaged in a long-term campaign to use **missiles and drones** to target Israel (therefore infringing the Jeddah FIR) along with shipping channels in the **Red Sea.**

The military response to these activities is the use of **air defence systems** to destroy them.

The latest incident occurred on Nov 3, where a crew witnessed the interception of a missile at a similar

level in open airspace near **Jeddah**. OPSGROUP members can access a special briefing on this latest event here.



Of particular concern to aircraft at altitude is the use of ballistic missiles which originate from Western Yemen and are destroyed by defensive intercepts while on descent toward their target – which puts the airspace of **Northern Saudi Arabia** at heightened risk given its proximity to Israel and Gaza.

This essentially creates three risks to overflying aircraft – a direct hit by a missile (extremely unlikely), debris fields from inflight break ups or successful interceptions, and **misidentification**.

For the latter, many well-known incidents affecting civil aviation have come from **mistaken identity**. Malaysia 17, Ukraine 752 and Iran Air 652 were all due to misidentification.

Egypt ATC Congestion:

OPSGROUP has received several recent member reports of **severe frequency congestion** in the Cairo FIR apparently due to ATC overload.

One crew even reported that during an entire portion between the North Coast of Egypt to the Red Sea (MMA – M872 – SILKA) that they were **unable to talk to ATC.**

The corridor is much busier than usual which may present latent threats. Good airmanship at this time would be to keep a close eye on TCAS, ensure all anti-collision lights are on and consider the use of a PAN call if a deviation becomes necessary without a clearance.

We have approached both the Egyptian CAA and ANSP for feedback and have yet to receive a response. If you have experienced this yourself in the **HECC/Cairo FIR**, please get in touch with us at team@ops.group.

The Central Route

This more conventional route tracks northwards along the Persian Gulf before an extended transit of **Eastern Iraq** using the UM860 and UM688 airways which run parallel to Iranian airspace before crossing **Turkey** and a southern portion of the **Black Sea.**

The overriding question from this route is *"is it safe to overfly Iraq?"*

In our opinion, yes but with some disclaimers.

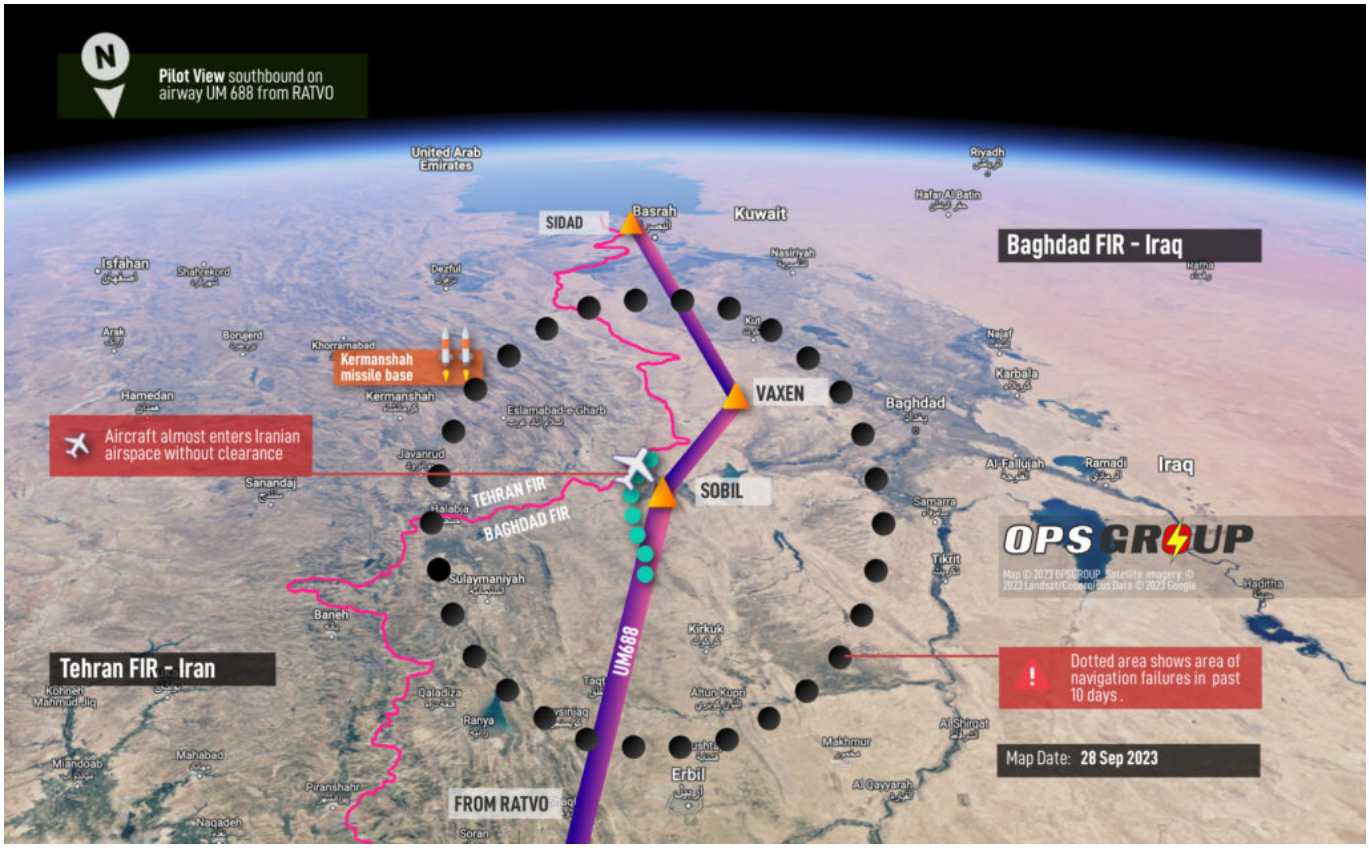
UM860/UM688 Airways:

The UM860/UM688 have been **considered safe** for a long time. And prior to 2021, remained the only option available for **US operators** to enter the **Baghdad FIR** at all.

They continue to see heavy traffic by major carriers and can be considered a viable option.

When using them, an important consideration is their **proximity to Iranian airspace.** Due to the recent escalation in hostilities between Israel and Iran, many states prohibit operators from entering the Tehran FIR due the risk of anti-aircraft fire at all levels.

Extensive **GPS interference** (including spoofing) can be expected in Northern Iraq and on at least one occasion has led an aircraft to almost inadvertently enter Iranian airspace without a clearance.



Extra vigilance for the early signs of GPS interference is essential for the safety of this route, along with early notification to air traffic control if it is suspected. Radar vectors remain your best fail safe.

Also beware of the potential for sudden closures of the **ORBB/Baghdad FIR** should further fighting occur between Israel and Iran. It closed completely during recent Israeli airstrikes and remains geographically sandwiched between the two, along with Jordan and Syria.

Free Routing:

In 2021, the FAA changed the rules. A new SFAR was issued that allowed N-reg overflights anywhere in Iraqi airspace, provided they're conducted **at or above FL320**, which has opened-up new options for free routing.

Great for fuel, but arguably not safety. We continue to advise against flights away from the above airways due to well publicized risks of militant and terrorist activity which may target civil aircraft with **anti-aircraft weaponry.**

They may also be misidentified by air defense systems targeting drones which are frequently used to conduct attacks in Northern Iraq that originate from Turkey and Iran.

Crew and passenger safety is also an important concern should an emergency landing be required.

Turkey (beware of GPS interference):

We maintain a low-risk rating of caution for Turkey. As two of the three routes in this article include a lengthy overflight of the country, it is worth touching upon why any risk rating has been applied at all.

There is minor risk to overflights from misidentification by local militia who infrequently target Turkish military aircraft with anti-aircraft weaponry. This risk is predominantly near the border with Syria and Iraq where a higher level of airborne military traffic and UAS is present.

Far more prevalent is GPS interference – there have been frequent reports of both jamming and spoofing

by aircraft well inside Turkish airspace. It appears to be common throughout the LTAA/Ankara FIR, especially anywhere near the border with Iran or Iraq. PIREPs also extend to Turkish airspace over the Black Sea. Reports share very similar symptoms: Un-commanded turns, position errors, and multiple GPWS warnings. The spoofed locations tend to center on Sevastopol on the Crimean Peninsula – a difference of between 120-250nm from the actual aircraft position. OPSGROUP members can access a special briefing on this hazard here.

The Northern Route

This is the route being favored between destinations in Europe and India/South East Asia.

It begins with a transit of Pakistan, before an uncontrolled crossing of Afghanistan and into Turkmenistan. A westerly turn is then made cross the Caspian Sea, Azerbaijan, Armenia and Turkey before rejoining the central route over the Black Sea.

While a fairly conservative option, it is the longest in terms of track miles.

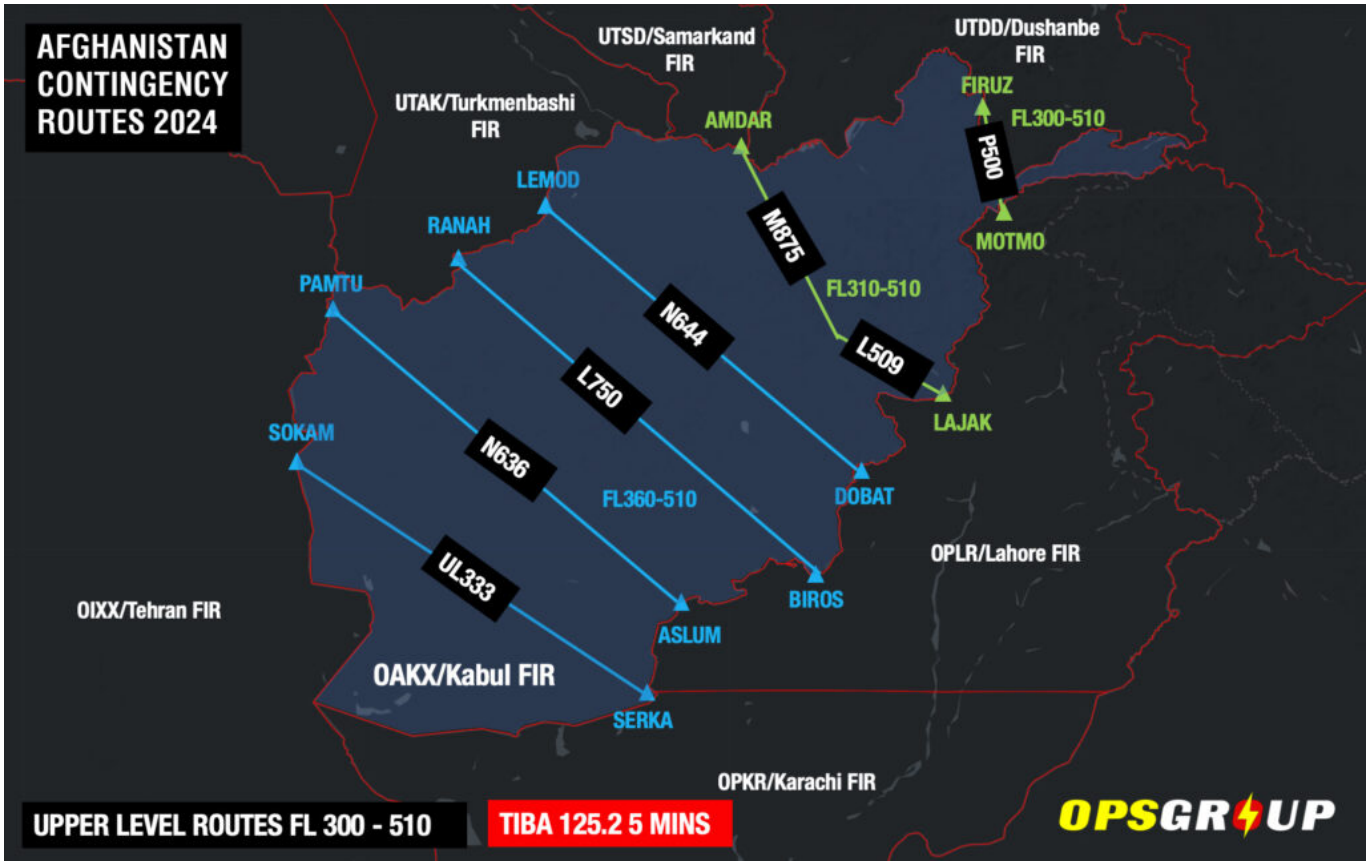
Afghanistan:

For all intents and purposes, airspace safety in the **Kabul FIR** has not changed since the Taliban re-assumed control of the country in late September 2021.

The entire FIR remains **uncontrolled** and there is no guarantee of crew or passenger safety if you need to land. In that sense it remains the most important consideration in the selection of this route.

With that said, adjacent FIRs are managing the entry and exit of traffic and separating them with miles-in-trail and level restrictions.

Once inside, fairly robust contingency procedures (including the use of TIBA) appear to be working, with major carriers the likes of Lufthansa and KLM making **safe crossings** every day.



Aside from potential **insurance complications** of extended flight in uncontrolled airspace, it seems the predominant risk for overflights is what happens if you have an emergency and **need to divert.**

The overriding consensus (along with common sense) is **don't land in Afghanistan.** In our recent article we explained it would be wise to consider it akin to ditching i.e. a last resort. Careful consideration of critical fuel scenarios to clear the Kabul FIR in event of de-pressurization, engine failure or both is essential to moderate this risk.

Azerbaijan and Armenia:

We maintain a level of caution for overflights of these countries given their history of conflict, but for now the risk to overflights remains low.

A ceasefire agreement is in place, and most states have lifted their airspace warnings for the **YDDD/Yerevan** and **UBBA/Baku FIRs**.

When sporadic fighting has occurred, it has been confined to border regions. A contingency to keep to mind is the use of northerly waypoints BARAD, DISKA and ADEKI to avoid the area and **transit from Azerbaijan through Georgia instead.**

Stay Informed

The situation in the Middle East has recently proven that **airspace risk can change quickly and without warning.**

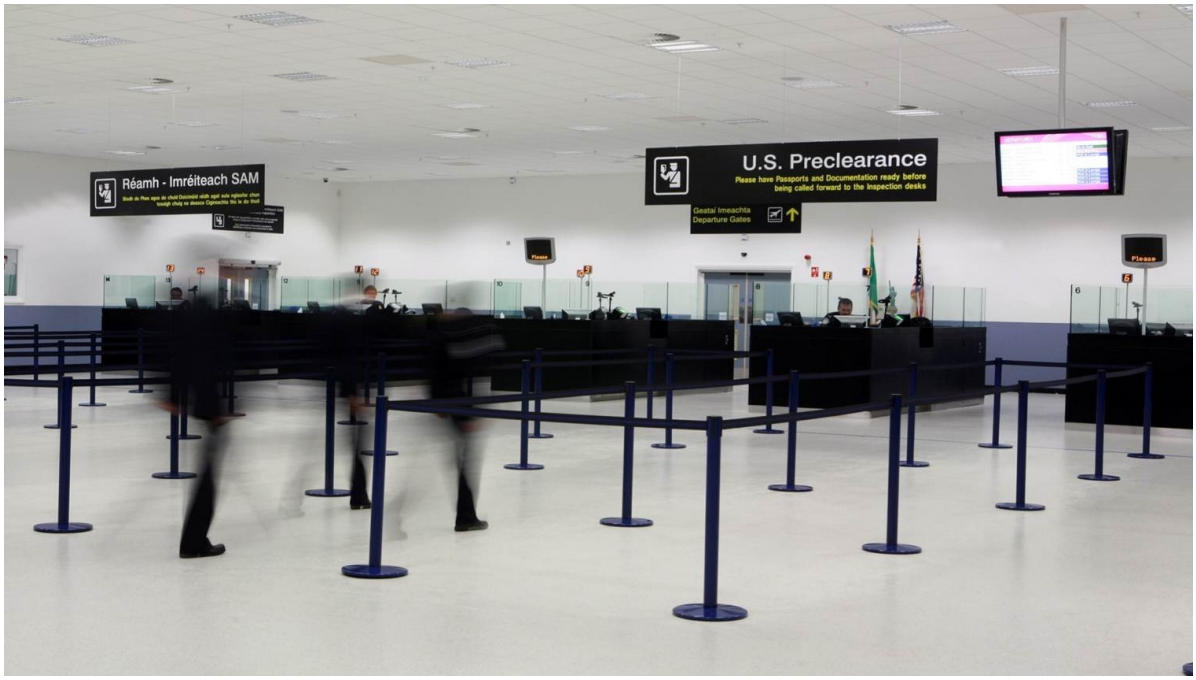
Overflights need to stay informed and have good contingencies in place to manage unexpected re-routes and airspace closures, along with suitable diversion airports.

OPSGROUP issues Ops Alerts for members on a daily basis, but our risk and security alerts are also available for free on safeairspace.net which our team keeps updated around the clock.

If you have more questions, you can get in touch with us on team@ops.group. We'd love to hear from you.

US Pre-Clearance: How does it work?

David Mumford
12 December, 2024



What is US Customs and Border Protection Pre-Clearance?

This service basically allows aircraft flying from certain approved airports direct to the US to complete their entry procedures at their departure airport – instead of on arrival in the US.

Where can I do it?

If you're a bizav flight (i.e. private or charter), you can only do it at **EINN/Shannon** and **TNCA/Aruba.**

Scheduled airline flights can do it at these airports too:

- ***The United Arab Emirates*** *– OMAA/Abu Dhabi*
- ***The Bahamas*** *– MYGF/Freeport or MYNN/Nassau*
- ***Bermuda*** *– TXKF/Bermuda*
- ***Canada*** *– CYYC/Calgary, CYEG/Edmonton, CYHZ/Halifax, CYUL/Montreal, CYOW/Ottawa, CYYZ/Toronto, CYVR/Vancouver, or CYWG/Winnipeg*
- ***Ireland*** *– EIDW/Dublin*

Where can I fly to in the US once I've Pre-Cleared?

Turns out it's not that easy to find a list of US airports approved for the arrival of Pre-Cleared aircraft. But thanks to Signature FBO at EINN/Shannon, here is a copy:

Finding a list of US International Airports of Entry is pretty easy, just go to the CBP website and use their interactive map. But it's worth noting that **not all US International Airports of Entry are on the list of those approved to accept Pre-Cleared flight**s, due to lack of agriculture agreements, and/or local CBP agreements there.

How does Pre-Clearance work in reality?

US CBP has published this guide on exactly **how the Pre-Clearance service works**, but here's the lowdown:

1. **Request the service with CBP** – Get in touch with CBP telling them that you want to do it! Pass them a bunch of information – details about the flight, passengers and crew. You can do this step through your ground handler (recommended).
2. **Submit APIS** – Slightly tricky here, because for Pre-Clearance you have to submit this no less than one hour before the scheduled Pre-Clearance processing time itself, rather than the departure time from the Pre-Clearance airport. For example, you want to fly from EINN-KALB at 2pm, and you've got your Pre-Clearance set up for 1pm, so that means you need to file your APIS no later than 12pm!
3. **Pre-Clearance approval** – US CBP will email notice of approval, including the appointment confirmation number.
4. **The Pre-Clearance procedure** – When you arrive at the Pre-Clearance airport, CBP will conduct the same procedures as if you were at an airport in the US. Travelers and luggage are screened and the aircraft is inspected.
5. **Departure** – Crew, passengers and luggage board the aircraft, and off you go. (And remember – no opening of any aircraft doors from this point before departure!) The kindly CBP chaps you've just dealt with will zap your info across to their counterparts at whichever US airport you're flying to, so everything should be nice and smooth on arrival.
6. **Arrival** – Upon arrival in the US, bag up your garbage for CBP to collect. Note that if you have to land somewhere other than where you said you'd be landing in your APIS, Pre-Clearance approval will be voided and you'll have to go through the normal entry process.

Remember, if you're a bizav flight, you can only do Pre-Clearance at EINN/Shannon Airport or TNCA/Aruba. So here's some info specific to both of these airports…

Pre-Clearance at EINN/Shannon

One of the FBOs there is **Signature Aviation**, and they have provided a summary of what you can expect when you Pre-Clear, with a few more details than the basic summary above. You can download the PDF here, but key points are: you must give 24hrs notice, and the CBP office opening hours are 0900-1700 local each day with out of hours available between 0700-0900 and 1700-2100 local. You can contact them at snn@signatureflight.ie.

Pre-Clearance at TNCA/Aruba

Jet TNCA is the only FBO at Aruba, and they can provide Pre-Clearance to bizav flights. They need 24hrs notice, it costs $315, and CBP there are open from 0930-1100 and 1530-1700 local time each day (not available on afternoons at weekends). You can find more info here, and contact them at ops@jet-tnca.com.

A note on the US Virgin Islands

Technically, airports in the Virgin Islands "offer" this service too, but it's not really Pre-Clearance in the same sense as at EINN and TNCA – here it's actually more of a requirement than an optional extra. The US CBP say the following:

For flights leaving the USVI enroute to other United States locations, GA aircraft operators are required to contact CBP in the USVI prior to departure. Aircraft cannot be moved from the U.S. Virgin Islands to other U.S. locations until CBP Agriculture Specialists (CBPAS) have:

- *had the opportunity to inspect the aircraft;*

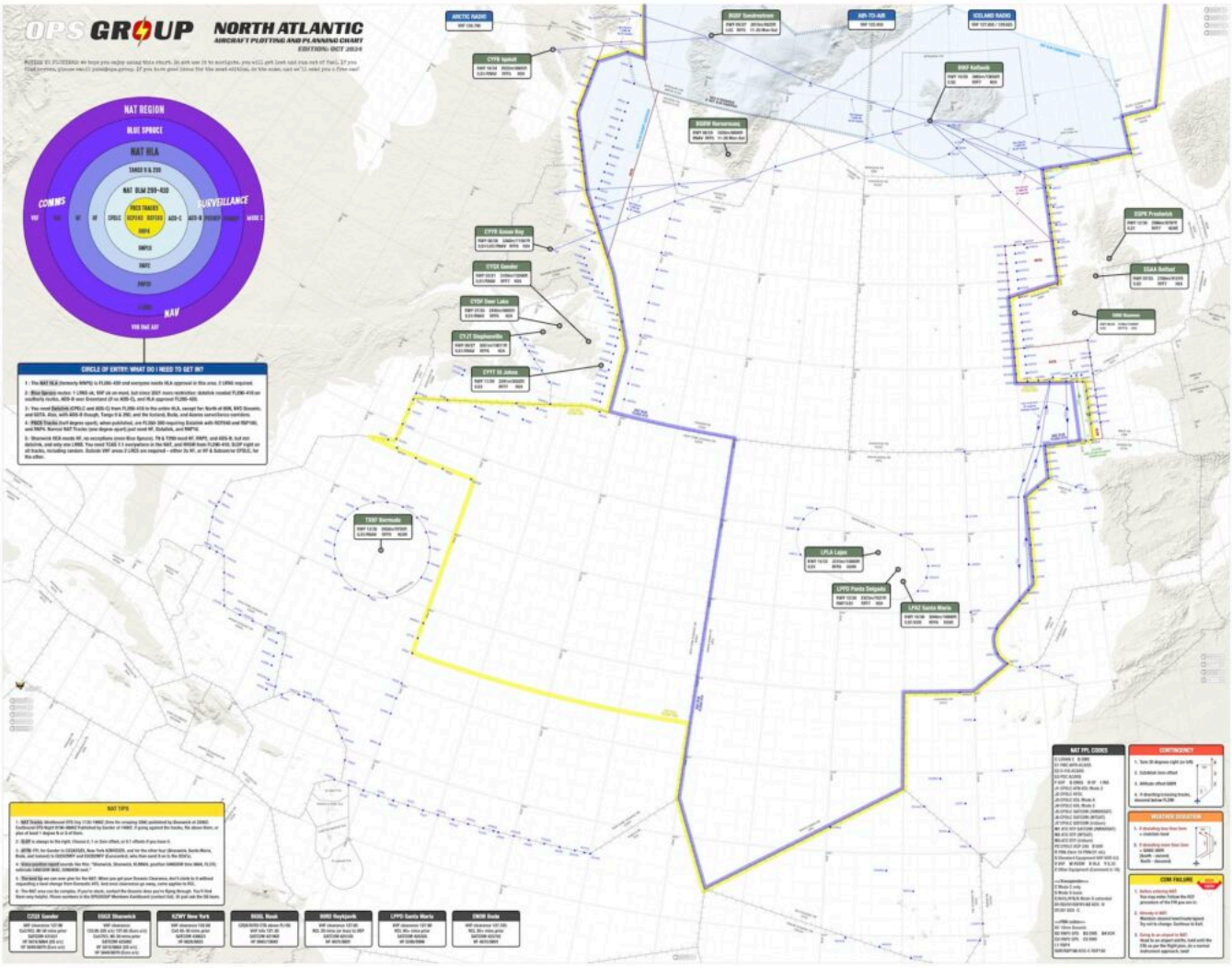
- *crew, and passengers; and*
- *the CBPAS has provided clearance for departure from the USVI.*

Standard Aviation FBO at TIST/St Thomas say that Customs requires a minimum notice of 2hrs in advance of the appointment time. Appointments are available 7 days a week from 0800-1630 local, and it costs $250. Contact them at ops@sa-stt.com.

2025 North Atlantic Plotting & Planning Chart

David Mumford
12 December, 2024

The new OPSGROUP NAT/North Atlantic Plotting and Planning Chart 2025 is released today! This is our chart showing North Atlantic Oceanic Airspace and adjoining domestic airspace, with easy to read NAT Tips, Airspace Requirements, Emergency Procedures, and much more!



OPSGROUP members – you can grab a copy in your Dashboard. View it on your iPad or Laptop etc. as a PDF, or print it out! If you're not a member, read on for how to get a copy…

Changes in this NEW edition (Oct 2024):

- **FULLY UDPATED** for 2025!
- **UPDATED!** NAT Tips – using NAT Tracks, SLOP, filing an Oceanic Flight Plan, and helpful tips.
- **UPDATED!** Quick reference for contingency, weather, and comms failure with easy graphics.
- **UPDATED!:** NAT Airspace Circle of Entry 2025 – easily check what you need for Nav, Comms and ATC Surveillance depending on which bit of the NAT you will be flying through.
- **Additional** diversion airports, now 16 total primary NAT alternates with runway, approach, length, RFF, and hours.
- **Easy view** of boundaries for HLA and DLM/Datalink mandated airspace.
- **Updated** NAT FPL codes, clearance frequencies, Satcom, and HF.
- **Fully updated** "South East Corner" with new Tango routes.
- and … Treasure Boxes!

Other chart features:

- Requirements for NAT tracks, PBCS tracks, datalink mandate.
- Common NAT Diversion Airports.
- Runway Orientation, Length, best IFR Approach.
- RFF Category and Opening hours.
- NAT FPL Codes and sample FPL.
- Blue Spruce routes and equipment requirements.
- All NAT Entry/Exit points with associated required landfall fixes.

There are two options to download a copy of the NAT Chart:

OPSGROUP Members

You can get it in your Dashboard, under **Briefings and Guides**.

Get it from the OPSGROUP Store

Not a member? Get a copy from the **OPSGROUP Store**.

Member Meetup – NAT Special: Nov 6, 1500 UTC

David Mumford
12 December, 2024

Member Meetup November 2024

- November 6, 1500 UTC
- North Atlantic Special
- Release of 2025 NAT Guide and NAT Plotting/Planning Chart
- **Non-members welcome** to attend this one (see below)

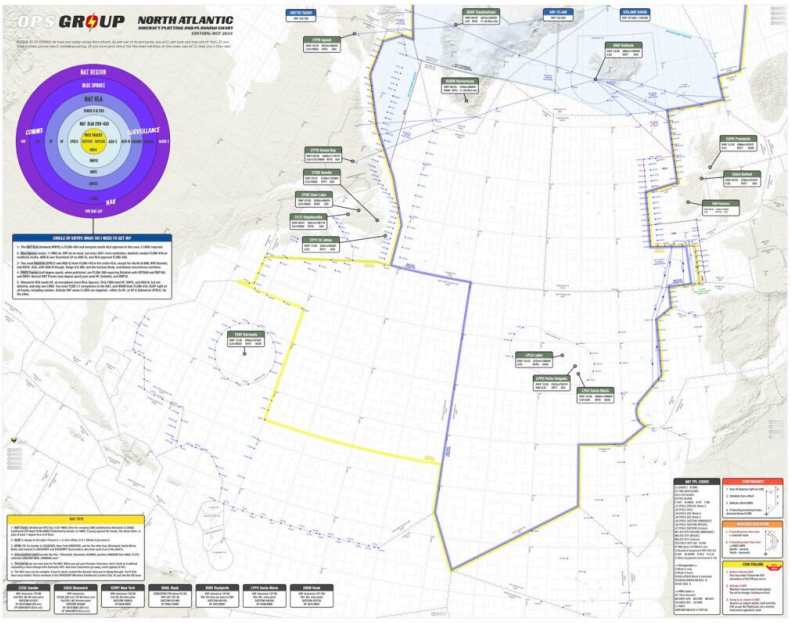
Member Meetup November 2024

Hi everyone! This months OPSGROUP Member Meetup has a special focus: the North Atlantic (NAT), and upcoming changes. This will be the final monthly meetup for 2024. (□□□)

Here is the running order of topics – yes, a long list!

- Blue Spruce Routes removal.
- Oceanic Clearance Removal (Shanwick/Gander) coming up on Dec 4th.
- PBCS Half-Track usage.
- Use of RNP4 on the NAT, more than advertised.
- Current “Hot Errors” to avoid.
- FL280 operations.
- New NAT Doc 007 scheduled for March 2025.

- **New OPSGROUP NAT Chart 2025** released today! (download your copy here)



We'll also look at:

- New ICAO Doc 4444 coming later this month.
- FF-ICE.
- Greeland big changes for ETOPS/Alternate availability.
- OPSGROUP NAT Guide 2025 walk-through.

Join fellow members to say hello, meet some new people, discuss the latest in international ops, and get the latest from the OPSGROUP Team.

OPSGROUP Members

Save your spot: Register here!

OPSGROUP Member Meetup: **November 6th 1500 UTC** (on Zoom)
In local times: 10am, New York / 3pm, London / 4pm, Amsterdam / 7pm, Dubai

Non-Members

For this particular NAT Special, we are inviting non-members to participate. The North Atlantic update portion is open to everyone.

OPSGROUP NAT Special: **November 6th 1500 UTC** (on Zoom)
In local times: 10am, New York / 3pm, London / 4pm, Amsterdam / 7pm, Dubai

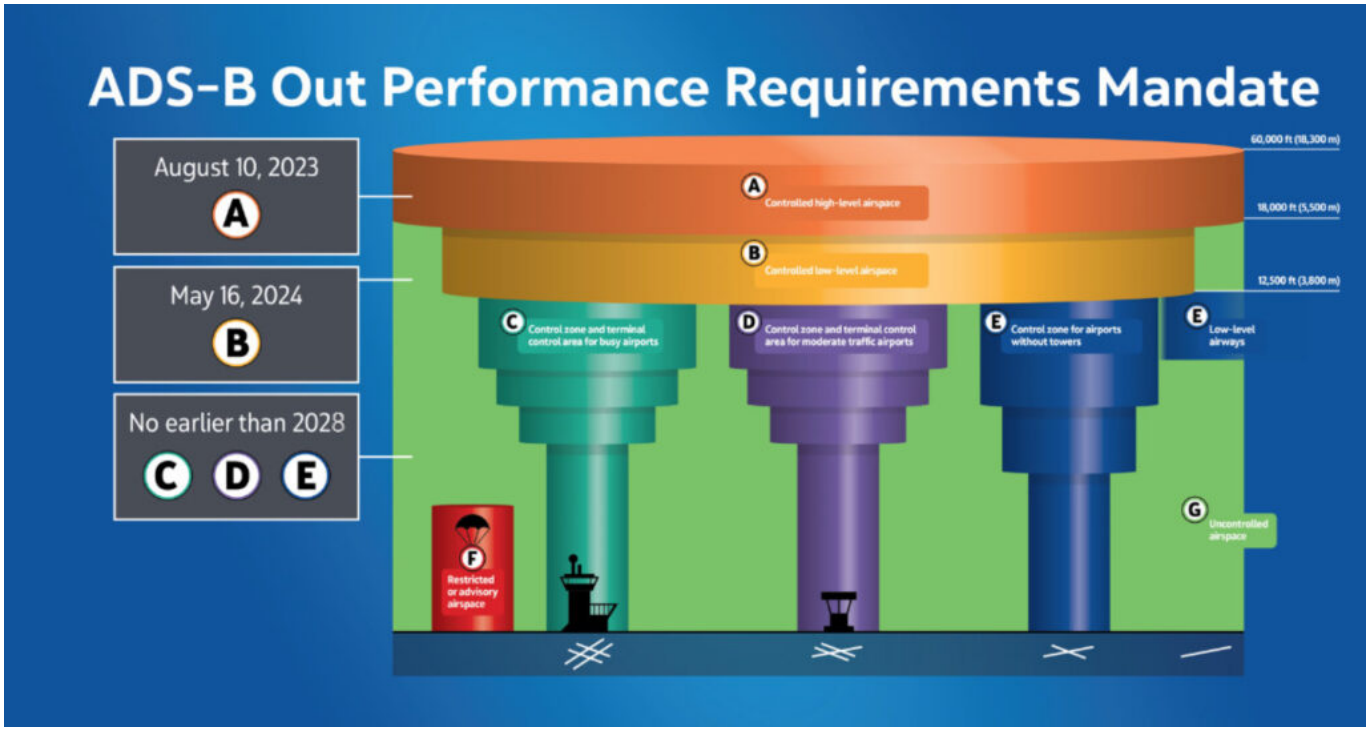
Use **this link** to register for the call.

Canada ADS-B Mandate

Chris Shieff
12 December, 2024

Key Points

- **ADS-B became mandatory in Canadian Class A airspace in Aug 2023 (above FL180). It then became mandatory in Class B airspace (above FL125) in May 2024. Mandates in any Class C, D and E airspace will be determined no sooner than 2028.**
- **You need an antenna able to broadcast to ADS-B receivers both on the ground and in space, and you need to include some extra stuff on your flight plan.**
- **If you don’t have ADS-B, you have to apply for an exemption online from NavCanada.**



What equipment do I need?

- A transponder with **ADS-B out capability** that meet the minimum performance standards (or better) found in this fancy document. This needs to be attached to an antenna that can broadcast to ADS-B receivers both on the ground, and in space.
- You can also find more on this in section 551.103 of the **Canadian Aviation Regulations.**

Extra Flight Planning Requirements

- If you plan on entering airspace where the ADS-B mandate applies, there is some extra stuff you need to include in item 10b of your **ICAO flight plan** (assuming you have all the right gear on board).
- Use the code **B1** if you have ADS-B Out only, or **B2** if you have ADS-B In *and* Out.
- You'll also need to include **SUR/CANMANDATE** in item 18.
- **One other gotcha** – make sure the flight identification (flight number or aircraft reg) broadcast by your ADS-B equipment exactly matches the one used in item 7 of your flight plan. Lest there be trouble down the track!

My ride doesn't have this fanciness. What are my options?

- NavCanada will do their best to accommodate aircraft who don't have the right gear on board, in the same way they'll work to fit non-transponder equipped aircraft into transponder mandatory airspace.
- They'll assess each application on a **first-come, first-served basis.** It takes time to figure out behind the scenes, and so you'll need to ask **at least three business days** before your flight.
- There may also be suggested re-routes to make your request possible, along with special comments to include in Item 18 of your flight plan.

- **You can apply for an exemption online, here.** If you have a number of flights to operate, you can also submit a blanket request via service@navcanada.ca.

More Info

You can find that in the Canadian AIP (ENR 1.6.3), or even better – this page from NavCanada dedicated to the ADS-B Mandate. This includes a fairly extensive FAQ section at the bottom.

Greenland NAT Alternates – Major Changes Coming

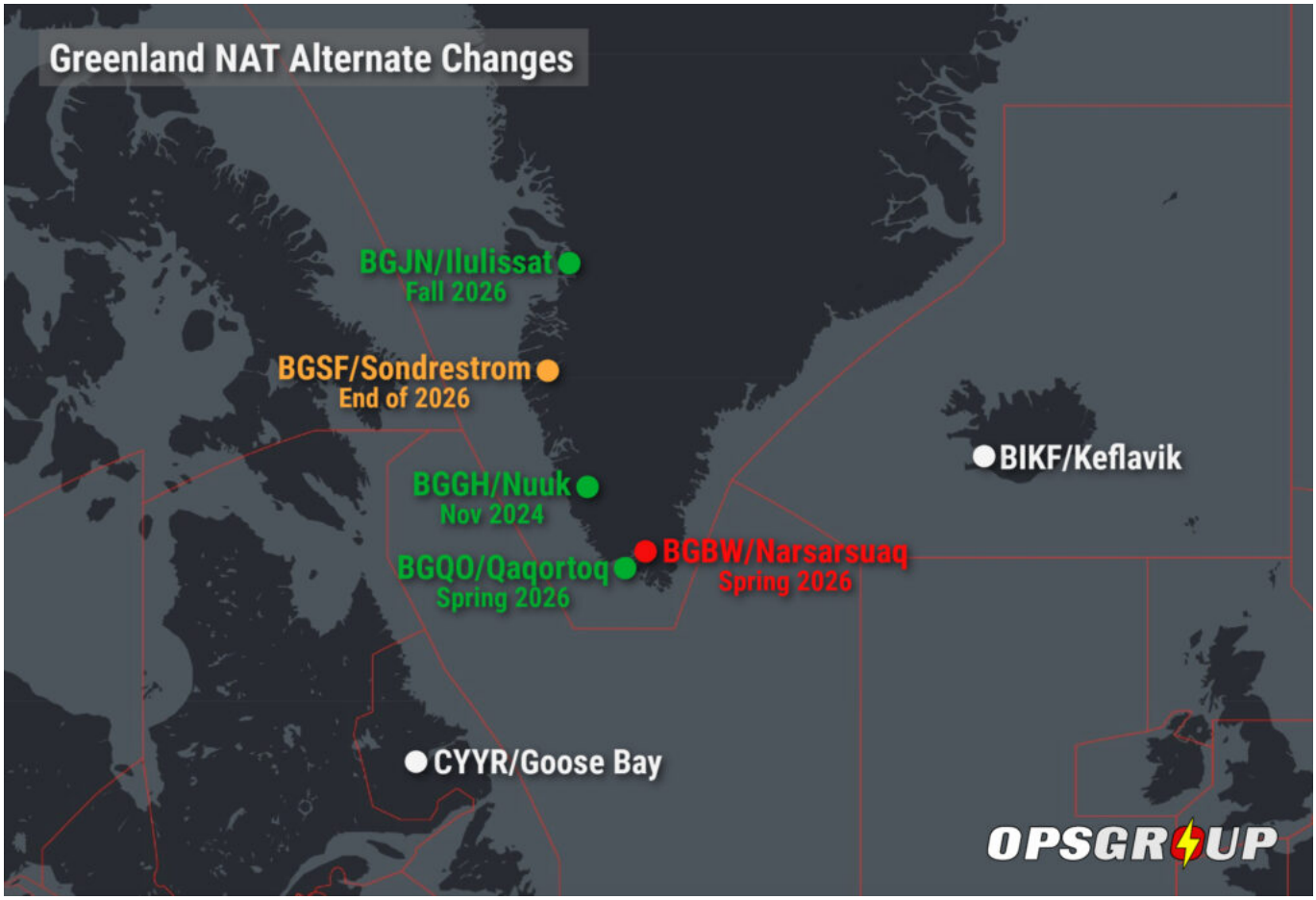
Chris Shieff
12 December, 2024

Each day thousands of aircraft routinely cross the NAT and use airports in Greenland as enroute/ETOPS alternates – mainly **BGSF/Sondrestrom and BGBW/Narsarsuaq.**

It's big business for Greenland's major airports, but over the next few years **major changes are coming** that will directly impact on the operational use of these airports as NAT alternates.

Here's the lowdown on what's changing:

- **Opening:** BGGH/Nuuk (Nov 2024), BGQO/Qaqortoq (Spring 2026), BGJN/Ilulissat (Fall 2026).
- **Changing:** BGSF/Sondrestrom possibly downgrading ATC to AFIS (end of 2025).
- **Closing:** BGBW/Narsarsuaq (likely Spring 2026).



ETOPS Airports...

Before we get stuck into the finer points of what's changing at each airport, a big question many will have is: **"What airports can I use as enroute/ETOPS alternates?"**

Answering that is tricky, because it will depend on a number of factors that will be different for each operator – if the airport has a long enough runway for your particular aircraft / the necessary facilities and services / the minimum approach procedure / fire cover / weather minima etc.

But here's a quick reference table showing what's changing, and when, which *might* be helpful:

Airport	What's Happening?	When?	Rwy Length	OK for ETOPS?
BGGH/Nuuk	New runway being built	Nov 2024	2200m	Probably fine
BGSF/Sondrestrom	Possibly downgrading ATC to AFIS	End of 2025	2800m	Probably fine
BGBW/Narsarsuaq	Scheduled to close	Spring 2026	1800m	Not if it's closed!
BGQO/Qaqortoq	New runway being built	Spring 2026	1500m	Short runway, so probably not
BGJN/Ilulissat	New runway being built	Fall 2026	2200m	Probably fine

BGGH/Nuuk

Nuuk's found on the western edge of Southern Greenland, close to the NAT HLA. It's Greenland's capital city but until now, the airport has not been 'capital-sized'.

Hence why larger aircraft have not considered BGGH/Nuuk as a viable alternate due to its **short runway**

length (3,050’/930m) in addition to poor weather and the mountainous terrain that surrounds it.

But things will soon get easier. A major expansion has been underway since 2019 to replace its aging runway and improve the airport infrastructure to accommodate the wide body airliners of the territory’s flagship carrier who are relocating their hub there.

28 Nov 2024 has been earmarked as its full re-opening – just weeks away. **A new runway will now measure 7,200’/2200m.** Better yet, ILS approaches will be operating at both ends with much lower minimas. A new terminal building, tower and apron are already in use.

If you have any doubts as to Nuuk’s viability as a well-equipped NAT alternate, it may be reassuring to hear that at least one **US legacy carrier** will also commence scheduled services to the improved airport from Newark twice a week from mid-next year.

Keep an eye out for an upcoming OPSGROUP briefing on the new and improved Nuuk soon.

BGQO/Qaqortoq

A new airport will be opening in Spring 2026, **35nm away from Narsarsuaq** on Greenland’s southern tip.

Right now Qaqortoq is a heliport (operating under a different ICAO code), but will **re-open with a 4,921’/1500m runway** due to a decision by Greenland’s government a few years back to convert it for fixed wing traffic.

At that length Qaqortoq will likely only be an option for **small to medium sized jets**, but there is also room for future expansion to 5,905’/1800m – so watch this space in years to come. Word on the street is that it will also be equipped with both LOC and RNP approaches.

BGJN/Ilulissat

A new international airport is under construction which will be equipped with a **7,217’/2200m runway.** It’s scheduled to open in Fall 2026 and will replace the existing domestic airport. By in large, it will be equipped with the same equipment as the upgraded airport in Nuuk.

Next up, a look at what’s happening at the existing airports BGSF/Sondrestrom and BGBW/Narsarsuaq…

BGSF/Sondrestrom

The much-improved airport in Nuuk will undoubtedly take a heavy toll on traffic levels at **Sondrestrom** – in the vicinity of a 90% reduction.

But all is not lost for BGSF as a solid NAT alternate – it will continue to operate, with almost **full services available** with one notable exception – **ATS could be downgraded to an AFIS sometime next year.**

The **runway (9,186’/2800m)** is longer than Nuuk, and the weather much more predictable – it should remain a solid option to consider.

BGBW/Narsarsuaq

The airport is scheduled to **close in 2026!**

Despite its geographical convenience to NAT traffic, it remains a **difficult option**. For some, it is considered only in the case of extreme circumstances (such as fire).

The reason for this is predominantly **weather, and the non-precision approaches** that serve the airport. The runway itself is also short at only **5,905’/1800m.**

Reminder – Look out for Surprise Fees

We've written about this before, but worth a reminder.

Be careful – if you file BGBW or BGSF as an alternate after hours (overnight 20-11z or anytime on Sundays) you will be charged the better part of **$3000 USD** for the privilege of keeping standby equipment on watch, and runways clear of snow. Even if you don't actually divert there.

A little insider advice – **advance notice will reduce the cost** as it allows for cheaper planning. If you need one outside of normal operating hours, provide at least 24 hours' notice.

For regular use, operators can also apply directly for a reduction in these rates.

Know more about changes to Greenland Ops?

We'd love to hear from you. You can reach us via news@ops.group

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Bizav Roadblock: Turkey and Armenia

Chris Shieff
12 December, 2024

UPDATE 30 Oct 2024:

- **Turkey has reportedly started allowing bizav overflights heading to/from Armenia.**
- **This issue stretches back to May 2023, but Turkey dropped the restriction in Sep 2024.**
- **So if you're heading to Armenia (UDYZ/Yerevan, for example), you can now overfly Turkey – you no longer have to route around the country or make a stop somewhere like UGTB/Tbilisi in Georgia.**

Turkish Ban

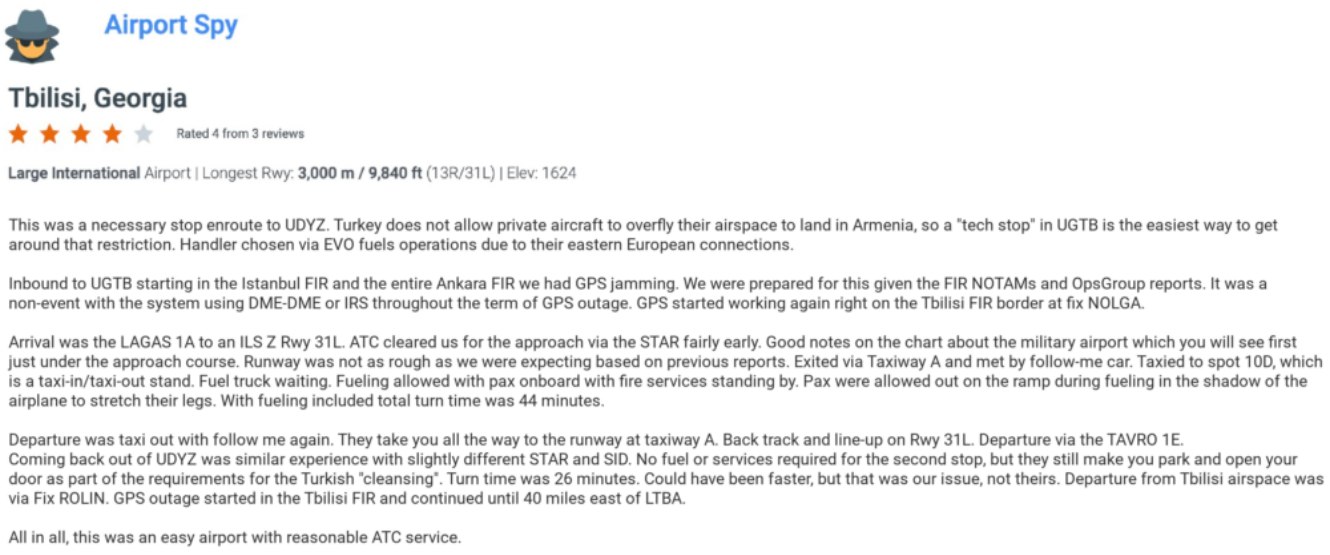
Back in May 2023, Armenian airline FlyOne operating a Paris-Yerevan flight had to make an emergency landing in Chisinau after being **denied entry to Turkish airspace.**

Turkey reportedly applied this **last-minute ban** in response to a monument erected in Yerevan the previous week, which they were unhappy about.

Pretty soon after, FlyOne evidently managed to resume Turkey overflights, but it seems that this restriction was **still informally applied to bizav overflight requests.**

OPSGROUP Member Reports

There was no Notam published on this issue, nor anything mentioned in the Turkish AIP. But some operators made **tech-stops in Georgia** to fix the problem. In Oct 2023, two **Airport Spy reports** were received from OPSGROUP members, where they required a tech-stop at **UGTB/Tibilisi (Georgia)** before continuing on to **UDYZ/Yerevan (Armenia)** in order to overfly Turkish airspace:



Airport Spy

Tbilisi, Georgia

★★★★☆ Rated 4 from 3 reviews

Large International Airport | Longest Rwy: **3,000 m / 9,840 ft** (13R/31L) | Elev: 1624

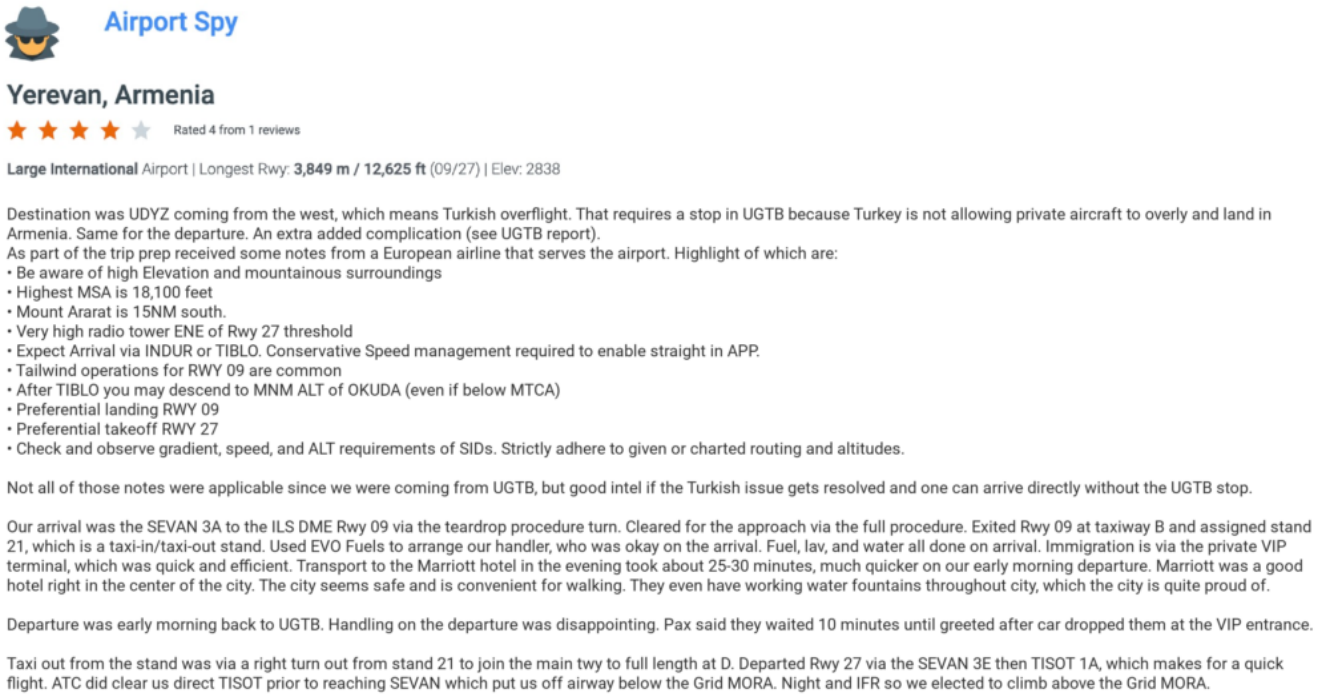
This was a necessary stop enroute to UDYZ. Turkey does not allow private aircraft to overfly their airspace to land in Armenia, so a "tech stop" in UGTB is the easiest way to get around that restriction. Handler chosen via EVO fuels operations due to their eastern European connections.

Inbound to UGTB starting in the Istanbul FIR and the entire Ankara FIR we had GPS jamming. We were prepared for this given the FIR NOTAMs and OpsGroup reports. It was a non-event with the system using DME-DME or IRS throughout the term of GPS outage. GPS started working again right on the Tbilisi FIR border at fix NOLGA.

Arrival was the LAGAS 1A to an ILS Z Rwy 31L. ATC cleared us for the approach via the STAR fairly early. Good notes on the chart about the military airport which you will see first just under the approach course. Runway was not as rough as we were expecting based on previous reports. Exited via Taxiway A and met by follow-me car. Taxied to spot 10D, which is a taxi-in/taxi-out stand. Fuel truck waiting. Fueling allowed with pax onboard with fire services standing by. Pax were allowed out on the ramp during fueling in the shadow of the airplane to stretch their legs. With fueling included total turn time was 44 minutes.

Departure was taxi out with follow me again. They take you all the way to the runway at taxiway A. Back track and line-up on Rwy 31L. Departure via the TAVRO 1E.
Coming back out of UDYZ was similar experience with slightly different STAR and SID. No fuel or services required for the second stop, but they still make you park and open your door as part of the requirements for the Turkish "cleansing". Turn time was 26 minutes. Could have been faster, but that was our issue, not theirs. Departure from Tbilisi airspace was via Fix ROLIN. GPS outage started in the Tbilisi FIR and continued until 40 miles east of LTBA.

All in all, this was an easy airport with reasonable ATC service.



Airport Spy

Yerevan, Armenia

★★★★☆ Rated 4 from 1 reviews

Large International Airport | Longest Rwy: **3,849 m / 12,625 ft** (09/27) | Elev: 2838

Destination was UDYZ coming from the west, which means Turkish overflight. That requires a stop in UGTB because Turkey is not allowing private aircraft to overly and land in Armenia. Same for the departure. An extra added complication (see UGTB report).
As part of the trip prep received some notes from a European airline that serves the airport. Highlight of which are:
• Be aware of high Elevation and mountainous surroundings
• Highest MSA is 18,100 feet
• Mount Ararat is 15NM south.
• Very high radio tower ENE of Rwy 27 threshold
• Expect Arrival via INDUR or TIBLO. Conservative Speed management required to enable straight in APP.
• Tailwind operations for RWY 09 are common
• After TIBLO you may descend to MNM ALT of OKUDA (even if below MTCA)
• Preferential landing RWY 09
• Preferential takeoff RWY 27
• Check and observe gradient, speed, and ALT requirements of SIDs. Strictly adhere to given or charted routing and altitudes.

Not all of those notes were applicable since we were coming from UGTB, but good intel if the Turkish issue gets resolved and one can arrive directly without the UGTB stop.

Our arrival was the SEVAN 3A to the ILS DME Rwy 09 via the teardrop procedure turn. Cleared for the approach via the full procedure. Exited Rwy 09 at taxiway B and assigned stand 21, which is a taxi-in/taxi-out stand. Used EVO Fuels to arrange our handler, who was okay on the arrival. Fuel, lav, and water all done on arrival. Immigration is via the private VIP terminal, which was quick and efficient. Transport to the Marriott hotel in the evening took about 25-30 minutes, much quicker on our early morning departure. Marriott was a good hotel right in the center of the city. The city seems safe and is convenient for walking. They even have working water fountains throughout city, which the city is quite proud of.

Departure was early morning back to UGTB. Handling on the departure was disappointing. Pax said they waited 10 minutes until greeted after car dropped them at the VIP entrance.

Taxi out from the stand was via a right turn out from stand 21 to join the main twy to full length at D. Departed Rwy 27 via the SEVAN 3E then TISOT 1A, which makes for a quick flight. ATC did clear us direct TISOT prior to reaching SEVAN which put us off airway below the Grid MORA. Night and IFR so we elected to climb above the Grid MORA.

Spy Reports

If you have managed to get a Turkey overflight permit for a flight heading to/from Armenia, please let us know! You can also reach us directly on news@ops.group, or file an Airport Spy report.

OPSGROUP members can access the **full Airport Spy database** via the members dashboard here.

Turkey or Türkiye?

Just a final note on this… In June 2022, the United Nations agreed to a formal request to recognise Turkey as "Türkiye", as part of a rebranding campaign launched by the Turkish president.

However, no major media outlets have changed their spelling so far. **So for now at least, Turkey remains Turkey.**

LOA Guide for US Operators

David Mumford
12 December, 2024

Applying for Letters of Authorization (LOA) from the FAA can be a tricky old process. Because there are so many different things you need permission for, you might need various LOAs.

An LOA is a formal "you're allowed to do that" certificate given to an operator, permitting them to conduct a **specific flight operation**, fly in **certain airspace**, or use a **particular bit of equipment**, or **document.**

The folks at Nimbl (the new name for AviationManuals) have issued an updated guide which tells you what LOAs are, when you need them, and how straightforward the application process can be.

You can **download a copy of the guide here.**

The guide includes:

- Who needs what and where, for Part 91 and Part 135 operators.
- List of key terms, and explanations of the most common LOAs and why you would need them.
- Separate elements of an LOA application – some discussion on the process.
- Turnaround timeframes for different LOAs.

Who issues me my LOA?

The FAA, but more specifically, your local FAA Flight Standards District Office (FSDO). You can find a location of those here.

So, a Principle Operations Inspector, known as a **POI** is the person at the **FAA FSDO** who will issue your **LOA**. Don't you just love aviation acronyms

How to apply

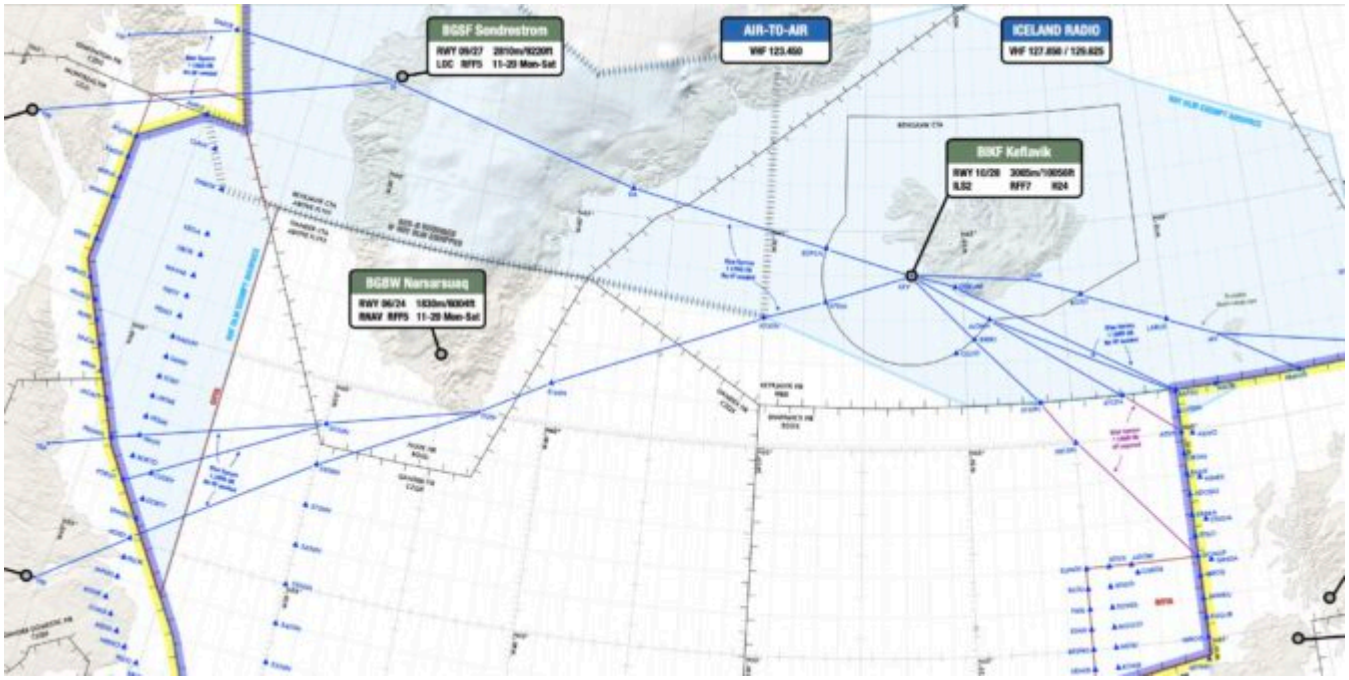
1. First things first, check the guide, and **work out what LOAs you need.**
2. Then decide **who the actual operator is.** The FAA say this is "the person or entity who has operational control of the aircraft." But they don't mean the pilot flying it – they mean the person who has **legal control, not operational control.**
3. Decide who is the **responsible person**, what your primary address is, and then work out which FSDO is going to be the closest. *Sometimes operators get confused about this point and think they are able to choose which FSDO they can submit to, not realizing that the address on the documents matters a lot to where they can submit.*
4. **Contact your local FSDO**, work out what they need you to send them, and send it.
5. **Now the FAA will review your application.** Turnaround times vary according to which LOA you've applied for – it can take anywhere from three weeks to six months, so you'll want to get it right the first time! If it gets rejected, they will send you a detailed list of why to help you when you re-apply.

Anything else?

If you have any questions about the process, or if you need help with any of the above, visit www.gonimbl.com or send them an email at info@gonimbl.com. They have a dedicated team of LOA experts who provide support to operators in preparing all the paperwork, plus ongoing support as you go through the FAA submission process. (Also, we've known them for a long time, and can confirm they're nice people!)

NAT Ops: Flying the Blue Spruce Routes

David Mumford
12 December, 2024



Most traffic crossing the North Atlantic Airspace (NAT) occurs from **FL290-410 through the North Atlantic High Level Airspace (NAT HLA).** Over the years, advances in navigation, communication, and surveillance equipment have led to additional requirements for operators so ATC can safely reduce aircraft spacing and pack more aircraft through the airspace.

OPSGROUP has recently updated the **NAT Circle of Entry** for 2025. This tells you what you need to get into each different sliver of North Atlantic airspace:

So, for unrestricted access to the NAT HLA, operators need:

- 2 Long Range Navigation Units (LRNUs)
- Outside VHF areas 2 LRCS are required – either 2x HF, or HF & Satcom/or CPDLC, for the other.
- FANS 1/A equipment for the NAT Datalink Mandated airspace
- Super-duper datalink for the coveted PBCS Tracks (i.e. CPDLC capable of RCP240 + ADS-C capable of RSP180)

And for US operators, that equipment list is a prerequisite for several required LOAs:

- A056 CPDLC Enroute, and Oceanic and Remote (PBCS)
- B036 Oceanic and Remote Continental Navigation Using Multiple Long-Range
- Navigation Systems (M-LRNS), Aka. RNP 4 (and RNP 10)
- B039 NAT HLA
- B046 RVSM
- D195 MEL (not technically required for a crossing, but might as well throw this one in)

The above is the ideal setup. But what if I fly old stuff, or new stuff, or broken stuff, or little stuff?

Old Stuff

To the formerly early adopters without the benefit of factory standard state-of-the-art equipment: let's say your aircraft has LRNUs that are only capable of RNP 10, or your FANS equipment is RCP400 and RSP400. All else being equal, the only limitation would be **no PBCS tracks.** And **no T9/T290** either. All other tracks or random routes through the HLA are approved.

Is your equipment so old it doesn't even have the above equipment? **Consider yourself the same as broken**, and keep reading...

New Stuff

You just closed on a shiny, new, well-equipped jet and have to ferry it across the pond, but you have no LOAs. In this case, you are altitude and route are limited. No RVSM or NAT HLA LOAs means the airspace from FL290-410 is off limits for you. If traffic permits, ATC may let you climb through the HLA above FL410, but you might want to plan fuel and route at FL280. Route-wise, without B036, **you're Blue Sprucing it.**

If you only have some of the above-listed LOAs, **also consider yourself broken.**

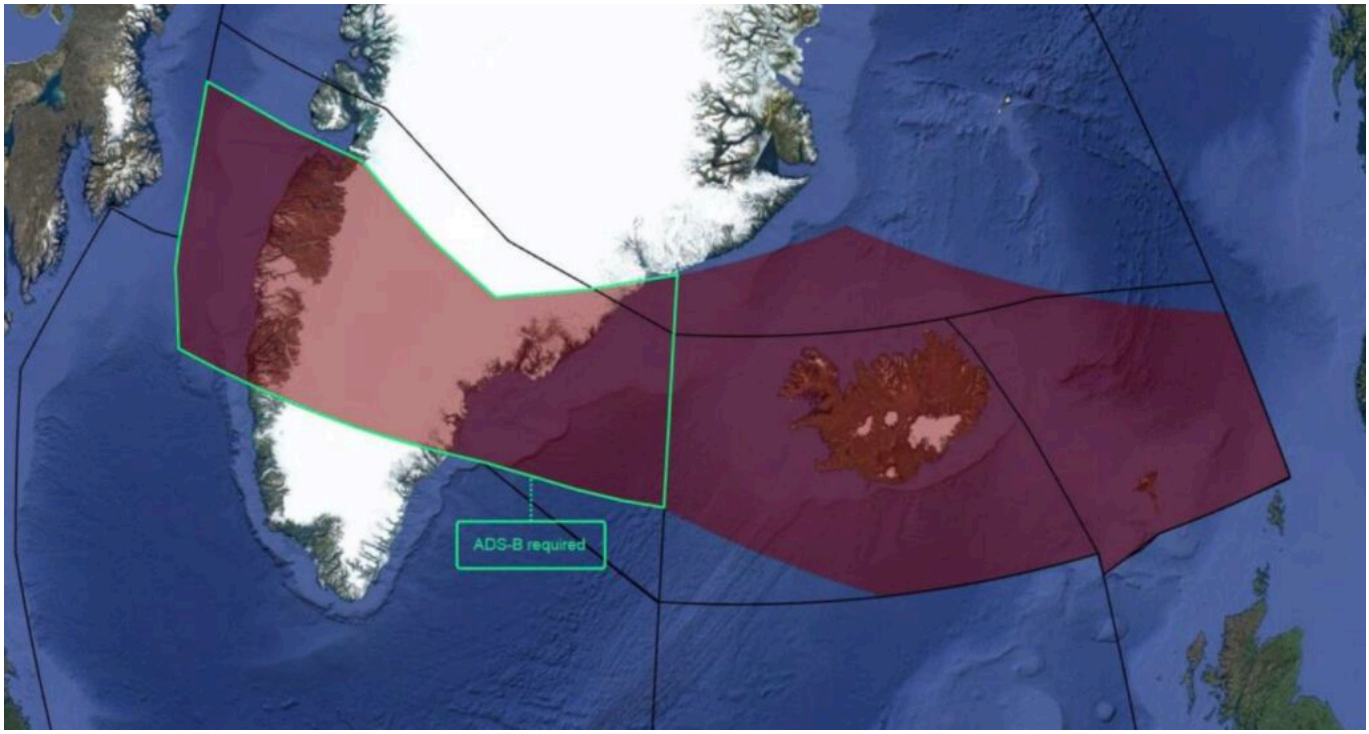
Now, it gets a little more nuanced...

Broken Stuff

You've been spoofed, but only one GPS came back. When down to one LRNU (or you don't have B036), **Blue Spruce it.** With only one LRNU, you could fly through the NAT HLA along the Blue Spruce routes if you get State approval. Otherwise, fly above or below.

You're down to **one HF radio** because you lost the other HF or Satcom – **Blue Spruce it**, and altitude is your discretion. Your bad day just got worse, and you lost both HF radios – Blue Spruce it – but **stay clear of Shanwick OCA** (good news, there's a Blue Spruce Route for that).

HFs are back, but your **Datalink konks out** (CPDLC or ADS-C), or you don't have A056. There are two options: stay within the Data Link Mandate (DLM) exemption area (overlays the Northern Blue Spruce route) and fly any altitude, or **fly the Southern Blue Spruce route below FL290** (or maybe above FL410, if ATC lets you). The DLM exemption area exists because you don't need CPDLC in that area. Radio reception is pretty good through there.



Little Stuff

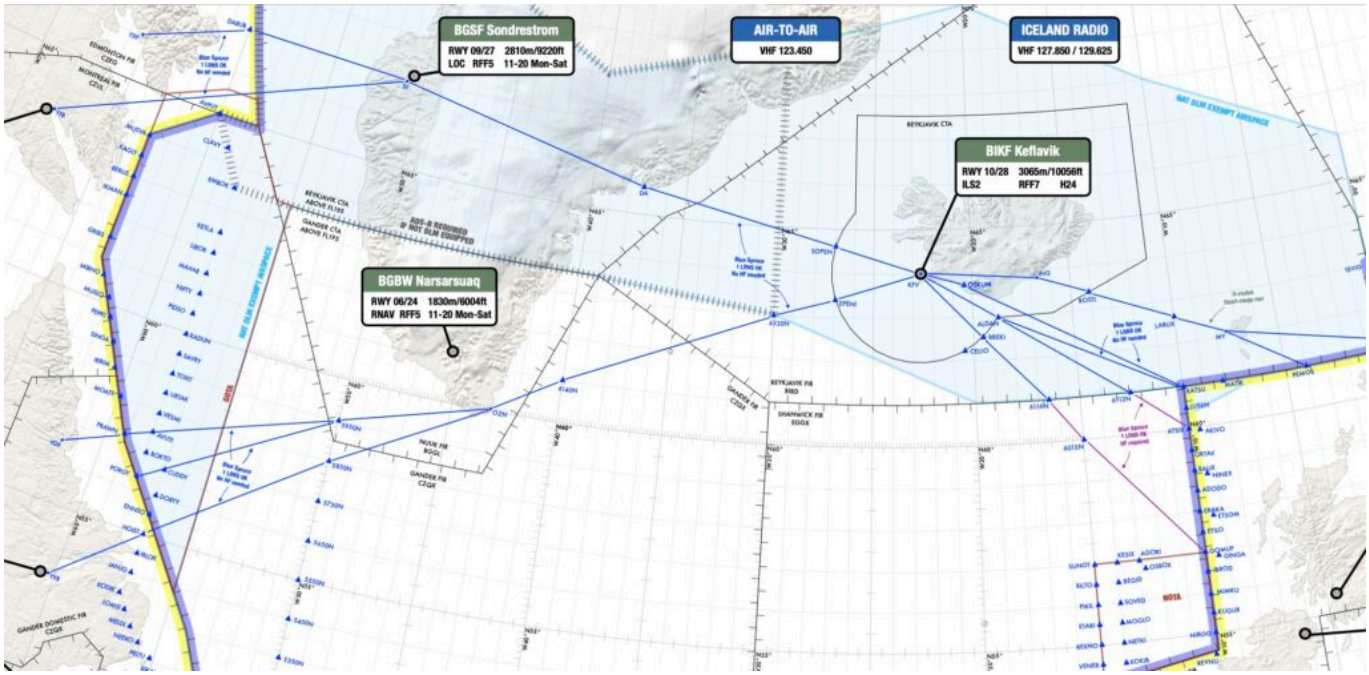
And if you get a wild hair to cross the Atlantic in an aircraft with only one LRNU, no HF radios, no Datalink, no LOAs, without the range to fly non-stop (like me), you guessed it, **Blue Spruce it.** It's starting to sound like a cheesy rap song.

What's a Blue Spruce?

It's a Christmas tree native to the Rocky Mountains that you won't see across the Atlantic on any of your stops. However, the Blue Spruce Routes are routes in and around the Atlantic connecting Canada, Greenland, Iceland, and the UK.

So why are they called the Blue Spruce Routes? Back when military aircraft had wooden propellers (sometimes made of spruce), they painted the tips blue. These aircraft had to make the trans-Atlantic journey along the now-known Blue Spruce Routes.

A complete list of the 11 Blue Spruce Routes is found in Nat Doc 007 3.2.1. The routes are precisely defined, but in practice, they are more of corridors, give or take a degree of latitude.

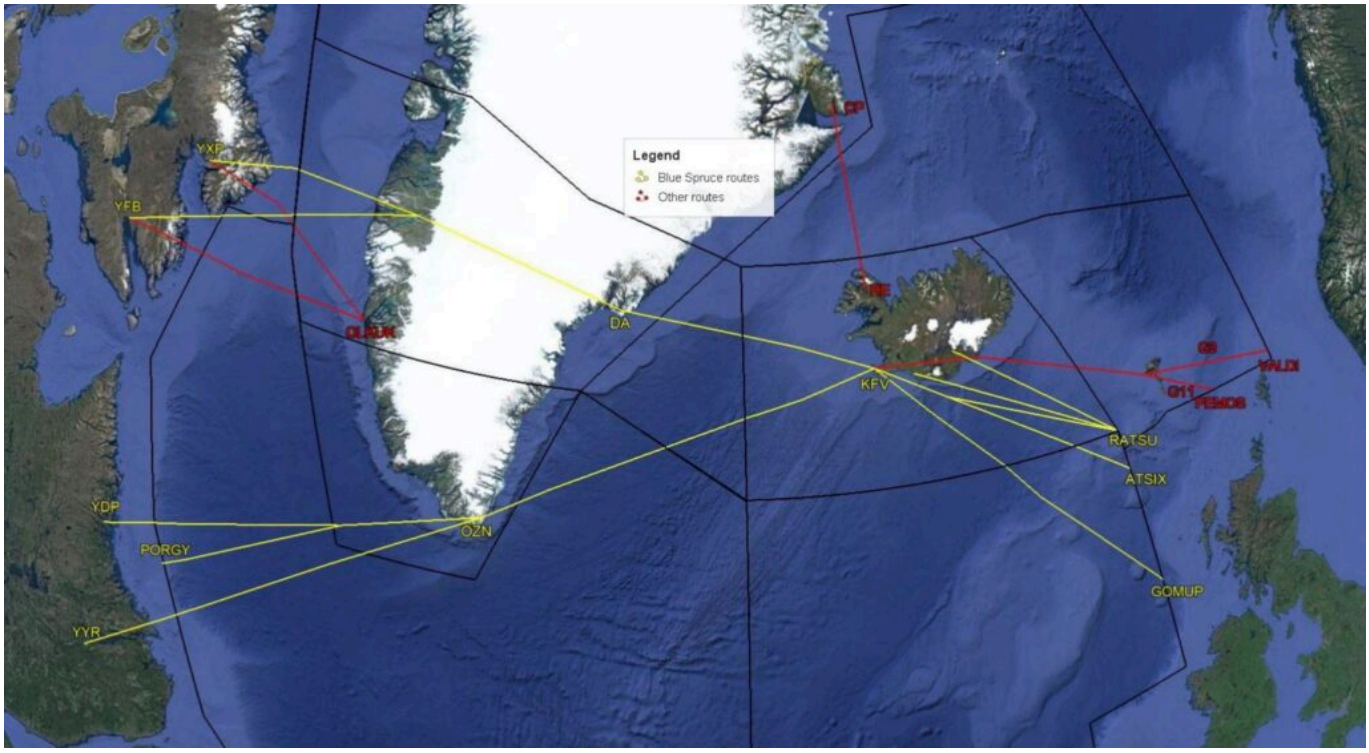


The routes are segments between countries. If you piece them together, the most commonly used complete **Southern Blue Spruce Route route headed East is:**

YYR HOIST 58°N50°W OZN 61°N40°W 63°N30°W EPENI KFV OSKUM RATSU

The Northern route:

YFB SF DA SOPEN KFV ALDAN RATSU

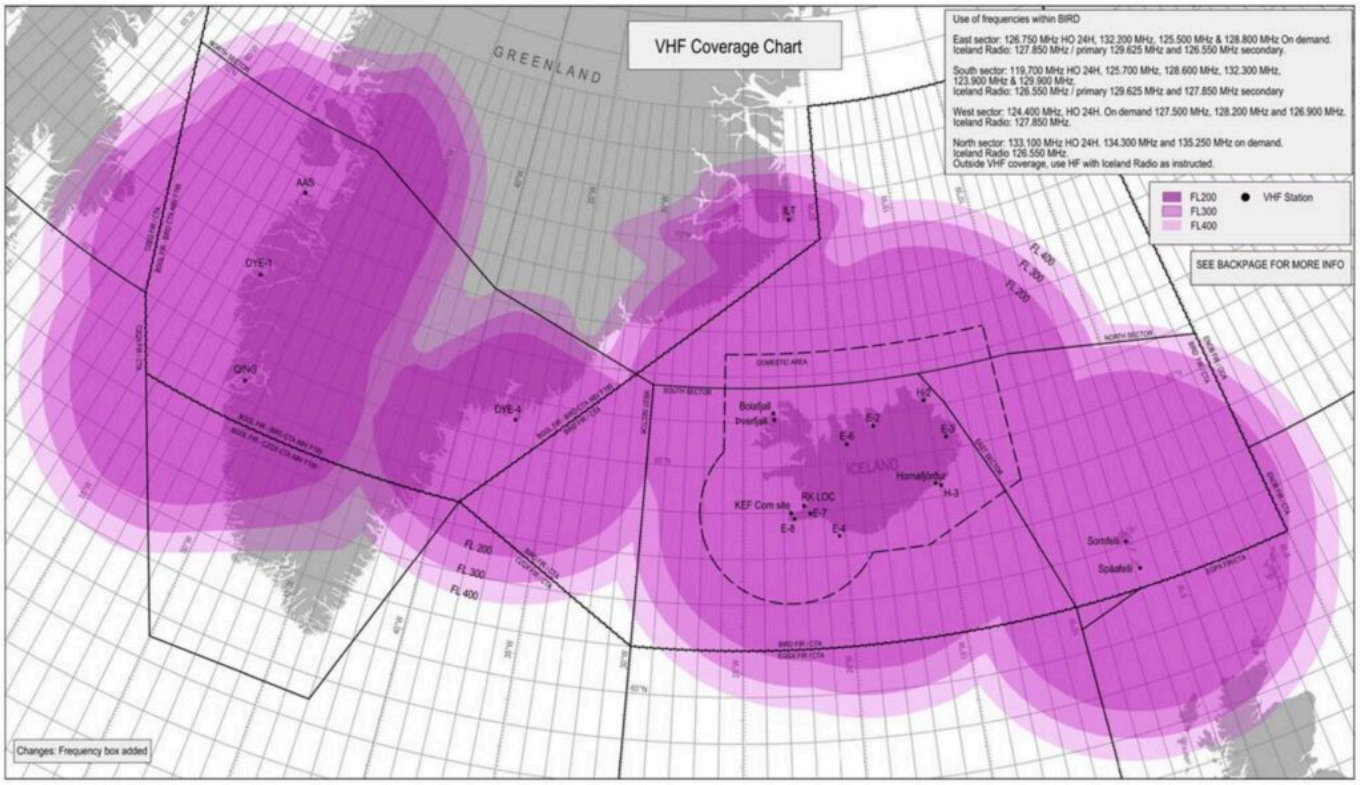


Gray Areas

The Blue Spruce Routes provide exemptions from equipment and operational requirements because land-based radio transmitters along the route provide decent coverage, and route legs are short enough to complete a crossing without necessitating equipment redundancy.

Now, there are exemptions from the rules, and then there are gray areas. Despite all the relief these routes provide, one regulation remains: you must maintain two-way radio communication with ATC. So far, much of the discussion is how high you can go, **but what about how low?**

VHF communications have improved significantly in the Atlantic in the last ten years. Both the northern and southern routes have VHF reception at appropriate altitudes. The longest stretch of water is between Canada and Greenland. **On the southern route over this stretch of water, I have experienced adequate communication at FL250 and up. The northern route is good down to FL200.** Iceland is fantastic – it's almost like you're in domestic airspace.



The gray area is when you plan to operate below these altitudes and are counting on using another aircraft to relay position reports. By the letter, this is a no-no. The up-and-up solutions would be to rent a portable HF unit or containerize and ship the aircraft to Europe, both of which are about $20k. You can see the incentive to count on relays.

Are ferry pilots bending the rules? Let us descend, inception-style, one further layer down the list of the exceptions: ATC can waive the HF requirement for ferry, delivery, and special event flights. Ferry pilots have all the fun

Summing up

So, you have the Blue Spruce option if you need an exemption. You can operate with one LRNU, no HFs, no CPDLC, and no LOAs along the Northern and Southern routes. Unless you can get above the NAT HLA, you're crossing between FL200-280 to the North or FL250-280 to the South for adequate VHF comms.

Is that all you need to know? Not even close!

If you are an experienced international operator, it may be an easy option to cross on a Blue Spruce Route. **If you're new, there is a lot to consider:**

- Necessary paperwork for international operations

- Understanding ICAO and foreign aviation regulations
- Flight planning, handling services, and local airport operations
- Oceanic procedures and contingencies
- Survival equipment requirements – especially for single-engine aircraft
- Weather – it's not great down low!
- Human factors issues like fatigue and where to find the best beer (Reykjavik)

If you want to learn more, check out myaircraftmanagement.com for a 101-level walkthrough of a Blue Spruce operation.

More NAT info!

The latest edition (2025) of the NAT Guide ("My First North Atlantic Flight is Tomorrow") has now been published. This 24-page guide is for pilots and dispatchers, to **help you understand the basics of North Atlantic flying.**

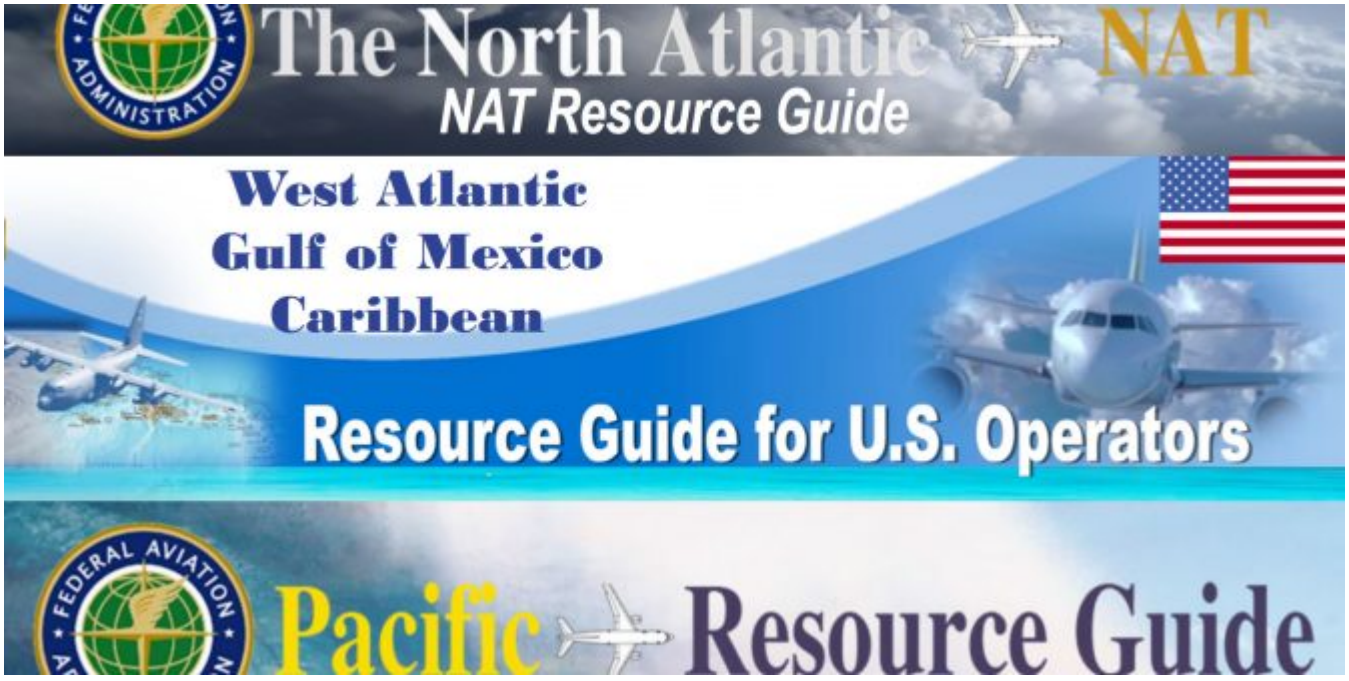
Even more NAT goodies coming soon...

Start licking those lips, OPSGROUP members! Our in-house bakers at OPSGROUP HQ are currently hard at work perfecting the recipe for a new version of our **NAT Plotting & Planning chart** – valid for 2025. Stay tuned, it's coming soon!

Happy Crossings! ✈ ✈

Updated FAA Oceanic Guides

David Mumford
12 December, 2024



The FAA has updated its resource guides for the three big oceanic areas of interest: the **North Atlantic**, the **Pacific**, and **WAT** airspace (West Atlantic / Gulf Of Mexico / Caribbean). All three have been updated effective 18 October 2024.

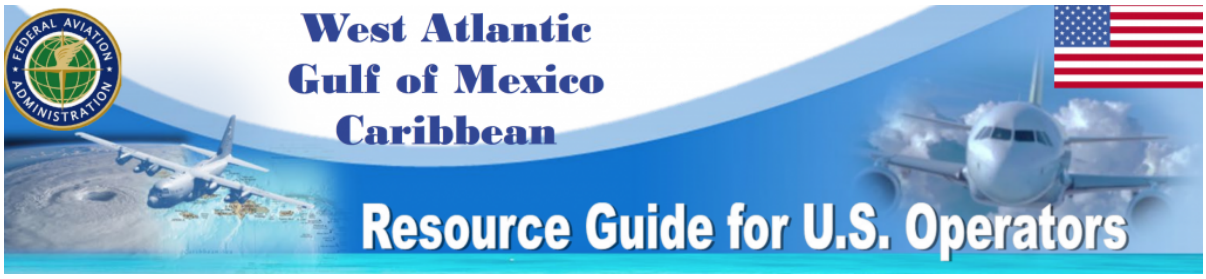
These guides are a good starting point for understanding all the essentials of operating in these regions, and include links to all kinds of useful supplemental information around the main topics for each region.

Click on the pics to check them out.

North Atlantic

Pacific

WATRS



To see a timeline of the **big changes on the NAT** stretching back to the beginning of time (well, 2015) click here.

Opsgroup members can download several **NAT guides** and a **NAT Plotting & Planning Chart** via the Members Dashboard here.

NAT Guide 2025 – My First NAT Flight is Tomorrow

OPSGROUP Team
12 December, 2024

The **latest edition** (2025) of the NAT Guide ("My First North Atlantic Flight is Tomorrow") has now been published. This **24-page guide** is for pilots and dispatchers, to help you understand the basics of North Atlantic flying.

Contents:

- 1. What's different about the NAT?
- 2. Changes in 2024, 2023, all the way back to 2016.
- 3. (Updated 2024) **Circle of Entry** – a visual depiction of what equipment is needed to enter the different parts of the NAT region airspace.
- 4. **NAT Quick Map** – Gander boundary, Shanwick boundary
- 5. Routine Flight Example #1 – Brussels to JFK (up at 5.45am) – NAT HLA certification, Oceanic Paperwork, Special requirements, getting an Oceanic Clearance, Equipment failure, Weather deviation, and going off track.
- 6. **Non Routine-Flights**: No PBCS, No RVSM, No RNP4, No HF, 1 LRNS, No HLA, No ETOPS, No TCAS, No Datalink – what you can do and where you can go.
- 7. **Diversion Airports guide**: A couple of notes on each of the most popular diversion airports from Shannon to Goose Bay: What to expect.

- 8. **Airport data:** BGBW Narsarsuaq, BGSF Sondy, BIKF Keflavik, EGPF Glasgow, EGPK Prestwick, LPLA Lajes, LPAZ Santa Maria, EINN Shannon, EIDW Dublin, CYFB Fro Bay, CYYR Goose Bay, CYQX Gander, CYYT St. Johns, LPPR Porto, LPPT Lisbon, TXKF Bermuda.

- 9. **Overflight permits** – routine and special, non-standard airworthiness, how to get one.

- 10. **Special NAT procedures**: Mach number technique, SLOP, Comms, Oceanic Transition Areas, A successful exit, Screwing it up, Departing from Close Airports

- 11. North Atlantic **ATC contacts** – Shanwick, Gander, Iceland, Bodo, Santa Maria, New York – ATC Phone, Radio Station Phone, AFTN, Satcom, CPDLC Logon codes; and adjoining Domestic ATC units – US, Canada, Europe.

- 12. NAT **FPL Codes and Flight Levels**

- 13. The **Contingency procedure** – weather and diversions

- 14. **Flight Plan Filing** Addresses by FIR

- 15. NAT Clearance or no Clearance, guide to the new RCL process.

- 16. **Common Gotchas**: ATC and OPSGROUP Member favorites.

- 17. Links, Questions, Guidance

There are two options to download a copy of the NAT Guide 2025 (24 pages, 6Mb)

OPSGROUP Members

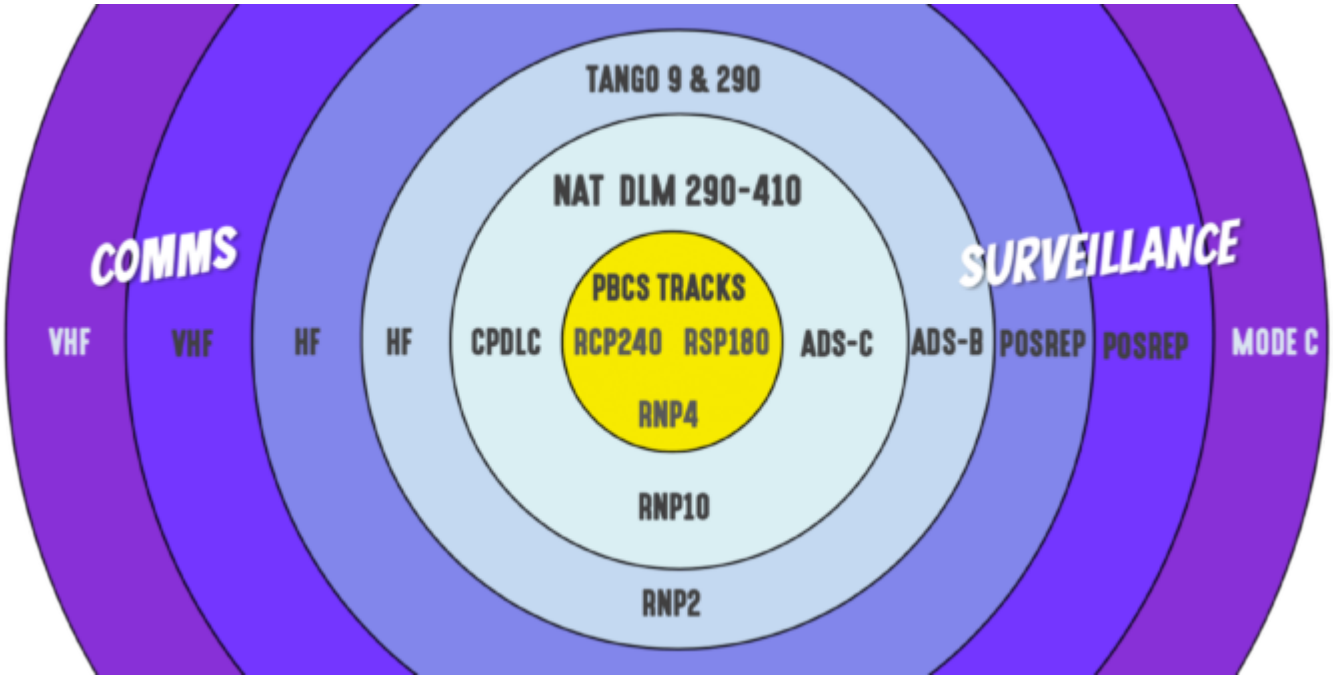
You can get it in your Dashboard, under **Briefings and Guides**.

Get it from the OPSGROUP Store

Not a member? Get a copy from the **OPSGROUP Store**.

NAT Circle of Entry (2025)

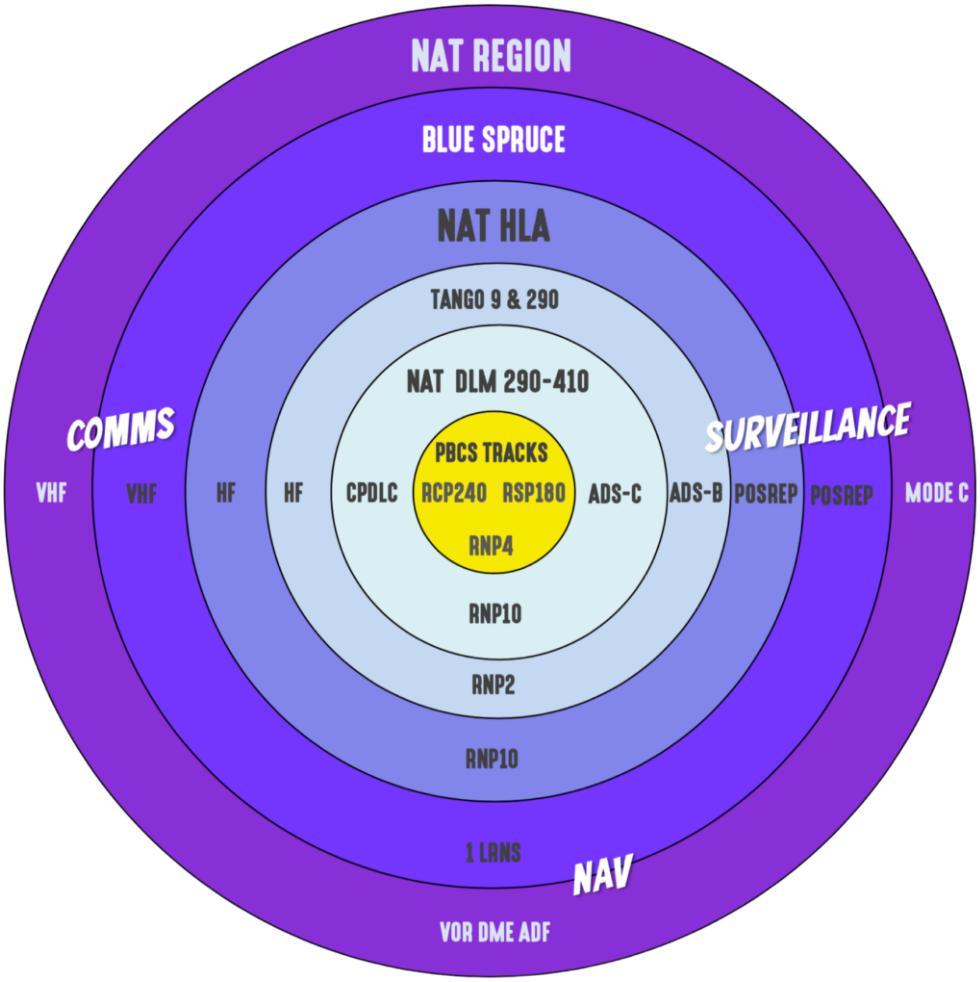
OPSGROUP Team
12 December, 2024



> For the **latest changes and updates on the North Atlantic**, including our most recent **Guides and Charts**, use our NAT reference page at **ops.group/blog/nat/**

We've updated the NAT Circle of Entry for 2025. As always, changes on the NAT continue without pause for breath – this version is the latest information as at October 2024. The Circle of Entry tells you what you need to get into each different sliver of North Atlantic airspace.

Click on the circle to **download** the more detailed PDF.



We've also published a new version of the **NAT Guide ("My First North Atlantic Flight is Tomorrow")**

Get a copy here.

NAT FAQ: No Datalink – Where can we go?

Mark Zee
12 December, 2024

NORTH ATLANTIC

COMMON QUESTIONS AND USEFUL ANSWERS TO HELP YOU CROSS ...

No Datalink – Where can we go?

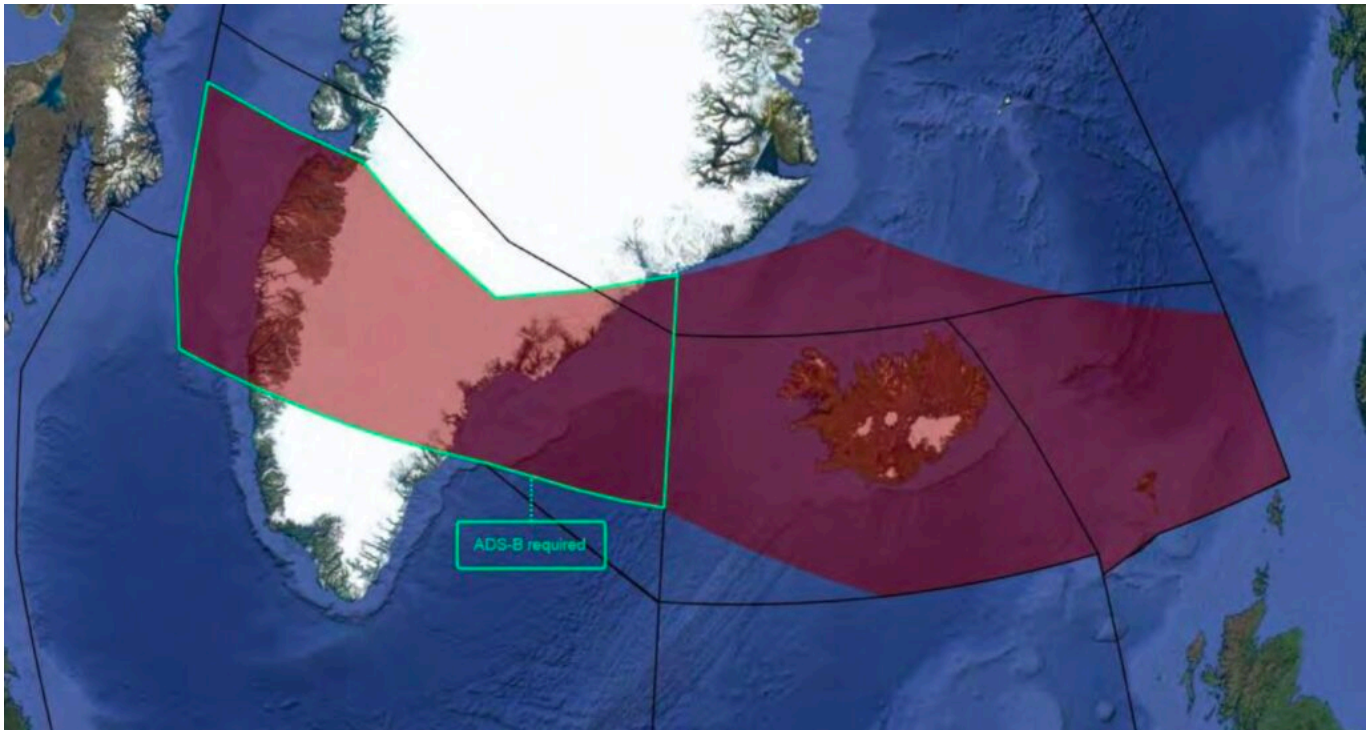
- **You can** make a crossing at FL280 or below, or FL430 or above
- **You can** cross via the Iceland-Greenland corridor if you have ADS-B
- **You can** enter NY Oceanic, the Bodo and Azores corridors, GOTA, and fly down T9/290.

Datalink is defined as **CPDLC** and **ADS-C**. If you're missing either CPDLC or ADS-C, then you're not datalink equipped. Since 2021, datalink is mandated (DLM) for the entire NAT region between **FL290-410** [NAT Doc 007, Ch 1.8]. The only exception is flights STS/FFR, HOSP, HUM, MEDEVAC, SAR, or STATE.

Without datalink, you can only enter these areas on the North Atlantic FL290-410 [NAT Doc 007, 1.8.2]:

- **Anywhere north of 80N**
- **New York Oceanic East**
- **The Iceland-Greenland Surveillance corridor** (ADS-B required west of 30W)
- **The Bodo corridor** (ADS-B required)
- **The Azores corridor** (ADS-B required)
- **Tango 9 and 290** (ADS-B required) (per UK AIP)
- **GOTA** (ASD-B not required but please do if you can, says ATC)

The only complete crossing available is therefore via the **Iceland-Greenland** corridor. For this, you need **ADS-B** west of 30W.



So, if you have ADS-B, and the remaining **NAT HLA** requirements, you can make a crossing at normal altitudes (eg. FL380) through this airspace.

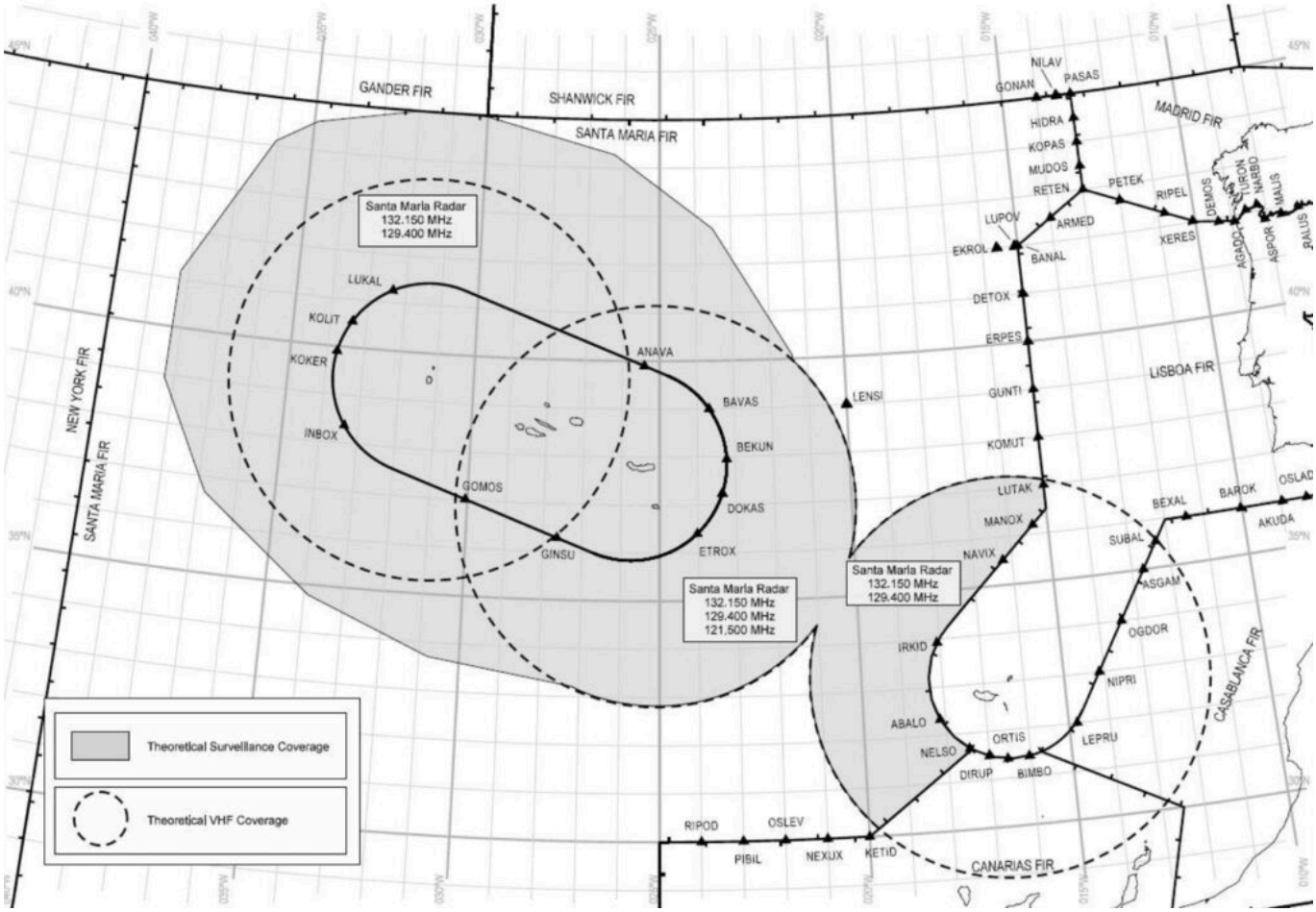
For planning purposes, this area is bounded by the following:
Northern boundary: 65N000W – 67N010W – 69N020W – 68N030W – 67N040W – 69N050W – 69N060W – BOPUT.
Southern boundary: GUNPA (61N000W) – 61N007W – 6040N010W – RATSU (61N010W) – 61N020W – 63N030W – 6330N040W – 6330N050W – EMBOK. [NAT Doc 007, 1.8.5]

If you don't have ADS-B, then this crossing is not available between FL290-FL410.

In this case, you should plan to cross the ocean at FL280 or below, or FL430 or above. This in turn places you outside the NAT HLA, as the HLA levels are FL285-FL420. A crossing at FL280 may mean a fuel stop, in Iceland for example (BIKF or BIRK are commonly used).

You **can** request a climb or descent through Datalink Mandated airspace from ATC, and this is commonly granted, but you do need **HLA approval**.

Santa Maria Corridor



The Santa Maria Corridor will allow you to fly out to the Azores and back, but won't help with a full NAT crossing due to the gap between Santa Maria surveillance and the New York oceanic boundary. To use this corridor, you need a Mode S transponder with extended squitter for ADS-B. [NAT Doc 007, 1.8.5 b]

This didn't answer your question?

Comment below. Sadly (for us), we enjoy digging into this stuff. So, post your question below and we'll update this page with the answer (probably quite quickly!)

Useful links for more on this ...

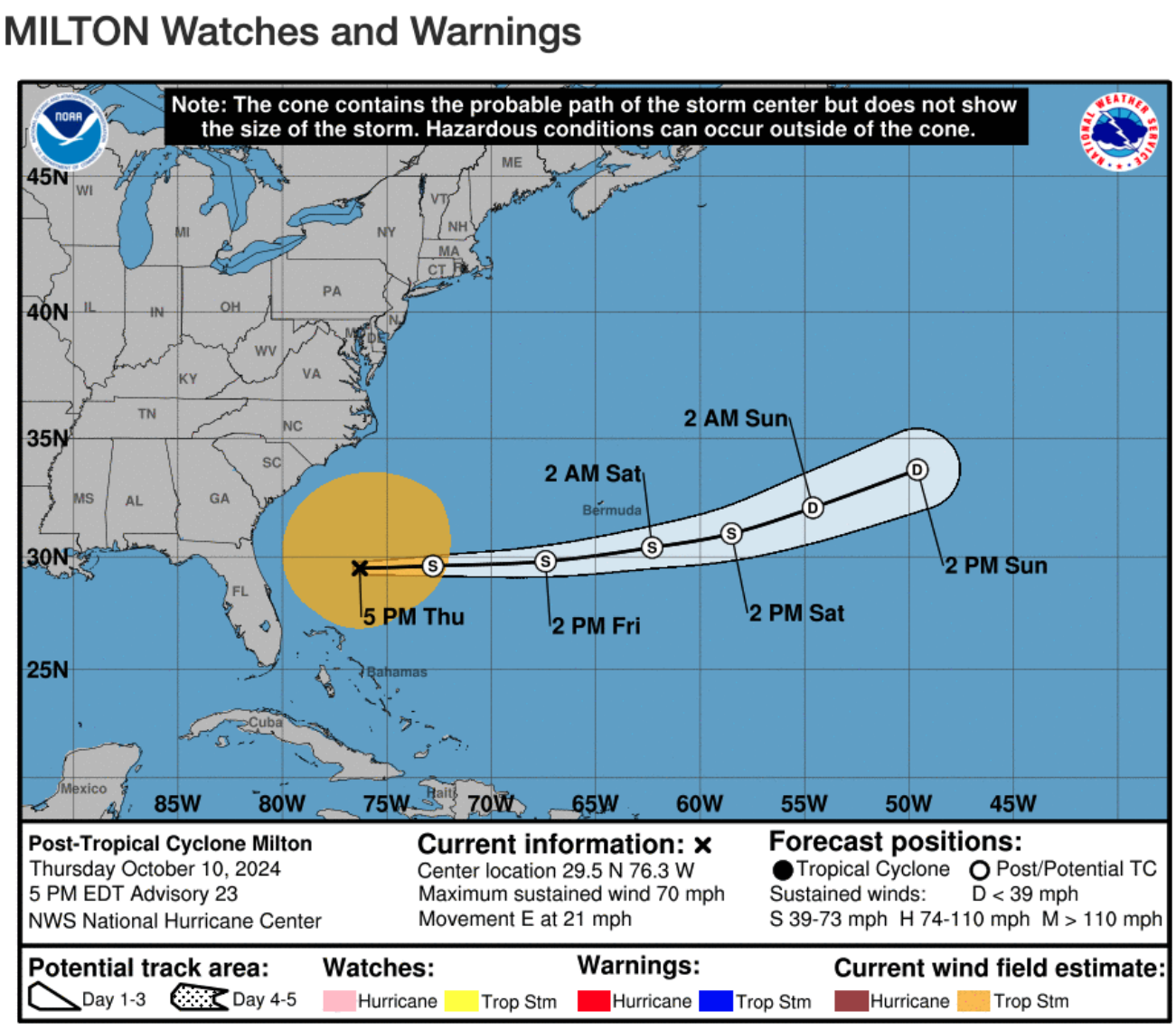
- NAT Timeline – new rules, year by year
- NAT Datalink – current rules
- NAT Doc 007 (ICAO)

Hurricane Milton – Florida Under Warning

Chris Shieff
12 December, 2024

** *Final Update Oct 11, 0500z.*

Hurricane Milton has now weakened into a tropical storm and is headed away from Florida into the Atlantic. It will pass south of Bermuda on Oct 12 but with little to no impact expected at **TXKF/Bermuda**. Damage assessments at airports are still underway.



Here is a summary of the current situation as at **0500z Oct 11** – unless things change, this will be our last update on Milton.

Mexico

The **Northern Yucatan Peninsula** is no longer under any active storm warning or advisory.

The only aviation impact was to **MMMD/Mérida** which re-opened on Oct 8 – no significant damage was reported.

Gulf Routes

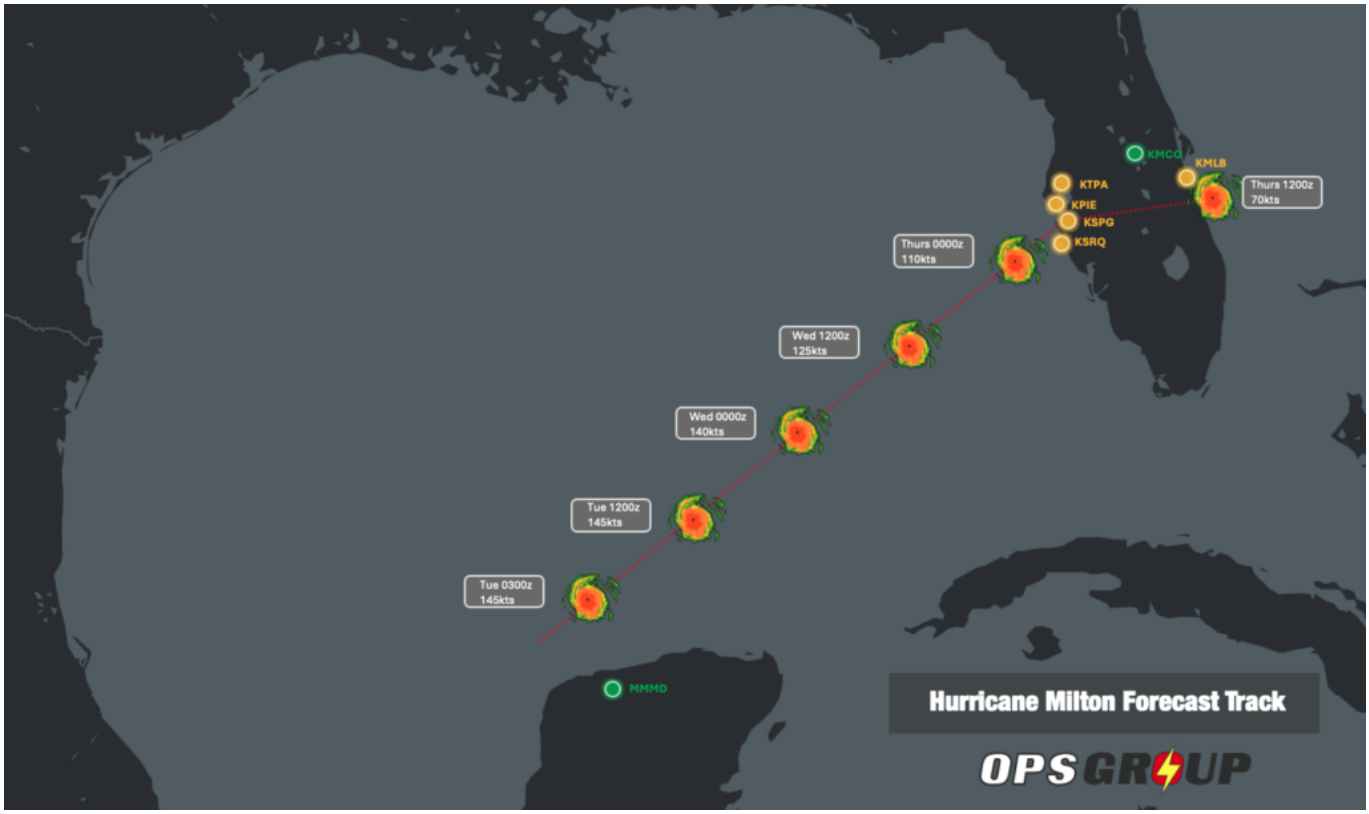
Gulf route closures as a direct result of Hurricane Milton have now finished.

Florida

The worst is now over for Florida – Milton is tracking eastwards away from land and into the Atlantic. Most airports are planning to reopen today (Oct 11), however damage assessments are still ongoing so Notam timings may change or be extended.

Airport Closures

KTPA/Tampa	**Re-opening** Oct 11, 1200z *(est.)*
KPIE/St.Pete-Clearwater	**Re-opening** Oct 11, 2000z *(est.)*
KSPG/St.Petersburg	**Re-opening** Oct 12 1600z *(est).*
KSRQ/Bradenton	**Re-opening** Oct 12 1000z *(est.)*
KMCO/Orlando	**Open** *Fuel limited, check availability.
KMLB/Melbourne Orlando	**Re-opening** Oct 11 1300z *(est.)*



The FAA has now finished its telcon briefings for Milton.

Stay Informed

For **live operational updates**, keep an eye on the FAA NASS website which will be updated constantly as Milton passes.

The National Hurricane Center will provide accurate forecasts and tracking info here.

Have we missed something? If you have an update to share regarding airport or airspace status, please

reach out to us via news@ops.group.

NAT Conundrums: Volume I

Chris Shieff
12 December, 2024

Originally published 2021, Updated 2024

- Changed **SLOP requirement** in GOTA: now only in the Oceanic portion
- **More to read!** NAT Conundrums Vol II, NAT Conundrums Vol III (GOTA), NAT Conundrums Vol IV (Contingencies)

It's no surprise to most that the North Atlantic is the busiest oceanic airspace in the world. To keep things running smoothly there are a bunch of procedures to follow. We write about them a lot, especially when they change. From time to time questions continue to pop up that make us scratch our heads. And so we thought this might be a good chance to share a few of those with you – *naughty NAT conundrums* if you will.

To SLOP or not to SLOP?

Chances are if you fly in oceanic airspace you already heard of Strategic Lateral Offset Procedures (SLOP). They're pretty straightforward – you're supposed to **offset up to 2nm right of track without needing a clearance**.

We do this because humans are fallible and mistakes can be made. Ironically the extreme accuracy of modern navigation systems mean that in the case of gross navigational errors, level busts or incorrect clearances, these systems actually *increase* the chance of a collision. So we pull over to the side of the road a little more, just in case.

Do we have to SLOP?

If you're in the **NAT HLA** and your aircraft is capable then **yes, it's 'required'** (as per ICAO NAT Doc 007). The only time you shouldn't is if your aircraft's FMS cannot automatically maintain an offset i.e. it doesn't have that function. In that case you 'must' stay straight up the middle.

Remember, your SLOP can be in **increments of 0.1nm** and "0 nm" SLOP is also a thing!

You SLOP from the ENTRY point only, and need to have stopped the SLOP by the EXIT point.

- Don't go 'direct to' the EXIT, this will put you on a different track. Cancel the SLOP to return to 'centreline'
- Only SLOP from the ENTRY to the EXIT
- If you are routing from a NAR into the NAT, the last point is your entry into the NAT and you can SLOP from here

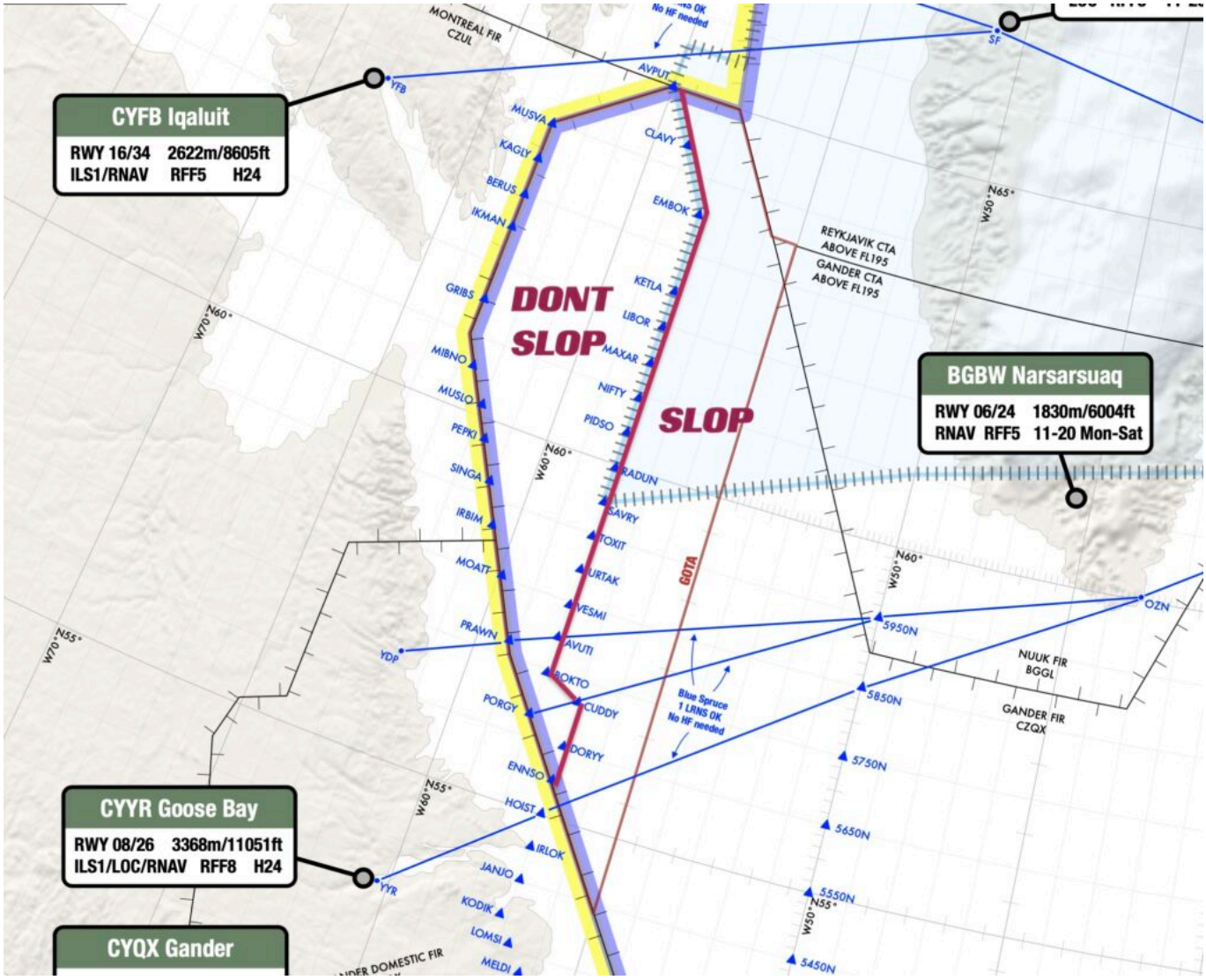
Can we SLOP in the Oceanic Transition Areas?

Or in other words in NOTA, SOTA, BOTA or GOTA? Good question.

NOTA and SOTA: The short answer is no. The slightly longer one is that the both NOTA and SOTA are under radar control with domestic separation from Shannon Radar. You should only apply SLOP between your oceanic entry and exit points.

BOTA: It's a similar story. BOTA radar control services are provided by Brest Control in France – essentially domestic rules still apply. So no SLOP-age.

GOTA: This is the odd one out. GOTA (the Gander Oceanic Transition Area) is off the coast of North-eastern Canada. You should SLOP only once you have passed the Oceanic Entry Point (OEP) eastbound and within Oceanic Airspace "proper", and vice versa westbound – sto SLOP at the Oceanic Exit Point (for example NIFTY on the chart below).



Are there any other ‘gotchas’?

Yes – three main ones:

1. T**he ENOB/Bodo and BIRD/Reykjavik FIRs.** Look out for these. Buried in the NAT Doc 007 it says that you are only allowed to SLOP above FL285. So don’t get caught out in the lower levels.
2. **Tango Routes T9 and T290.** These lie just outside of BOTA airspace. According to the UK AIP ENR 3.5, SLOP does not apply here.
3. And whatever you do – **never SLOP left!**

What’s the difference between the NAT Region and the NAT HLA?

The NAT Region is virtually all of the non-domestic airspace over the Atlantic – from around 20 degrees north all the way up to the pole (excluding New York Oceanic West). It contains seven Oceanic Control Areas – BGGL/Nuuk, BIRD/Reykjavik, ENOB/Bodo Oceanic, CZQX/Gander, EGGX/Shanwick, KZWY/New York Oceanic East and LPPO/Santa Maria.

Within the NAT region (and occupying a large amount of it) is the **NAT HLA**, which stands for *High Level Airspace*. It only exists from **FL285 to FL420.**

Because the NAT HLA is some of the busiest airspace in the world, there are a number of stringent navigation and communication requirements that you must meet to enter it. This includes being either RNP 4 or RNP 10 capable, having two independent long range navigation systems and in most cases, datalink. Operators also need state approval.

If you don't meant those requirements you can still fly through the NAT *Region*, but you'll have to fly below or above the NAT *HLA.* Blue Spruce routes are the exception, which allow aircraft with only one long range navigation system or limited comms equipment to enter.

Can I fly across the North Atlantic without Datalink?

Yes, but it's gonna be tricky.

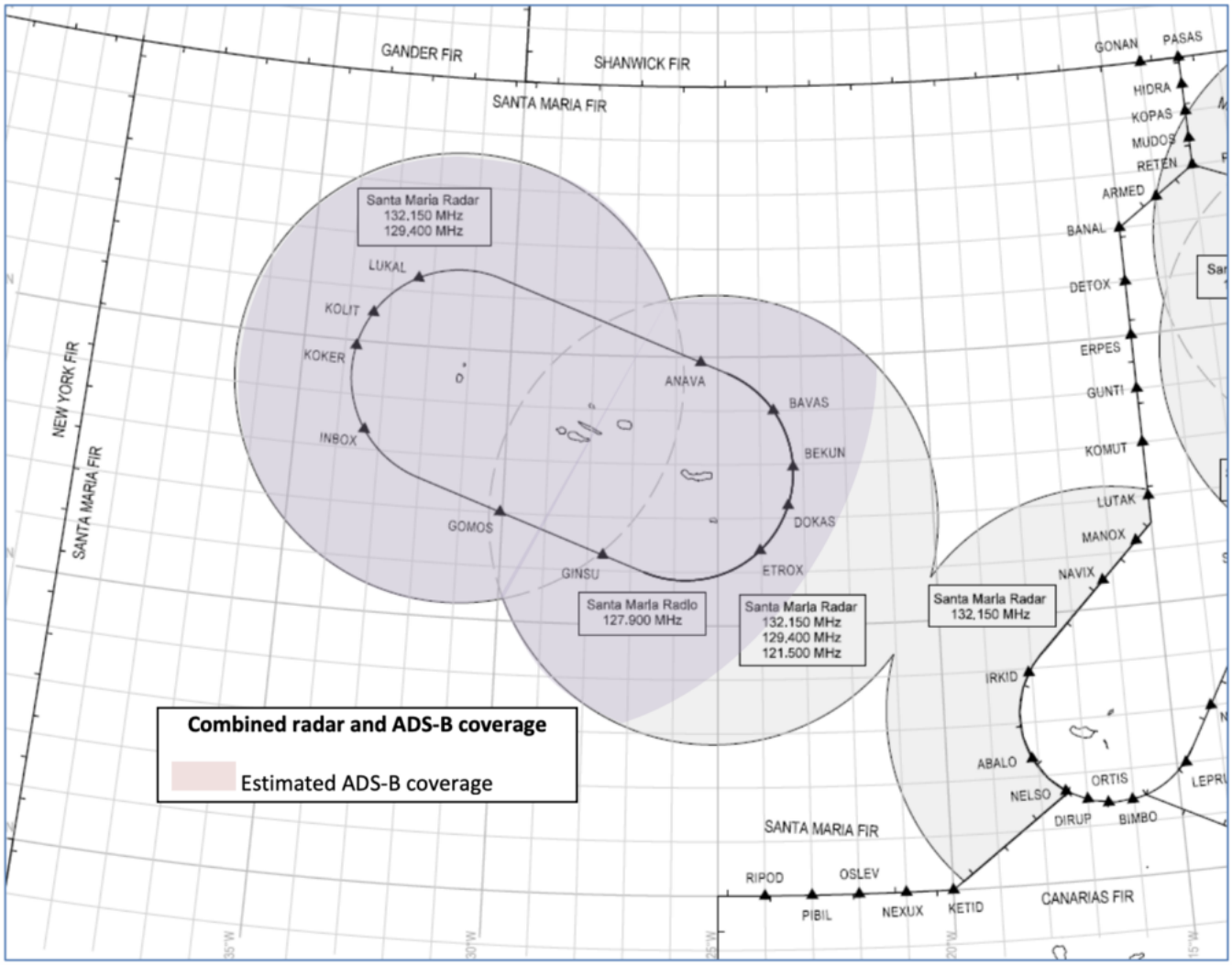
The North Atlantic Datalink Mandate (NAT DLM) means aircraft need to have **CPDLC and ADS-C** to operate between **FL290-FL410** throughout the NAT Region.

There are a few exceptions where the NAT DLM does not apply:
– Everything north of 80°North.
– New York Oceanic East FIR.
– Tango Routes T9 and T290. The other Tango Routes (T213, T13, T16) all require datalink.
– ATS Surveillance airspace, where surveillance service is provided by means of radar and/or ADS-B, coupled with VHF.

That last one about "ATS Surveillance airspace" is essentially just a section of airspace over Greenland and Iceland, which looks like this:

So if you're on a NAT crossing and you **don't have datalink**, you technically have to **stay below FL290 until you hit the blue shaded area**. It's worth noting that aircraft without datalink can request to climb/descend through datalink mandated airspace, but will only be considered on a "tactical basis" by ATC.

Further south, there is another section of "ATS Surveillance Airspace" in the area connecting the LPPC/Lisboa FIR (i.e. mainland Portugal) to Madeira and the Azores, which is **also exempt from the NAT DLM:**



So in theory, an Atlantic crossing without datalink would also be possible here – within the LPPO/Santa Maria FIR you would just have to ensure that you stay below FL290 or above FL410 outside of the bubbles until you reach the KZWY/New York FIR (where the NAT DLM does not apply).

Even further south, in the TTZP/Piarco and GVSC/Sal FIRs, CPDLC is the primary means of communication, but it's still **not mandatory**.

So down south, the bottom line is that as long as you stay out of the LPPO/Santa Maria FIR between FL290-410 where the NAT DLM applies... except for the ATS Surveillance Airspace bubbles where it doesn't apply... then you'll be ok with just HF. Got it?

For more info on the NAT Datalink Mandate, check out our previous article.

So, what's your conundrum?

We'd love to hear it. Chances are if you don't know the answer, many other people won't either, so it's always great to share.

Get in touch with us at team@ops.group with your question, and we'll include it in the next article on Naughty Nat Conundrums.

And if you want to download a PDF of our **North Atlantic Plotting Chart**, check how to get a copy here.

US Border Overflight Exemptions: A How-to Guide

David Mumford
12 December, 2024

Key Points

- **When arriving from south of the US, operators must make their first landing at a US Customs & Border Protection (CBP) "Designated Airport" closest to their point of border or coastline crossing.** ***(There are actually a few exceptions, which you can read about here).***
- **One way to avoid having to deal with Designated Airports is to obtain a Border Overflight Exemption (BOE).**
- **CBP have a standard guide on how to apply for a BOE. We've also made a fun 1-page Opsicle with instructions on how to do this. Download both below ⬇**
- **NEW! Sep 2024: The NBAA have announced that US CBP has increased the validity period of Border Overflight Exemptions to three years (previously two). If you already hold one, there is nothing you need to do right now – the new validity will apply from your next renewal.**

How to Apply

It's actually very simple. You basically just send CBP an email.

Depending on what type of BOE application you are making (new, renewal, name change) you tailor your email in slightly different ways, but there's some standard information you need to include every time:

- **Operator Name:** who you are + your contact info
- **Operator Description:** whether or not you transport people or things for payment
- **Compliance Statement:** you basically just state you agree to comply with CBP terms and requirements

CBP send out a standard email template to people wanting to apply for a BOE, which guides you through the process. It's super helpful because it gives examples of exactly how your email to them should look – **follow the advice in this doc and you can't go wrong.** You can download it here.

Or for a quick-ref cribsheet of what to do, OPSGROUP members can download this Opsicle that we lovingly prepared!

CBP say that BOE processing will take **no more than thirty days**, and there is **no charge or fee** associated with the process. Happy BOEing everyone!

Do I need a TSA Waiver for a flight to the US?

David Mumford
12 December, 2024

If you're heading to the US and are trying to work out whether you need a TSA Waiver for your flight, we have an Opsicle to help with that.

OPSGROUP members can download a copy for free here.

If you're not an OPSGROUP member, but you'd like to be, you can join here.

Let's start with the basics

Here is the TSA Waiver site. This is where you **submit your requests.**

And here is the TSA site on waivers. This is where you can **find info on Waivers.**

Which Waiver is Right for You?

There are a few types. You have your Disney Theme Park, Washington DC Special Flight Rules Area/Flight Restricted Zone, Major Sporting Events and Special Events Waivers.

And then you have your International Waivers which include International Air Ambulance, No Transponder and **International Single Trip Waivers** – this last one is what we're interested in.

The Guidance

International Waivers are required for *'various aircraft to fly within US airspace, which includes the airspace above the United States and its territories'.*

Whether you need one depends on your **aircraft size, where it is registered and where you're coming from.**

Flying to and from the US

International TSA Waivers are not required for any aircraft arriving to or departing from the US or its territories. So this applies if you only make one stop in the US (i.e. you fly in and straight back out again).

Flying within US airspace

Planning to make more than one stop in the US? You'll need an International Waiver if you do this in a foreign registered aircraft which is heavier than 100,309 pounds MTOW (45,500 kg).

But, since most private aircraft generally fit under this weight limit, **you probably don't need one.**

Overflying the US

OK, here we go, the bit to know – this is for when you take off and land somewhere not in the US or its territories, and overfly the US in between.

If your aircraft weighs 100,309 lbs MTOW or more: you need a Waiver, even if your aircraft is US registered.

If your aircraft weighs less than 100,309 lbs MTOW: US registered aircraft do not need one. If you are foreign registered and overflying, you do need one – unless your aircraft is registered in a "Portal Country", and is flying directly from any one of these (prior to entering US airspace).

The Portal Countries:

- Canada
- Mexico
- Bahamas
- Bermuda
- Cayman Islands

- British Virgin Islands

Special Interest Countries

The black sheep of the World of Waivers. Probably the easiest category to work out the rules for. **You'll need an International Waiver for everything** – ops to, from, within and over the US, if your aircraft is registered in one of these countries. The list currently includes: **Cuba, Iran, North Korea, China, Russia, Sudan, and Syria.**

To recap…

Landings: Foreign registered aircraft over 100K lbs making 2 or more stops in the US need a Waiver.

Overflights: All overflights over 100K lbs need one – and that includes N-reg. If you are foreign registered and overflying, you need one regardless of size. There's one single exception: If overflying with an aircraft under 100K lbs registered in a Portal Country, and the flight is from any of those countries, then you're good.

Special Interest Countries: Aircraft registered in these need a Waiver for everything – ops to, from, within and over the US.

Where is this officially written?

There were some official, permanent Notams published back in 2016. **FDC 6/4255 and FDC 6/4256 (KFDC A0006/15 and A0006/16).** These have vanished though and we can't find any replacements.

The best spot to read it (officially) seems to be in the AIM Chapter 5 *(Air Traffic Procedures)*, Section 6 *(National Security and Interception Procedures),* and take a look at 5-6-7 for the stuff on transiting US airspace.

How to get it and what to do with it.

You need to submit your request to the Authorization Office here. It is recommended that you submit your request **at least 7 days before** your planned flight to the US.

When you apply, don't forget to include all those who may be onboard in your request.

Once you have it, it is only **valid for 90 days.** You need to **carry the hard copy** onboard with you.

Any other things to know?

If you do operate over US airspace then you need to stick to their rules which also require that you:

- Use an active VFR or IFR flight plan
- Be equipped with a Mode C or S transponder and use an ATC-assigned transponder code
- Communicate clearly with ATC

Any other gotchas?

A couple, as reported by an OPSGROUP member:

Watch your weight: *One in particular issue I have seen a few times is that of Private Global 7500s. Most owners of this aircraft are usually stepping up from a previous version like the Global 6000 series. Many*

fail to recognize that this step up has a significant impact on their US TSA requirements. I think most miss the weight class change and simply think of the aircraft as a Global XRS with better range. The implications of not having a valid waiver can be significant.

Validity period: *A waiver can be valid for "up to 90 days" with the required dates being set during the initial application. A waiver may be modified up to three times with the end date being fixed (i.e. the end date on the original application must remain the same for each subsequent modification). There is a caveat I should mention regarding the number of allowed modifications, being that this is only valid within a calendar year.*

Anything we missed?

Let us know, at team@ops.group

Vegas F1: Brace Yourself for Special Event Fees

Chris Shieff
12 December, 2024

Brace yourself – the Formula One Grand Prix in Las Vegas is just around the corner, and metropolitan area airports are about to get really, *really* expensive. Here is an early rundown on what to expect so you can start planning your trip early.

The Grand Prix

The FAA has published the procedures for this year's event yet here.

While race day is Nov 24, **special procedures** will apply at KLAS/Las Vegas, KHND/Henderson, KVGT/North Las Vegas and KBVU/Boulder airports from **Nov 19–26.**

All arrivals and departures will need a **PPR number** issued by an FBO, including drop-and-goes. You'll need to include this in Item 11 of your flight plan.

Don't be tempted to try and land without one. Airport authorities will not allow you to de-plane your pax and you'll need to gas up and leave again without delay.

If you're looking to park overnight, **book now.** Last year it got so busy that the only option for many was to purchase a drop-and-go slot allowing thirty minutes on the ramp to offload, and another thirty to pick up.

Note that **Signature FBO** still cannot accommodate aircraft with wingspan more than 80ft, due to ramp construction works. **Atlantic Aviation** (the only other FBO at the airport) don't have any similar restrictions.

Even airports further afield, such as **KBVU/Boulder City** are already reporting they're booking up. If you're really stuck, it might be worth considering the likes of **KIFP/Bullhead City** (Signature) or **KSGU/St George** (Million Air) – although these would mean a long drive to downtown Las Vegas.

Traffic Jams

Inevitably, arrival rates will exceed airport capacity. ATC will use terminal initiatives to put the brakes on. It may go without saying, but it's important to carry **extra fuel** for airborne holding and reroutes.

Domestic IFR aircraft can also expect Departure Clearance Times for all inbound flights to the three major airports.

Within 200nm of the Vegas terminal area, ATC will not process airborne reroutes or changes of destination unless there is an emergency.

Special Event Fees

The biggest gotcha for anyone operating an aircraft to Las Vegas during the Formula One event is **special event fees** charged by FBOs.

At last year's event, we reported these exceeding $8,000 USD. This year we've already seen quotes as high as **$25,000 USD** from OPSGROUP members. So this year, we are effectively witnessing this fee more than triple. And that's just for the special event fee. On top of this there would be all the other standard fees (Facility, Parking, Hangar, etc).

AOPA has been crying foul on this very issue for some time now. As they explain, there is currently **no FAA policy** regarding special event fees. However, existing regs do require charges for the aeronautical use of a public airport to be 'reasonable', or sufficient to sustainably cover costs.

In this sense, the charge of tens of thousands of dollars to park an aircraft does seem exploitative – especially to those operating under Part 91 who may not even be using the airports for the special event they're being forced to pay for.

One last thing – Pacer.

If you're in Vegas for the F1, it would be a good idea to register and use Pacer before you take off again.

If you haven't heard of it, it's basically an **online information exchange** to help operators avoid leaving at peak periods by uploading their intended departure time.

Don't worry – your personal information won't be visible to anyone else, but you will be able to predict when ground delays will be at their worst. It was used at last year's event with good success and becomes more effective as more people use it. So, it's worth a shot.

Heard anything else?

Let us know, we'd love to hear from you. You can reach the OPSGROUP team on team@ops.group.

ADS-B Controversy? Landing Fee Fuss in Florida

Chris Shieff
12 December, 2024

Several airports in Florida are proposing **new landing fees using ADS-B to automatically invoice operators** as early as next month.

AOPA, along with other industry collectives, are crying foul. Not necessarily at the prospect of more bills, but because of the use of ADS-B data to **collect fees.**

Simply put, in both design and mandate, **ADS-B was never intended for this purpose.** It exists due to its ability to improve the safety and efficiency of air traffic – not to clip the proverbial ticket.

What's Being Proposed

Long story short, Florida has contracted a partnership of **third-party companies** that collect real-time airport operational data using ADS-B and use it to produce landing fee invoices.

The proposed billing structure will be **based on weight**, and the heavier you are, the more you will pay. The figure being widely thrown around is **$3USD per 1000 lbs.**

These fees may be introduced as early as 1 October 2024. Nearly a dozen Florida airports have already shown an active interest in implementing the new scheme.

For business jet operators, it's hardly earth-shattering news. $225 USD in fees to land a Gulfstream 550 for instance is well within the realm of normalcy – given publicly available fees.

So why should we be taking note? Because of the **precedent** being set and the implications that this may have for the future use of ADS-B data.

Push Back

AOPA have written to the FAA asking them to **block the use of ADS-B to collect fees.** They're also seeking legislative action to try and make sure this doesn't happen.

They make the following points:

- The fees will be collected by not-for-profit, public-use airports already operating in surplus thanks in part to Federal grants.
- The domino effect. Airports have expressed concerns that if other airports introduce the new fees, they will have to do the same to protect themselves from the resulting influx of traffic.
- This is not what ADS-B was intended for.

ADS-Being Watched

This is not the first time ADS-B has come under the spotlight for being used in ways that were never intended.

Case-in-point was the **recent controversy** of its data being used to track and publicize the whereabouts of prominent VIPs – one celeb famously described these as his *'assassination co-ordinates.'* You can read about that more here.

In a similar vein, one can argue ADS-B data should not be used to collect billing information either.

It was never intended for this purpose. The technology was invented, and in many cases *mandated*

for the better-than-radar effect it has on separation and airspace safety. Just take the fairly recent transition of the NAT HLA to space-based ADS-B for instance.

Where the lines become blurry is that **ADS-B data isn't protected** – with the obvious exception of things like the FAA's LADD and PIA Programs, which are limited in scope for international operators, and will be for some time yet.

The reality is that virtually anyone with around a hundred bucks worth of ADS-B receiver can track most 1090 MHz ADS-B equipped aircraft.

Unfortunately, the use of this data **opens the door to commercial interests** – the precedent arguably being set in Florida.

It is our data, and belongs in the aerospace system. Florida's proposed landing fees may be of more concern to flight training and lighter aircraft right now, but we have a **collective interest in supporting ADS-B only in its use for safety, and nothing more.**

Staying Switched On

What we don't want to see happen is **more pilots and operators switching off ADS-B** because they are skeptical of the system. Having your ADS-B switched on, even in areas where it's not required, provides a **massive advantage to aviation safety** of being able to see other planes around you.

The risk with schemes like this new one in Florida is that it will drive more pilots to avoid the system, which could ultimately lead to more incidents and accidents.

Have more info?

We'd love to hear from you. You can reach us on team@ops.group around the clock.