Queen Elizabeth II Funeral: Restrictions in London

OPSGROUP Team
14 September, 2022

The Funeral of Her Majesty Queen Elizabeth II will take place on September 19th, from 0900-1900z. There are likely to be significant restrictions in and around London on the day.

September 19 will also become a new Bank Holiday, and a greater than usual number of closures of businesses can be expected on the day.

Here's what we currently know as of **September 14:**

(All times in Zulu… we think)

All London Airports

Have a read of our post on London Airport options, and general top tips.

All the airports will operate at a **reduced capacity**. Except a similar thing to what you see on public holidays.

- A **two hour ground limit** is likely at most airports
- **No helicopters** will be allowed (except probably a lot of police helicopters over London, look out for them)

Demand is already building so get your requests in soon if you need to operate in. Important folk from about 120 countries are likely to be attend and guess where they'll all be flying into…

Security is going to be significantly higher as well.

EGLL/London Heathrow

The issue is **noise levels**, and trying to manage it alongside where the procession will be taking place, which is why they have something called ***"Operation London Bridge".*** The main 'quiet time' will likely be from 1350-1440z.

At the moment, a full stop on operations has not been suggested. However, there is probably going to be significant reductions in operations. So, here's the current plan:

Westerlies are expected to be in use, and if they are then the plan is this:

- **0900-1230** Stop on all **arrivals**, but departures will still operate
- **1050-1105** Stop on **all arrivals and departures** during the National two minutes silence. This will be managed tactically (so you'll probably just hold a little longer)
- **1230-1400** Stop on **all arrivals and all departures**
- **1400-1900** Stop on all **departures**, arrivals will still operate
- **1900** Operations will begin to return to normal

If Easterlies are in use then it gets a bit more complicated.

- Departures will be stopped in the morning
- Arrivals will be stopped in the afternoon
- But no departures means **no space on the ground**, which means a further reduction in the morning for arrivals as well.

The CAA has confirmed that any cancellations due to all this will be **alleviated**, so make sure you reference *'London Bridge'* when making your request.

Filing EGLL as an alternate on this date is probably not advisable as they are unlikely to be able to accept you (except on an Emergency). In fact, the AIP says not to.

EGKK/Gatwick

Gatwick has **some closures** from Sep 14-16:

- **15 Sep Whole airport closed** 0355-0415z
- **16 Sep Whole airport closed** 0250-0405z
- **17 Sep Open but no arrivals or departures** 0225-0420z
- **18 Sep Open but no arrivals or departures** 0310-0425z

So basically **tiny night closures**. Notams A6976/22, A6977/22, A7020/22 and A7021/22 are the ones to check. We haven't seen anything specific for the 19th.

Signature Handling is also going to be temporarily handed over to the Foreign Commonwealth and Development office so expect slower responses to slot requests and monitor for more restrictions by notam.

EGKB/Biggin Hill

We've not see any restrictions on Sep 19th, but there is a **flypast on the 17th** so it will be closed 1650-1700z (Notam C5209/22)

EGLC/London City

If the westerly **Runway 27** is in use then arrivals will be impacted less, but departures that continue west may be an issue. Early turns and significant extra routing might be required.

If it is the easterly **Runway 09** in use its more difficult again because northerly arrivals and the approach are over the City. There are likely to be restrictions here as well in that case.

EGGW/Luton

- Closed on Sep 18th from 1845-1915 (Notam A6988/22)
- Closed on Sep 19th for 2 hours… but we're not sure the time yet
- Also closed 0000-0530 17-18 for annual maintenance (Notam A6554/22)

EGSS/Stansted

Stansted is expected to be **handling the majority of traffic** coming in for the funeral. Currently, slots are taking longer to get approved because the FCDO is sorting this.

Parking is already filling up fast too so if you need it, book it soon.

- **Night Restrictions** are still in place between 0520-2220z daily
- **Only emergency diversions** will be accepted on Sep 19th due parking and ground capacity limits

EGMC/Southend

- Closed 0530-1300z on the 19th (we haven't seen a notam for this yet)
- The airport is **'strictly PPR'** until the 22nd (Notam P0144/22)

EGTK/Oxford

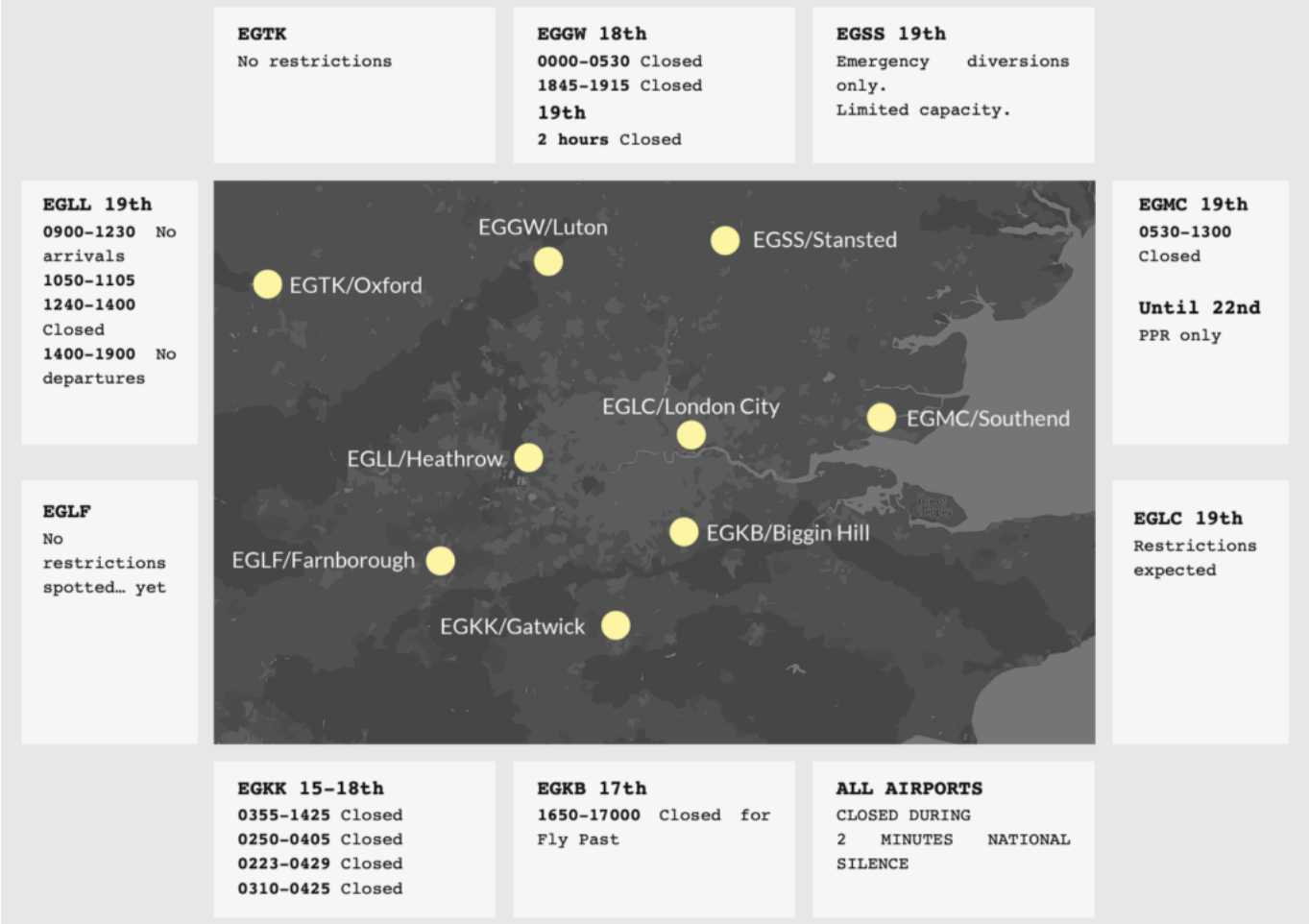
(Because it's not really London) they aren't expecting any restrictions or capacity problems.

EGLF/Farnborough

We haven't spotted any restrictions for here. The FBO says **'normal weekend/public holiday** restrictions'.

EGWU/Northolt

RAF Northolt has a full civilian ban in place between 1215- 1300z and an arrivals embargo between 1710-1810z on the 19th. The airport itself will operate 1100-1800z



Other UK Airports

The operational stop during the 2 minutes silence can be expected at airports across the UK.

Other bits of the World

The UK Monarch is Head of State for 14 Commonwealth countries, and has ties with another 44 or so. So a fair few countries may turn Sep 19 into a Public Holiday.

- **Bermuda** Sep 19th
- **New Zealand** One off Memorial Day Sep 26th
- **Australia** Public Holiday Sep 22nd
- **Canada** Sep 19th
- **British overseas territories** Sep 19th

Notams

Notams will be published confirming the planned restrictions. However, **the situation may change short notice** due a change in wind direction.

If a departure cancellation is required, it is likely the arrival will be as well (and vice versa, although that's rather obvious). They **won't be accepting rescheduling of flights** until they have a better idea of capacity levels, how quickly it will return to normal, and how many stands they have available.

The Toronto Slot Machine

OPSGROUP Team
14 September, 2022

CYYZ/Toronto Pearson has construction works planned this Fall *(that's autumn for European folk)*, which is going to mean some slot restrictions. Here's the info on it.

What are they doing?

They have been **rehabilitating one of the runways – 06L/24R** – since April 2022. The overhaul will give it another 30 or so years of life.

So far they've sort of done one third of it, and are finishing up the mid section, so just have the end bit to go – but this is **the longest section to complete.**

After this they'll be whacking in a lot of LED lights and also working on new bay areas.

You can read all about it here.

What does it mean for traffic?

This is actually their second busiest runway which means fairly big disruption. Normally Toronto runs a **dual or triple runway configuration** when it gets busy, but since they can't do that, they've been maximising the efficiency of the other two where they can.

With the biggest bit of the construction coming up, they have put some **slot restrictions** in place to manage the traffic, **effective Aug 2.**

This will mainly impact Business and General Aviation flights.

- First up, there are **limited slots between 15:00 and 19:59** local time, each day

- This applies to **arriving and departing** aircraft
- BizAv/GenAv flights looking to operate between **06:30 to 12:29 must file a reservation** with the Airport Reservation Office Online Coordination System (ARO OCS)

Good news though – any **unallocated capacity** (with an hour to go) will be available for BizAv/GenAv flights. So you might be able to sneak in last minute (although we wouldn't recommend depending on it).

ARO OCS?

Find all the info on that here, and if you're not already registered then do it because it **takes 7 days.**

Actually that link takes you directly to Toronto's site on it and there is a bunch of handy info there like who is exempted, how to do it, forms etc.

The Directive.

The official stuff on it can be read here. It says what we said, but you can also find some handy contact info in there too, in case you have any questions on it all.

NAT Ops: Atlantic Thunder 22

OPSGROUP Team
14 September, 2022

Remember that big NAT military exercise a couple of years ago? And then the one that happened last year (Formidable Shield) around May time?

Well, now Atlantic Thunder is happening, which means once again **large parts of North Atlantic airspace will be closed to all flights** for several hours at a time.

Not quite as big as Formidable Shield though, but still big enough to have a conference about it.

The Conference.

They are holding one so you can find out exactly what the deal is.

Join it by visiting the Eurocontrol NOP page and find the link there under *'latest news'*. They have one before each of the days where the most impact is expected, so the first takes place on **September 6th at 14:30 UTC** (and then on the 8th and the 10th).

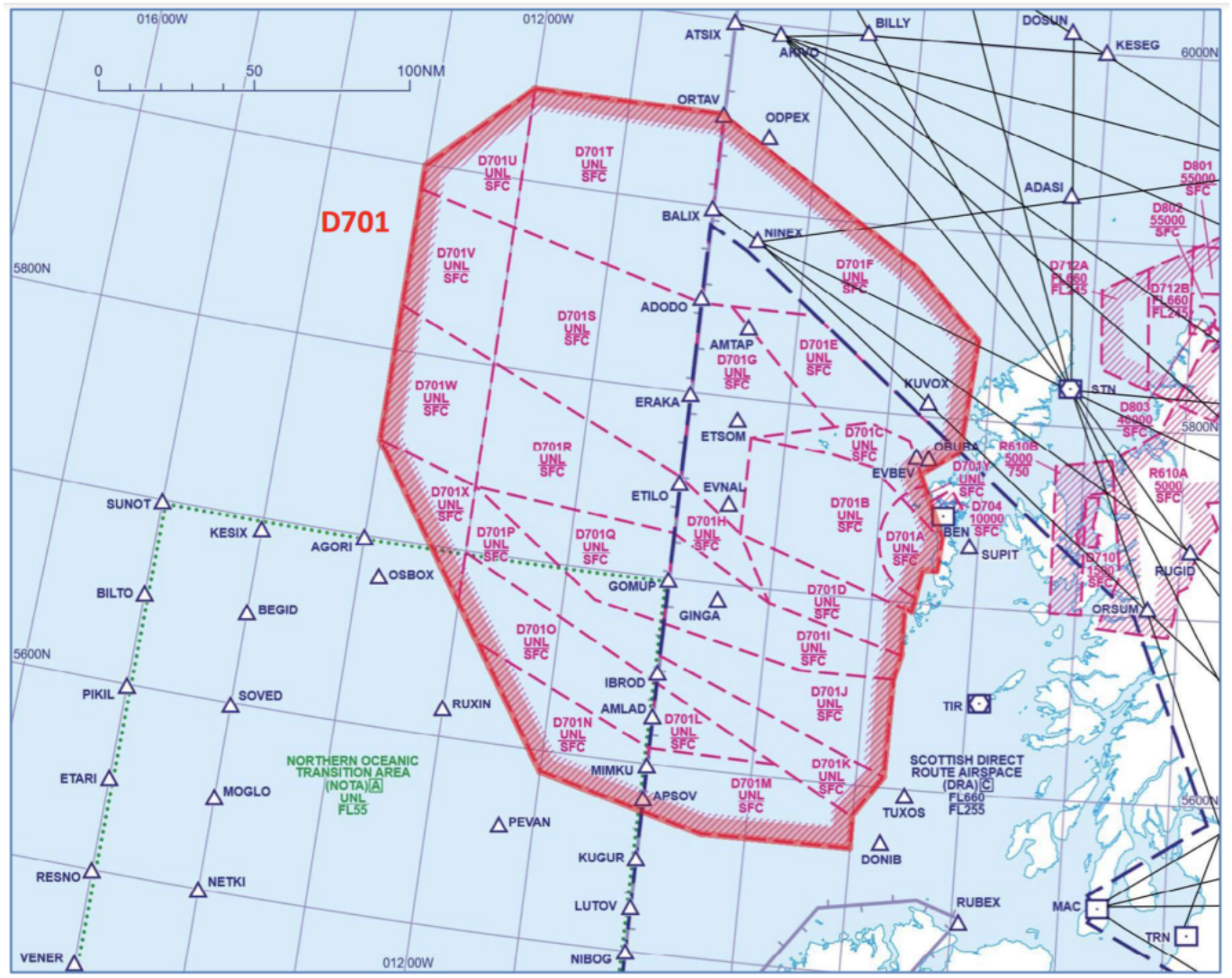
The Event itself.

Atlantic Thunder will take place from September 1-12, but **the main exercise takes place on the Sep 7** (or Sep 9 or 11 if it doesn't go ahead on Sep 7).

The official PDF issued by Shanwick is available here, and has lots of lists of everything closed and when...

We prefer pictures though.

So first up, danger area **EGD701** –



This area is tricksy because as you can see, it is made up of loads of smaller bits that can be activated at different times (and to different levels). They affect a bunch of the routes out of the NAT HLA, and potentially both the **EGGX/Shanwick and EGPX/Scottish FIRs.**

Initially it will be closed 1-6, and then on the 12th as well. The timings are annoying. Sometimes it is

FL200, sometimes it is FL270, but then bits of it, **between 1400-2359, are shut to FL UNL.**

Like we said, *tricksy.*

But then…

But then there is **Configuration 2** which involves the closure of **EDG701 and also EGTHUN1 and EGTHUN2**, which is a bigger area looking like this –

Of course, they only publish the exact timings and configurations 24 hours in advance so you're going to have to keep your eyes out for Notams and info on those.

Routing around the closed airspace.

Aeronautical Information Messages (AIM) will be issued prior to the start of each exercise, which will include suggested routings for flight planning around the closed areas.

Traffic overflying around these closed areas can expect to get **30NM separation if in NAT HLA** airspace (FL285-420), or **60NM separation if flying at lower levels**.

Danger in Denver: Collision Risk

Chris Shieff
14 September, 2022

On August 3, the FAA put out a new Safety Alert (SAFO) for KDEN/Denver. Here it is if you want a read.

The issue is the high number of TCAS alerts being recorded when aircraft are shooting parallel approaches to Runways 16L/16R.

It turns out that TCAS, high elevation, and reduced separation aren't a great mix, and the FAA are worried there are chances of a collision.

Here’s a breakdown of the situation.

Elbow to Elbow.

Since 2004, KDEN has been operating two parallel runways (16L and R). The two runways sit literally elbow to elbow, with only 2600’ (709m) between them. For simultaneous close parallel approaches, 3600′ separation between runway centrelines is generally required. In Denver, typically two separate controllers are feeding traffic onto the approach cones for each runway, which means **coordination can be a challenge.**

From early on it became apparent that **nuisance TCAS alerts were a problem.** The FAA sought to fix the issue, and so in June 2019 Denver TRACON started separating aircraft vertically by 1000’ in case someone busted through a localizer.

Trouble is, this didn’t fix the issue. Instead, now the **majority of TCAS events are happening when aircraft are established on the final approach course.** The big threat here is the number of folk selecting TA only (a good 20%), and there is now a healthy dose of desensitisation thrown into the mix from so many nuisances warnings in the past.

Then there’s the elevation.

Fun fact: TCAS becomes more sensitive with altitude. Or in other words, the trigger thresholds for both TAs and RAs increase the higher you get.

Enter Denver – the ‘*Mile High City*’ – called that because it sits exactly a mile above sea level. **That’s around a 5,300’ elevation.**

The next iteration of TCAS, (the romantically named ACAS XO), promises better tolerances for these conditions but it’s not here yet, so right now users of **TCAS 7.1 get all the warnings when all the warnings are not necessary.**

What the FAA are concerned about.

Operate into Denver, and the threat of simultaneous parallel approaches isn’t new, but awareness of the threats needs to be improved. The basic idea is folk should:

- Have an awareness of how the **close in approach setup** might increase the threat
- Brief how operating in **TA only mode** adds to this
- Know exactly where to be and what’s around by **listening out on the radio** and monitoring TCAS carefully
- Think about to remember to **re-select TA/RA mode** in the event of a missed approach
- Be aware of how **nuisance TCAS** cautions and warnings may **desensitize** crew.

In fact, this could be useful guidance anywhere where there are similar operational and environmental conditions which might increase the risk of collision.

Dublin Airport’s North Runway Opens

OPSGROUP Team
14 September, 2022

Dublin Airport has a brand new runway! Sláinte!

It opened on August 24, 2022, only 15 years after its original planning permission was approved. It’s actually the airport’s third runway because everyone seems to oddly forget about 16/34 (which is a none too shabby 2072m with an ILS and RNP approach, so perfectly useable!)

Anyway, **10L/28R** has opened and is ready for use. There are a load of new charts effective from August 19 for you to check out if heading in.

What's it got?

It's got:

- **10,200'** (3109m) x 45m of tarmac.
- **A CATII/III ILS** onto 10L (but no published approach to 28R).
- **The ILS is very standard**. 3000' platform altitude and 3° glideslope.
- **There are restricted areas** to the south so the missed approach is to the north. Keep an eye on this if there are any storms passing through.
- **A new apron area (5H)** which is still under construction, so watch out if you're taxying around the end of 10L (threefold of 28R). The second phase starts from September 8 so check the chart validity carefully.

You can find the Irish AIP here if you need it.

Anything else to know about the airport?

- **They favour the 28s**, and you can expect these in use until the tailwind reaches 10 knots.
- **Read the airport briefing** because there are a bunch of **taxiways you mustn't stop on** when vacating certain runways, because they won't actually get you clear of the runway.
- **They have NABT** for certain categories of aircraft.
- **Sometimes they talk fast and give you a thousand taxi clearances** in one go so be ready to copy the clearance down!

- **The aprons get congested.** Probably because some clever person built loads of nice little cul-de-sacs for the airplanes to park in, not remembering airplanes can't do three point turns to get out again.

Other than that it is a nice, easy airport to operate into.

And also…

EIDW/Dublin does have a **pre-clearance service for the US**, but it's only available to scheduled airline traffic. If you want to get this service for your private/charter flight, you'll have to go to EINN/Shannon instead.

Here's some more info on all that US pre-clearance stuff.

A little bit of history.

If you want the boring historical facts then go and look at Wikipedia. This is some of the lessor known stuff.

Dublin actually means Black Pool, but locals (well, folk who speak Irish) know it as *Baile Átha Cliath.*

Collinstown Aerodrome (as Dublin airport was originally known) was the spot where the most successful raid against the British took place, in 1919, during the war of Independence. 25 or so raiders broke in, poisoned the guard dogs (well, actually they did that in the afternoon and just timed it well), then silently captured any human sentries and managed to nab a whole load of ammunitions and weapons before escaping. They also amusingly left the Brits unable to give chase because they'd sledgehammered all their cars in the garage.

Nowadays, Dublin Airport seems to be a place where people leave stuff, rather than raid stuff from it. It has a **history of random items abandoned there by passengers** including an urn of ashes, a 42" television, some large paintings, 7 grandmothers (on separate occasions) and a toilet. One of those is not true. I'll let you guess which.

The Doha FIR: Qatar is finally getting its own airspace

OPSGROUP Team
14 September, 2022

For such a small place, Qatar has some big history. It is in the news (and in aviation news) a fair old amount over the past few years.

And now another newsworthy event is occurring, because it is finally

getting

its

own

airspace!

We feel like we should send a house (well, airspace) warming gift? Send us ideas. Or maybe just go and use the airspace.

What's the story?

We posted this back in 2021 when the news first hit the headlines that Qatar was looking to get its own airspace.

In short, (in case you can't be bothered to click the link and read it), with the exception of the OTHH/Doha terminal area, all the **airspace was controlled by Bahrain**. Which was never a problem until Qatar had a fairly large *'diplomatic dispute'* with many of their neighbours, and it reignited the campaign to get their own airspace.

They pushed the idea, there was some feedback, it wasn't good, so they put in a new proposal fixing the issues, and it was approved.

Now it is actually happening!

The **OTDF/Doha FIR** will be established, effective from **8th September 2022.**

Here is a map of what the **lateral boundaries** look like.

If you click here, you'll be transported to a lovely high res PDF fresh from the AIM (and minus the badly

done highlighting) so you can see it all much more clearly.

The vertical boundaries will be surface level to FL245, which means flights above FL245 will still be in the Bahrain FIR and under their control. So if you're overflying, you probably aren't going to notice much during **Phase 1.**

You can access all the info on this in the Qatar AIP, available here.

So that's it?

No, that's not it, because there are several phases.

Phase 2 is when Doha Control grabs control of **all the airspace above the State of Qatar and their waters**. This means surface level to somewhere unlimited above them.

Bahrain will still be responsible for controlling the **international waters bits nearby, but only up to FL245.** Now you might notice the difference if you're overflying, but not much – just some new frequencies to talk to.

This will come in from **23rd March 2023.**

Finally…

Sometime **after the end of 2024,** Doha will become the 'responsible authority' for the entire FIR, surface level to unlimited, including over the international waters.

What is important to know?

Communications:

Well, initially there won't be much change at all if you're only overflying.

Obviously, if you descend down into Doha then you are going to be speaking to someone not in Bahrain, but you would have been anyway once you entered the OTHH/Doha terminal area. Now it will just be a little earlier.

There have **never been issues with the handover** between Bahrain and Doha.

Flightplannng:

OTHHZPZX is the current *general* flight plan one.

All flight plans and departures messages for flights planning on operating through or within the Doha FIR must include addresses **OTDFZQZX**

If you're going to overfly on the A453, L602, L768, M600, M677, P559, P699, T308, T872, Y856 ATS Routes (via North of Qatar) then make sure you use **OTBDYWYX** in the message address.

In the absence of AFS, you can email: doha.comm@caa.gov.qa or fax at (974) 4462 1052 / (974) 4470 5075. An acknowledgement of receipt must be obtained via tel (974) 4470 5080 / (974) 4470 5081.

ATC (in general):

Controllers in the Doha TMA were always well trained and a good standard. There is no reason to suspect the new controllers responsible for the FIR won't also be.

Procedures are unlikely to have changed, it will now just be a Dohasian rather than a Bahrainian controller calling the shots.

(No, Dohasian isn't a real name, I made it up).

Weather:

Weather avoidance might require you to talk to both Doha and Bahrain if you'll be crossing the temporary boundary (into the international waters area).

Contingency procedures:

Until the official AIM is published this isn't confirmed, but the assumption is this will remain the same.

It's so small, why do we care?

While the airspace is smallish in the schemes of airspace size, it is biggish in terms of importance for the region. Around over **thirty percent of traffic in and out of the UAE** routes via Bahrain (soon to be Qatari) airspace, Kuwait and then up via Iraq to Europe, avoiding Iranian airspace to the right.

OTHH/Doha and **OKBK/Kuwait** provide two "final" alternates for en-route diversions for aircraft routing over Iraq, and also for aircraft routing south if UAE airspace closes. They are also close to Saudi airspace and useful alternates if ESCAT procedures prevent aircraft from operating into Saudi Arabia.

Anything else?

Not that we can think of, but you can tell us if you experience anything worthy of reporting once it goes live this September.

We did make this Airport Lowdown for OTHH/Doha in case you need it.

The Flight of Fright: Tales of Startle and Surprise

OPSGROUP Team
14 September, 2022

We may have brought this up before. I think we referred to it as "*that old chestnut*", and talked about how the lack of currency (a lot of folk were heading back to the cockpit after big periods of Covid-no-flying) made it a big threat to think on.

But it turns out lack of flying isn't the only issue. In fact, Startle and Surprise are a bit less *"old chestnut"* and a lot more *"giant conkers still encased in their spiny suits, falling on pilots' head from 40,000 feet"*. They can affect anyone, and regardless of experience or currency, can be hard to deal with.

So we thought we'd take another look, and a slightly more *personal* look, to see if that might help folk be less, well, startled when something startles them, (or surprised by something surprising).

It's all in your head.

It really is, which means reading about the *Science of Amygdala* and the *Theory of 'fight and flight'* is great, but **it probably won't actually change *your* reaction**. At least, not the one that counts. You may say *"oh, so that's why my brain did that!"* several hours afterwards when the adrenalin has worn off, but in the heat of the moment?

Knowing the theory probably won't help.

If you want to know how to not react the 'wrong' way to Startle or Surprise, then you need to **think about how you do currently react** – analyse those past events and what your brain did during them – because once you understand and are aware of that, then you can start to think about how to control it a little more.

A very wise lady wrote an interesting thing of this for the RAeS magazine. She pointed out that one of the big issues with training for Startle & Surprise is the fact that **you can't really do it that effectively in a simulator.**

- First of all, we all go to the sim **expecting hideous things to happen** and are generally quite primed for it.
- Secondly, unless your sim is particularly high tech then chances are **they have to build up to a lot of those startlingly surprising things.** Like the old *"close your eyes and only open them when I say ready"* UPRT practice. If you know what's coming, the effect is less.
- Thirdly, as much as we're told to treat the sim like a real flight, our little brains always know deep down that it is just a sim and **we aren't going to really be in any life threatening jeopardy**, which can change just how much 'fight or flight' it really goes for.

So it is hard to really experience a full Startle or Surprise in the sim. But we can still benefit from the practice by using it to review our reactions and thinking about how they felt, what we did, how we recovered – **we can mentally prepare ourselves** for the real deal should we ever encounter it.

Are you a 'flight' risk?

I am a naturally very jumpy person. My husband takes great amusement in making me jump at every opportunity which sadly has only further developed my "*scream first, think later"* response.

Would I have a similar reaction in an airplane?

Embarrassingly, yes. I once flew into my wind shear memory items after the system yelled *"Wind Shear!"* at me. Great. Nice to know I'm that well conditioned. Only the warning had gone off at 12,000' because the system had malfunctioned, and me hurling it into TOGA basically all out panicked the poor thing.

Are you a 'fight' risk?

I've seen other pilots startled by the dings of ECAM during an engine start, seen the EGT skyrocketing and yanked the start master off – de-powering a bunch of the systems the clever FADEC probably would have used to help the situation.

Both the flight or fight reactions generally have us wanting to do something immediately – to take action, to get 'out of danger' – and generally before we've really understood the situation and all the information in front of us.

The 'duh!' Moment

The other response is **the 'freeze up'.**

A prime example of this occurred in the French Bee go-around incident of 2018. Startled by an unexpected wind shear warning the FO seemed to freeze – **cognitive incapacitation.** This was quite an extreme example (extreme in how long it lasted).

I've heard folk say *"I really froze up!"* when they were startled or surprised, *"There was this moment of cluelessness, where I just didn't know what to do!"* This isn't the same as the poor French Bee FO though who, after carrying out that probably amounted to a conditioned memory reaction then checked out entirely for almost the entirety of the go-around procedure.

Is a momentary freeze up such a bad thing?

That 'duh' moment is a pause. It is your brain trying to work out what is going on, and this can be to your benefit if you recognise it, and use it as a trigger to start getting the brain back into gear.

The worst thing to do would be to *do something* because you feel you need to. You need to give your brain time, but **how can you do this?**

What should that response be?

A lot of folk say *"sit on your hands"* but this is easier said than done.

I mean, you're not literally going to sit on your hands. Mine tend to go into a sort of weird claw shape when I'm truly startled, which I've never understood because what use is that? I'm not a clawed apex predator, and it makes sitting on my hands particularly uncomfortable.

What I think the phrase is aiming for is **giving yourself a couple of seconds** to allow your brain to get out of the startled state and start actually taking in the information and processing it properly. So a better method, or technique, is the **deep breath trick**.

Literally one big guzzling breath of air.

I like this one for two reasons – one it really works, and two it turns what would have been a mortifying yelp into a sort of wheezing gasp which is less startling for the person sat next to me.

Be a rock.

Or rather a **ROC – Relax, Observe, Confirm.**

Actually, ROCK works too – Relax, Observe, Confirm, Know (what to do).

This is a really good mantra to get into your brain. Deep breaths to clear the mind. Look at what is in front of you. **Vocalise it** so the other pilot knows what's going on.

The point is, you are going to be startled at some point. Things are gong to surprise you, and chances are, you will have the age old human survival reaction to this. You probably can't help it, but if you can recognise it in yourself and stop it from taking over totally, then that is a good thing.

After all, the other 'old chestnut' CRM thing – the one about stress levels and how well you perform (because adrenalin is a useful thing, to a point) is also a science fact.

So – a challenge.

Try and think of a time when you've been startled, or surprised, and try and remember the feeling.

Once you start to recognise it, and to understand how you react, then you can really start to condition yourselves with a better response, or at least a way to manage it.

Then try to think of a situation when an immediate response really is required. Aside from the obvious *"TERRAIN AHEAD, PULL UP!"* or a really violent wind shear warning, there are very few. Engine fire? You still need to confirm the right one. TCAS? RTO? They build in the natural delay.

We've put together a bunch of 'stories' – A Startle and Surprise Story Book.

We aren't astronauts.

Chris Hadfield, Canadian Astronaut, once talked about how **astronauts sometimes might only have the time they can hold their breath for to solve a problem.** I tend to yelp which means I let all the air out, so I would be awful in this situation.

Thankfully, we aren't astronauts, and there is rarely going to be a moment when you have to act *right this second* or that'll be it. So taking two seconds, *two breaths,* to calm down and work out what actually does need to be done is pretty much always going to be a good thing to do.

Want to read some other stuff?

Try this for size. (It's the old post we wrote about this very subject when folk were heading back into the skies after long periods off).

And here's our book again in case you didn't already download it. If you have a personal story to share of a time when you fought the twin headed gorgon of Startle & Surprise, send it in and we will add it (anonymously of course). Email us at news@ops.group

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NAT Basics: An Unofficial Checklist For Pilots

OPSGROUP Team
14 September, 2022

We have a handy **'My First North Atlantic Flight is tomorrow'** briefing guide which is for everyone – the planners, the operators, the pilots. Everyone involved in getting airplanes across the NAT. If you want it, head to the shop (or member's dashboard) and grab it.

This post is just a mini slice of that – just for the pilots. Not because you don't already know how to *'do the NAT',* and not because your operator doesn't already have a procedure in place, but just because we thought it might be a handy little guide on the basic *stuff to do* if you're a pilot heading into the NAT HLA…

On the Ground

We'll start when you're sat in the plane getting ready to go. There are three things you probably want to do at this point:

1. Check the Techlog.

Make sure you have the equipment you need. That means none of it is broken. The vast proportion of the **NAT HLA requires Datalink** now, so make sure you're CPDLC and ADS-C are functioning (because you need both of them to be able to do the Datalink). Also check bits like HF, altimeters and all the usual stuff you'd need for general RVSM-ing while you're at it as well.

2. Check what you're loading in the FMS.

If all your waypoints are **five letter named ones** then this is less annoying to do, but getting the other pilot to independently check there are no discontinuities or rogue vowels that might send you off in the wrong direction is still a good idea.

If you have the dreaded **LAT/LONG points** on your flight plan then you are going want to check more thoroughly.

- First up, make sure there are **no funky ones** stored in your box by a different pilot from an earlier flight.
- Load yours in using the **correct format**, and get the other pilot to independently confirm you haven't messed up the numbers with half degrees (or no half degrees if they are supposed to be there).

- Check the **track and distances** between all your points (from Entry to Exit) and make sure what is in the box matches the flight plan. It's a whole lot easier to fix it on the ground if it doesn't.

3. Have a little look over the weather and Notams for the en-route alternates in the NAT region.

Places can get nasty in winter, and there aren't many, so if one of them is under 10 feet of snow or has some **hideous Notam** then you're better off knowing before you go so you can make a different plan.

Check the old **space weather stuff** too because if there are some storms raging up there you might experience some HF blackouts or satellite navigation issues and again, good to know what to expect (and what to do about it) before you're in it.

In the air (approaching the NAT HLA)

- Make sure you know who you need to **Logon to for the clearance**, and when to do it.
- Check **everything is still working.**
- Once you get your clearance make sure both of you check it. That means checking **what you've been cleared is what you have in the box.** If it has changed then you'll need to do those track and distance checks again. Select North Ref to TRUE for this but don't forget to set it back to MAG once the checks are done.
- Make sure you have the right **Mach set** (if it's a constant mach segment).
- Check the **RNP and Nav Accuracy** is High.
- Check your **altimeters are all within 200'** of each other.
- **Brief your contingencies** again and think about whacking something in the secondary to help if you want to.

Entering the NAT HLA

In you go…

Put that **SLOP in (0/1/2nm RIGHT of track, or 0.1 increments if your airplane is that clever)** and select **123.45MHz on VHF1** (unless you still have an active ATC VHF). Keep a good listen on 121.5MHz on VHF2. If you're heading into HF land then check in and do your **SELCAL check.**

When you're **30 minutes in, set your squawk to 2000.**

Now, some do this, some don't, and a lot do it different – it depends whether you're old school and using a plotting chart, or new school and EFB-ing. But even if you are in a high tech aircraft this is still one good method for checking you don't get any GNEs:

- As you cross over a waypoint, set your timer.
- After 10 minutes, check your GPS position in your FMS, and plot it on your chart/compare it to where your airplane is showing on your (electronic) map. If it doesn't match then you've got yourself a problem.

Keep an eye on those alternates and their weather. Plan stuff in advance so if anything happens

you're not flailing about in the sky like a headless chicken.

UH OH! I've got issues...

Use the contingencies, but not before trying to talk to ATC.

- If it's a **weather thing** and you only need up to 5nm to detour around it then maintain your assigned level. If you're going to need more than 5nm then use **SAND** – if your turn moves you South then ascend (climb) 300'. If your detour moves you North than descend 300'.

Always **check the tracks and traffic proximity first.** Turning the direction which will mean a longer detour might keep you more clear of traffic.

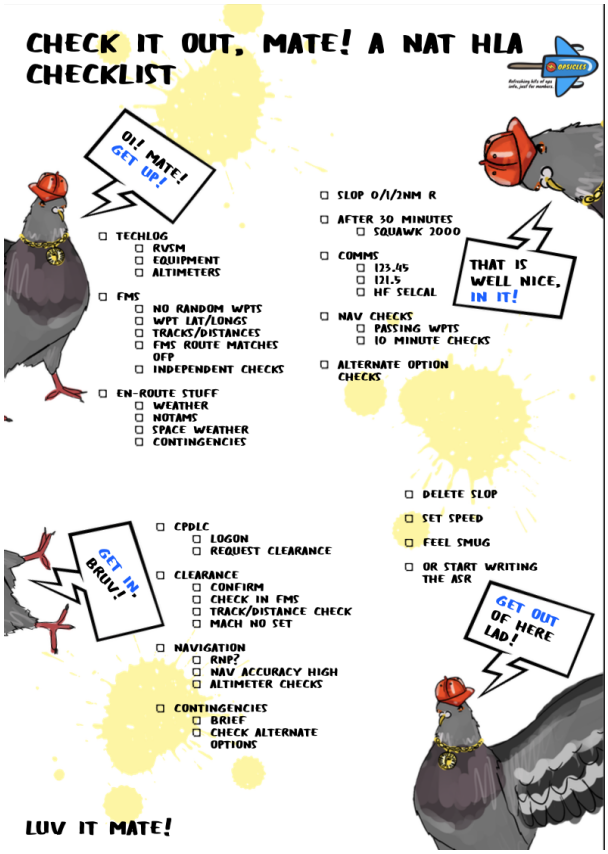
- If it's a **serious technical problem then turn 30° and offset laterally by 5nm.** Once established, climb or descend 500' (1000' if above FL410) or descend all the way down below FL290.
- If it's a **communication issue** then stick with your assigned clearance and do what you can to get in touch with someone.
- If it's an **ATC issue** (ie they've evacuated and aren't there anymore) then follow the published contingency procedures.
- If it's some sort of **navigation problem** then get in touch with ATC and go from there.

I made it!

Congrats. Delete the SLOP, set the speed to what you need and out you go, smug in the knowledge you traversed the NAT HLA without mistakes.

A checklist for you

We turned all this info into an **Opsicle.** It has London pigeons in it because they are clearly the masters of crossing the North Atlantic. Grab it here.



Aug 2022 NAT Doc 006 Changes

OPSGROUP Team
14 September, 2022

Are you *Trevelyan* across the NAT HLA anytime soon? Then here is a summary of the changes that just came out in NAT Doc 006.

What is Doc 006?

It is the Air Traffic Management Operational Contingency Plan for the North Atlantic Region, and we are talking about the Second Edition, August 2022 version which you can find here if you want a look. The last time it was updated was back in Feb 2021, and we covered those changes here.

Page 1

"Aha, a handy list of all the changes," think Rebecca and Dave as they glance at page one. *"This will be easy. Our job is done already."*

"What does it say?" Rebecca asks.

"It says that there is a new chapter on Common Procedures which were there but are now here…" replies Dave. *"And also something about a Notam and some route something somethings…"*

"There's still a lot of red again, isn't there?" whispers Rebecca.

"Yes, there is," sighs Dave.

"Should we read it for them?" Rebecca says wearily.

Dave nods.

All the changes are in red.

Finding the changes isn't hard. Understanding them is the annoying bit. So we shall try and make sense of what all those changes are for you so you don't have to.

(But before we go on though, here is the record of amendments so you can see if any of it looks remotely interesting to you. If not then you can go and do something much more interesting with your time instead of reading further.)

Chapter 1

They have updated the information on contingency situations thats might affect multiple FIRs. What could cause that? **Volcanic ash** could cause that.

They have also **added in Reykjavik.**

Chapter 1

Sorry, that bit before was just an intro or something.

So, Chapter 1 – Common Procedures.

- **Limited Service:** If ANSPs are going to only be able to provide a limited service they will try and let everyone know at least **12 hours in advance by Notam**. This is for times like if **datalink going to be down** or if there are some huge **solar flares** heading their way that might take out their HF for a bit.
- **No Service:** It's the No Service Situations we really need to worry about. If this happens then they will get a message to whoever they can, and whoever gets the message will help share it out to as many people as they can.

In any region, the results will be the same. With Comms disruption, they will obviously attempt other methods. There is likely to be a fair amount of **frequency congestion** on whatever methods are still working.

With control services, there may be some **additional restrictions which affect traffic flows**, and there may well be reroutings. Where possible, these will be limited to those not yet in the NAT (a bit easier for the old fuel planning).

In the event of a **sudden withdrawal of services,** here is an excellent chart for pilots to print out and have handy.

Immediate withdrawal of services

It's what the handy guide says, but in case you don't want to read that:

- **Already in the NAT?** Basically, stick with the last received and acknowledge clearance, try and talk to anyone you can and make sure you give position reports. You can use SATVOICE for this too. If you're in the middle of a level change, complete it as quickly as you can. If it's a control centre evacuation and you're on ADS then revert to voice.
- **Approaching the NAT?** If you're within 20 minutes and it is getting evacuated then stick with your last clearance. Only aircraft less than 60 minutes from their OEP can transit Gander. They guarantee no conflict profiles.

The Next Chapters

Shanwick: Contingency procedures have moved to chapter 11.

Gander: Nil Red

Reykjavik: This has a lot of new info, although not specifically in this section. The main thing is, if you can't get hold of **Iceland Radio HF** then **try Shanwick radio first**, then Gander or Bodø if still no luck. Reykjavik is the only FIR without supporting procedures.

Santa Maria: If Comms are down and you have **ATS safety SATVOICE** (INMARSAT or IRIDIUM) then you can call them on **426302 or 426305**. If you have a non ATS safety satellite network (some big old sat phone from the 80's onboard) then try **+351 296 886 655** but only if you really, really need to.

New York: Nein Rot.

Bodø: Bodø ACC includes Domestic control, Oceanic and Radio (HF). Thankfully it can be supported by basically all its neighbours FIRs (except Reykjvik).

Shannon: Non Rouge.

Brest: No roja.

Chapter 10 – Notification Messages

Or *'The Great River of Red'* as I know call it. Actually, most of this can be looked at in the below image (it's a picture of their example of a Notam).

Limited service? Info will be sent via other ANSPs.

No service? It has probably been evacuated and notifications of this will be sent via the NAT track

messages and transmitted on any appropriate frequencies.

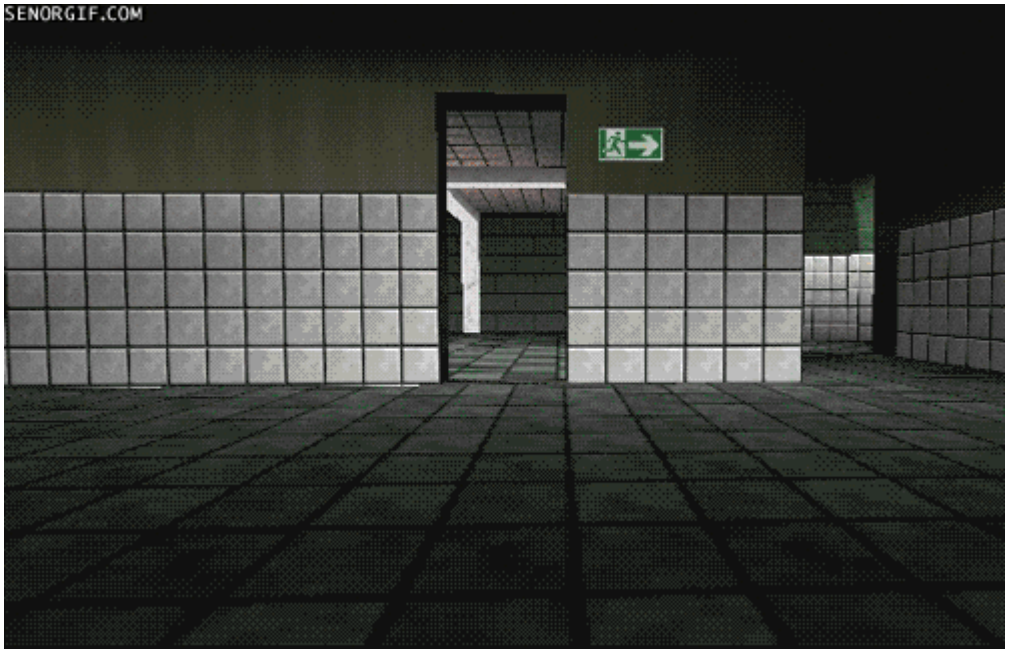
Chapter 11 – Route Structures

This contains info on the routes for each region. Mainly Reykjavik because they've added all of those in. There are some nice diagrams in this bit.

Chapter 12 – Contact Info

This is the contact details. Lots of red for the **new Reykjavik folk.**

That's it. We're off to play some Goldeneye on our N64. **Found something important that we missed?** Let us know! news@ops.group



Is breaking the rules always bad?

OPSGROUP Team
14 September, 2022

“So, Rebecca, tell us about a time when you didn’t follow an SOP?”

I don’t know about everyone else, but this question always seemed to pop up in interviews for me. Maybe I come across as ‘rigidly adherent’ to rules, or perhaps I tick too many of the “like finding alternative solutions” answer on the personality questionnaire and they think I will constantly be bending the SOPs into elaborate balloon animal shapes for the fun of it…

Here’s the question:

When can we ‘go outside’ the SOPs? How do we justify it? How do we actually do it?

It turned into three questions, sorry.

First up, what is the point of an ‘SOP’?

To prevent wild cowboy pilots from jaunting about willy nilly? Yes, probably that. But at the root of it, I think a fair definition could be **“to help with safety”.**

By the very vague ‘help with safety’ term, I mean *all the stuff* – providing guidance to help us stick to rules and regulations, helping us deal with situations, ensuring we all know what to do and how to do it, and what to expect. They create a sort of script, a choreographed dance to lead us.

Basically, making sure we’re all playing by the same rules.

Standard operating procedures are put out there not just to be a “that’s how we do it” rule book, but more a **“that’s how we can do it, because it should help with safety”** guidance book.

So compliance equals safety?

Now, a quick interlude on the word ‘compliance’ because **I don’t like it much.** If you search the definition of someone who is compliant it says they are “disposed to agree with others or obey rules, especially to an excessive degree”.

OK, the rules bit is fine, but the excessive degree? Following rules for rules sake, excessively? Nope.

But…

But compliance is necessary in aviation, and much of my dislike really comes from the fact I think it is generally **misunderstood, misused and misapplied.**

Someone wise said that *'compliance is the foundation and structure which helps build safety' (*I may have not quoted that completely right), but it sounds good to me.

So being compliant doesn't automatically equal being safe. **Rigid adherence for the sake of saying you adhered** does not automatically lead to safety. The two can absolutely go hand in hand, but just ticking boxes and saying *"I ticked them all, so I'm compliant, so I'm safe"* doesn't actually work, at least not all the time.

Sometimes it might, but it's not a guarantee.

The same goes for SOPs. Sort of...

An SOP generally isn't (shouldn't be) created for the sake of creating an SOP. Then you just end up in a hideous loop of *'the SOP says I must follow the SOP that says I must follow the SOP that says...'* you get the picture.

This is pointless.

Any procedure should be put in place because it does 'something safetyish', and so following it will help you be 'safetyish'.

Which brings me, finally, to the two occasions where I think it is ok to let something non-standard occur.

First up: The 'letting it slide' situation.

If I say *"checked"* instead of *"check"* on a checklist then I might not be compliant with the checklist terminology, my *'knowing the correct response on the checklist SOP'* might be subpar, but has that really impacted safety? No, it hasn't, because the same outcome has been achieved.

You pulling me up on it might impact safety though because it will make me angry at you!

So 'non-standard' stuff, for me, has to have some common sense applied to it. If it hasn't impacted safety, then the balance between rubbish CRM versus helping correct a bad habit (that could become more of a thing) has to be considered.

That's letting something slide.

Secondly: The ‘blind obedience’ situation.

Fastidiously following for following’s sake.

There could be times when an SOP might actually decrease safety, and that’s probably when you might want to **bend it, break it, or work outside of it.** I guess this is what all those interviewers are hoping to get at by asking this question?

Ultimately, safety is the aim of SOPs, and **if they don’t achieve it – do what will.**

And this can be tough to do, because often we fall into the trap of thinking SOPs are everything, and we become reliant on them to keep everything OK, rather than using them alongside our professional judgement and experience.

What about less black and white situations?

You’re stuck in a box that says ‘no permission, no can do’ and the operation is grinding to a halt? This is when to really think about the “instructions” that go with that box, so to speak. **The actual intent or purpose of the procedure,** and what you can do to maintain that. Because not being able to tick ‘exactly compliant with procedure’ is less important that ticking the ‘compliant with safety awareness and standards’.

The procedure might turn out different, but the outcome will still be achieved.

If you’re not getting my point on intent, refer back to the earlier paragraph where I used the splendid word ‘safetyish’ – it’s not in the dictionary, but you understood it, and it got the point across (hopefully).

Be Effective!

The final question then, if we're going with the **"same purpose, so all good!"** principle is the "Effectiveness Test". Quick definition – doing something effectively means doing it the best way.

Which is what SOPs are sort of there for. **Getting us to the most efficient (safest) outcome, the most effective way.**

So I can't just ignore a load of SOPs and say *"but the outcome was the same, what's the problem!"* And if that's the case, then how much should we be considering the effectiveness (rightness) of our process alongside the outcome?

To try to comply with the Effectiveness Test, we can fall down a rabbit hole of ticking every box, crossing every 'T', dotting every 'I' so to speak – basically, **worrying about the effectiveness versus the outcome too much.** Which is exactly what this whole post started out talking about.

But I can't swing the other way and barrel roll an airplane down an approach disregarding every stabilisation criteria but touchdown on speed not the blocks and say *"hey, the outcome was fine."*

So where do we draw this line? Is it even a line?

It comes down to airmanship. This might feel like it's not really an answer at all, but I think it will be **different for each of us** at the time, on the day, when we're faced with something that has us asking it.

And this leads to a last question, that came up as I thought through all of this – *"Is there a chance that too stringent SOPs actually stop us from thinking and judging, because we expect there to be an answer to every situation?"* Because SOPs help keep everything predictable, but often the situations are anything but.

My motto is this.

Let's aim for safety, and use the SOPs because they provide us with the most effective way of achieving that. **Until they don't.** And that's when we will do what we need to to maintain safety. But we'll try and do it with the SOPs, rules, regulations in mind *as best we can.*

New US Terrorism Warning: What's the impact to aviation?

Chris Shieff
14 September, 2022

On August 2, the **US Department of State** updated its worldwide terrorism warning for the first time since 2019 – terrorist groups around the world may be actively **planning attacks** on US interests. This follows news on July 31 that the leader of a major terrorist organisation was killed during a military operation in Afghanistan.

My flight is tomorrow, what does this all mean?

For starters, no *new* airspace warnings have been issued due to the recent events. But it is equally important that operators (especially N-registered ones) heed the information that is already out there.

This comes from a combination of FAA SFARs, KICZ Notams and Background Information notes.

In the most dangerous airspace, the FAA **bans US operators at all levels**. In which case, the decision to overfly is an easy one because it has already been made for you. You just can't do it.

But it's not always that clear cut. Risk may be present, but not enough of it to justify closing entire pieces of airspace. So the FAA carries out assessments and decides on what precautions operators should take to stay safe.

This is where the lines start to get a little blurry because these assessments take time, and security risks can evolve more quickly than the papers can be signed. In other words, what was safe *yesterday* may not be safe *today*.

And so operators may need to re-evaluate their exposure to known risks, based on what is happening right now. With that in mind, here are some hotspots US aircraft are *permitted to overfly* that we think deserve a second look.

Iraq

Back in October, the FAA lifted its long running Notam barring US operators from entering the ORBB/Baghdad FIR. The SFAR is now in effect, meaning overflights are technically okay provided you **stay above FL320.** But just because you *can*, doesn't mean you *should*.

Militant groups are active throughout the country and are known to have access to anti-aircraft weaponry. The have also have a proven track record of targeting US interests in the country. Scour through the OPSGROUP archives and you'll see report after report of rocket, drone and mortar attacks on

ORBI/Baghdad along with other regional airports.

Our advice hasn't changed – avoid overflights at all levels if possible. Although the eastern airways UM860, UM688 and UL602 are frequently used and considered safe options by some major carriers.

See: SFAR 77, Background Info Note.

Mali

The FAA currently advises US operators to **use extra caution if overflying Mali below FL260.** The main issue is the ever-fragile security situation on the ground. The FAA cites extremist or militant groups that may actively target civil aircraft with various weapons.

And things seem to be getting worse. On July 29, the US Embassy ordered the urgent departure of non-emergency US Government employees due to the risk of terrorism. Which is a warning sign for us that these risks may be escalating.

See: KICZ Notam A0009/22, FAA Background Information.

Somalia

The FAA currently allows US operators to **overfly the HCSM/Mogadishu FIR above FL260**. It's important to remember though that the security situation on the ground there is unstable – especially since a controversial election back in April.

Terrorist groups are active in the country, and may have been motivated by recent events. These groups have a proven track record of targeting civilians and aviation interests. In June this year news broke that several local carriers were considering suspending flights over security concerns onboard aircraft and at airports.

There is also currently an active trial of Class A airspace throughout the Mogadishu FIR, which means Somalia may be seeing higher numbers of overflights than normal. The problem is that emergencies and diversions may put aircraft at risk, especially US-registered tail numbers.

See: SFAR 107, KICZ Notam A0028/19.

Egypt

Back in March the FAA **lifted its airspace warning for the HECC/Cairo FIR**. It previously advised operators to stay above FL260 over the Sinai Peninsula – in the east of the country dividing the Red Sea from the Med.

The issue was the presence of extremist groups who may attempt to target civil aircraft. It's not clear what improvements led to the warning being lifted, but other countries have kept theirs in place – including the UK and Germany.

Recent events have proven that all is not well. An attack in Western Sanai in May this year was one of the most significant in the past two years – and was a clear indicator that terrorist groups are still active in the region. If they have been motivated by the happenings in Afghanistan, this may put aircraft at renewed risk.

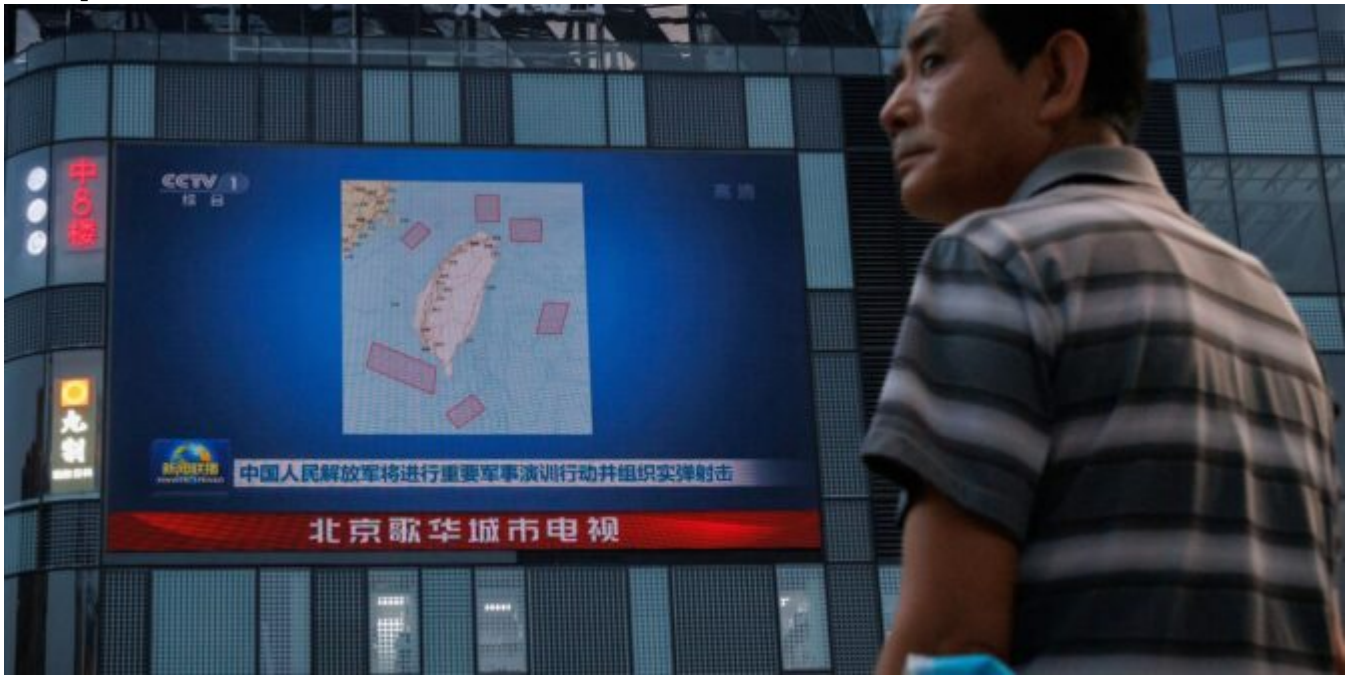
Where else to look.

As things change, airspace warnings get updated. For US operators the starting point is here – it contains everything officially put out by the FAA.

There’s also safeairspace.net – our conflict zone and risk database. The OPSGROUP team keeps this updated as new information comes to hand. You can view a global risk briefing by clicking here.

We Need to Talk About China!

OPSGROUP Team
14 September, 2022



China held new drills near Taiwan on Monday, a sign that they may intend to **normalize their military presence around Taiwan.** This came a day after the Chinese military ended their extensive 3-day exercises encircling Taiwan, effectively simulating a blockade.

During those exercises, there were **significant impacts to flight ops in the region**. Xiamen Airlines and Korean Airlines made adjustments to several flights to **avoid the airspace**, Cathay Pacific pilots were reportedly advised to **carry an extra 30 minutes of fuel**, and there were cancellations at **RCTP/Taipei** airport in Taiwan and **ZSAM/Xiamen** and **ZSFZ/Fuzhou** airports in mainland China.

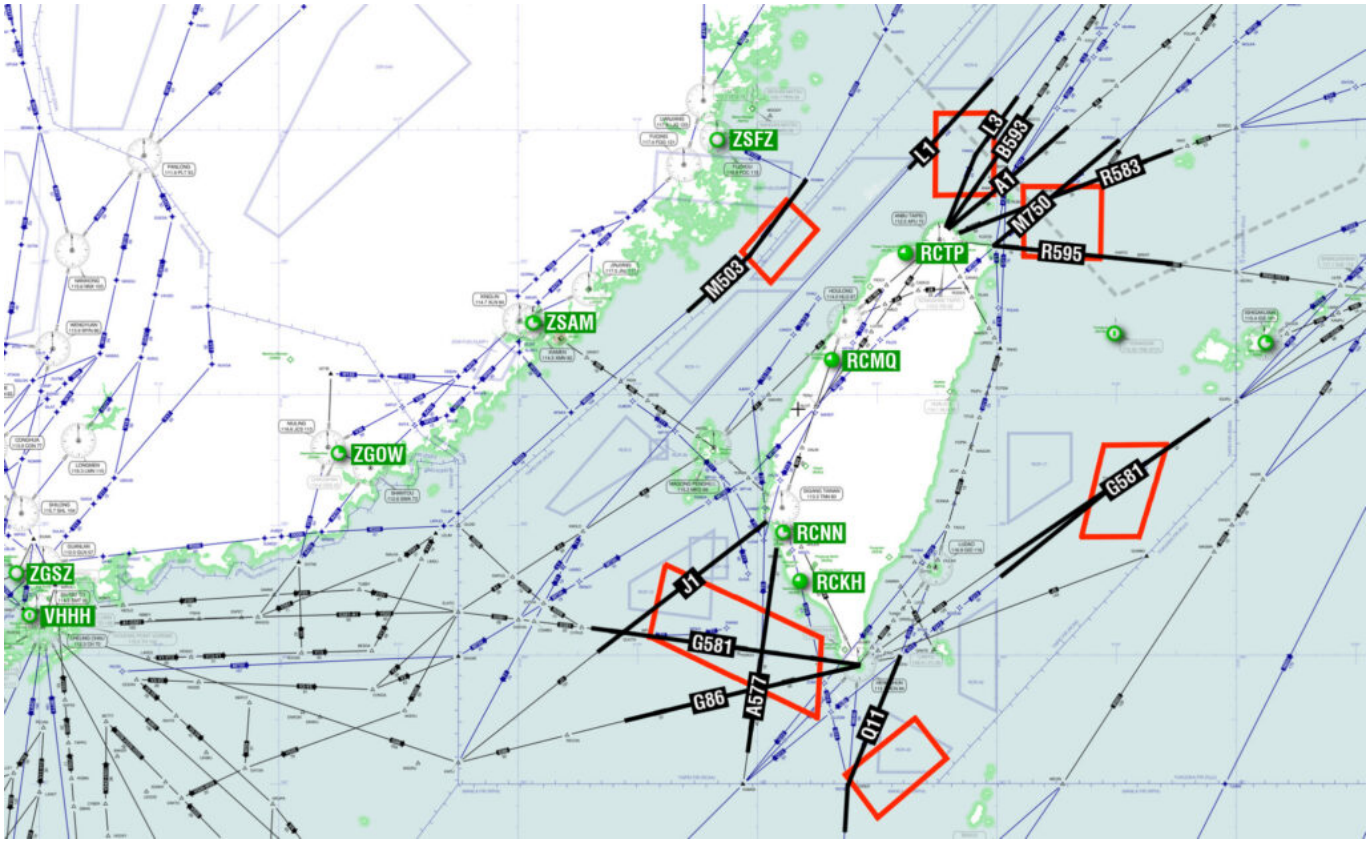
China published **ZBBB Notam A2119/22** which set out the six Danger Areas where **flights were prohibited at all levels:**

A2119/22 - A TEMPORARY DANGER AREA ESTABLISHED BOUNDED BY:
1.N251526E1202920-N245030E1200545-N250432E1195122-N252812E1201430
BACK TO START.
2.N260700E1215700-N253000E1215700-N253000E1212800-N260700E1212800
BACK TO START.
3.N253400E1225000-N250300E1225000-N250300E1221100-N253400E1221100
BACK TO START.
4.N225600E1224000-N233800E1225100-N233800E1232300-N225600E1230900
BACK TO START.
5.N211400E1213300-N213300E1211800-N210700E1204300-N204800E1205900
BACK TO START.
6.N224300E1191400-N221000E1190600-N213300E1202900-N220900E1203200
BACK TO START.

VERTICAL LIMITS:SFC-UNL. ALL ACFT ARE PROHIBITED TO FLY INTO THE AREA. SFC - UNL, 04 AUG 04:00 2022 UNTIL 07 AUG 04:00 2022. CREATED: 02 AUG 15:03 2022

Here they all are, plotted on a map:

And here are all the main airways that intersect those Danger Areas:



The Danger Areas affected major routes between Southeast Asia and Northeast Asia.

For any future exercises that China announces, if you're planning on transiting the **RCAA/Taipei, ZSHA/Shanghai or RPHI/Manila FIRs then make sure you check the ZBBB Notams** as it might not show up as part of your flight briefing pack.

Hypersonic missile launch

China launched **an unannounced hypersonic missile** on Aug 1 (we could not find any Notams for it). This marked the 95th anniversary of the Peoples Liberation Army being founded, and coincided with an announcement from the US that they might visit Taiwan.

The missile was **only fired *towards* Taiwan**, falling some 120km off the coast into the Taiwan Strait.

Taiwan-China procedures

Specific procedures regarding international flights into Taiwan have existed for years, and you can find more in-depth information on these here, and a post on general tips for China Ops here.

A brief summary:

- Foreign registered aircraft are prohibited from operating directly between China and Taiwan.
- If you need to make a tech stop between the two, VHHH/Hong Kong or VMMC/Macau are good options.
- The same rules apply for China overflights – if you're flying to Taiwan from any third country, you can't overfly China.
- Only Chinese and Taiwanese registered aircraft are able to operate directly between China and Taiwan.

Because of these, the airspace over the Taiwan Strait is not hugely busy and the missile posed a limited risk to aircraft.

Heightened military activity

China have been showing heightened military activity in and around the **South China Sea**, ownership of which is disputed by neighbouring countries. This is not directly linked with the Taiwan situation, but provides some further political (and flight ops) awareness, particularly because of the strategic military positions China hold in this region.

In addition, China have been carrying out **military drills in various areas,** mainly near the East China and Bohai seas. These **rarely impact flight operations,** with the prohibited zones focused on maritime traffic. However, increased offshore helicopter traffic and some flight disruptions into coastal airports do occur.

China have been increasing their **incursions into Taiwanese airspace** for a while, with a spate of them towards the end of 2021. These **pose some risk to commercial operations** for several reasons – **increased military traffic** being the obvious one. A lesser risk of **misidentification** is heightened as well, along with the potential response if a civilian aircraft accidentally encroaches on out of bounds Chinese military airspace (well, all of it is military, but some of the really 'don't go in there' parts).

What if China shut their airspace?

We are not saying it will.

However, China are initiating a major offensive in Taiwan, and this does draw parallels to Ukraine and Russia. If the US military becomes involved, this **may lead to sanctions** between the two countries. Some early consideration as to what airspace closures might mean is therefore a good idea.

China is a major air corridor, particularly with Russian airspace currently closed to the US and Europe. Reduced access or closure of the airspace will see **flights routing far further south** via Japan, and potentially across the South China Sea before routing across Thailand, India and Pakistan and the Middle East.

The impacts would be significant for various reasons:

- This will **significantly increase flight times and distances**, and likely be prohibitive for aircraft with lesser range capability (without fuel stops).
- The South China Sea may see **increased risk levels** if China increase their military presence there as well.
- **Summer weather patterns** can create further routing difficulties particularly around the Bay of Bengal area.

Other threats to consider.

The Cyber Threat
Chinese action in terms of cyber security *breaches* have been questioned more than once.

The political stuff
China and the US have a history of 'messy' visas for aircrew already. Further tensions are likely to increase this. Security for certain nationalities will need consideration.

Trade
China is a major trade partner with the US and Europe and sanctions on trade may impact aircraft parts manufacture.

Moldova Bomb Threats: Russia-Ukraine Conflict Spillover

OPSGROUP Team
14 September, 2022

Moldova is seeing a lot of spill over repercussions from the Russia-Ukraine conflict, but it has been hitting the international flight ops news more in the last few weeks because of a series of bomb threats.

Tell me more about Moldova.

Moldova is a small nation **sandwiched between Ukraine and Romania**, bordering the Black Sea. They were granted candidate status into the EU alongside Ukraine when all the current conflict started kicking off.

What about their involvement in the Russia Ukraine conflict?

While considered **a military neutral country**, they also broke away from the Soviet Union in 1991, and have had ongoing trouble in the **Transnistria region.** This is a breakaway republic in eastern Moldova, bordering Ukraine, with its main city Tiraspol.

This region is of interest to Russia because of its access down to the Black Sea, the close ties any in the area retain with Russia, and because of what it means for Moldova's EU entry bid – having **full control of borders is a pre-requisite** for this. All this means concerns for Moldova that **Russia might take steps towards them**, or at least the Transnistria region in a similar way as they have Ukraine.

The current conflict impact

Moldova initially closed all their airspace, but later reopened a section on their **western border with LRBB/Bucharest FIR** in order to enable flights to **LUKK/Chisinau airport.**

However, several countries have **active warnings for Moldovan airspace.** The primary risk is an **unintended targeting of civil aircraft** by military near the Moldova-Ukraine border, including misidentification (as with MAS17, UIA752).

A full post on the airspace situation from the Russia Ukraine conflict is available here.

You can also read the main warnings for Moldova on Safeairspace. As a brief overview of the big ones –

- **French operators** should not enter the airspace of **Ukraine, Belarus, and Moldova**, and should also not enter the airspace of Russia within **200nm of the FIR boundaries** with Ukraine
- **Canadian operators** are **prohibited** from the airspace of **Moldova.**

Why are we talking about Moldova now?

There has been a **spate of bomb threats** made at LUKK/Chisinau airport, the latest occurring on July 30 and another August 2. **No explosives have been discovered,** but the threats are treated as real and have resulted in evacuations each time, which has resulted in a fair amount of disruption. Up to 100 institutions and buildings have apparently been targeted with fake bomb threats over the summer so far.

What is the impact on international flight operations though?

LUKK/Chisinau Airport:

There are **special procedures** in place for operating into LUKK/Chisinau, and **new SIDs and STARs** have been published. However, only some of these are available.

Special care is recommended if **arriving on runways 26/27 or departing 08/09.**

Full details of the airspace changes are available here in Moldova's updated AIP SUP.

Overflights:

Moldovan airspace is **not required for overflights.** The primary routes from the Middle East and Asia, into or from Europe, bring aircraft over the Black Sea and Romania, remaining well clear of Moldovan and Ukraine airspace.

However, the proximity to airspace with identified risks, and the **increased traffic** because of the limited routes available, should be considered.

En-route Alternates:

Aircraft requiring an enroute alternate or diversion airport in this region should **consider LROP/Bucharest or LROV/Brasov** instead of LUKK/Chisinau.

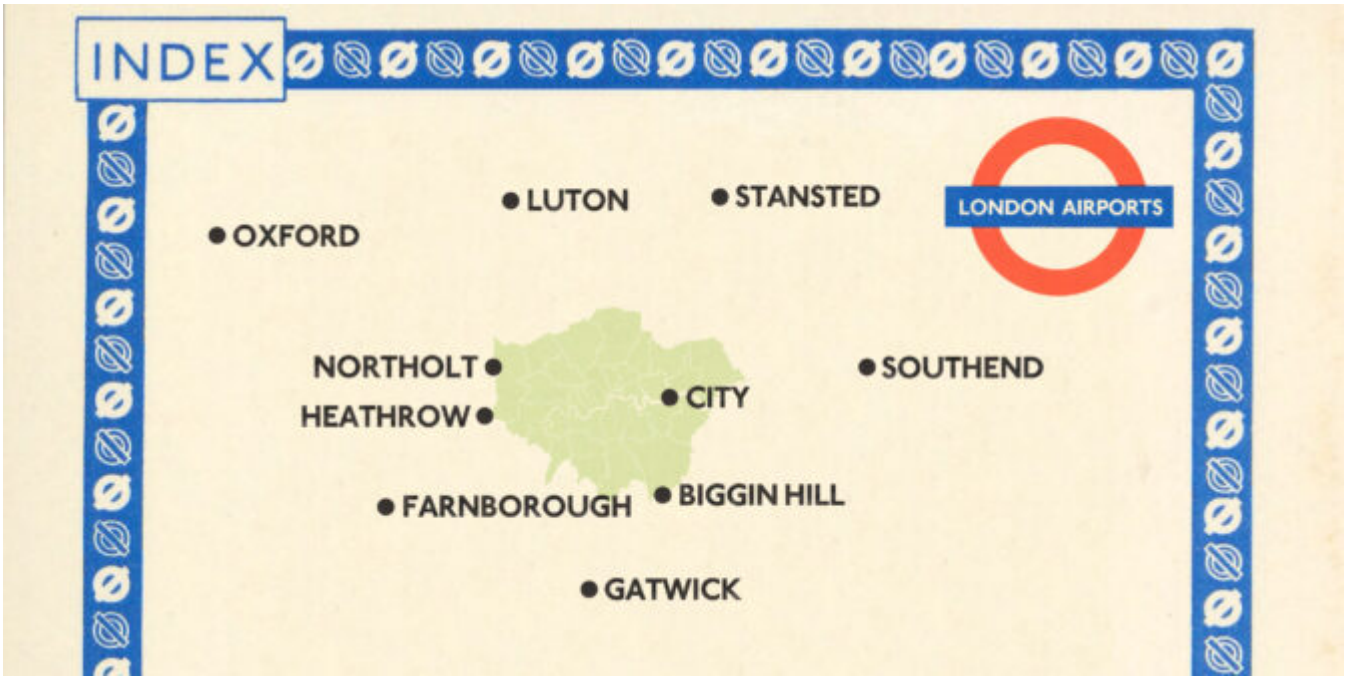
Security concerns:

If operating into Moldova, review your own measures and responses for bomb threat or other security threats, and **consider organising additional security.**

The US have recommended caution for their citizens in Moldova, and advise that **all alerts be treated as genuine** (and report anything that looks dodgy).

London Airports Top Tips

OPSGROUP Team
14 September, 2022



Here's some basic info we put together on the London Airport options, made with help from the London Underground tube map publishers, circa 1962.

How many airports are there around London?

Well, you have the big international ones – **EGLL/Heathrow, EGKK/Gatwick and EGSS/Stansted.**

Then you have **EGMC/Southend** which is also quite big but a bit less big really, it mainly just serves European routes really. Same for **EGGW/Luton.** FYI – both of these are officially 'London' as well.

Then you have smaller or predominantly business aviation airports – **EGLC/London City, EGLF/Farnborough** (not a London, but closeish), **EGTK/Oxford Kidlington** (this is a London), **EGKB/Biggin Hill** (really near London but not called London) and **EGWU/Northolt** (8nm from Heathrow and actually a military base).

Back in 2015, the UK handled something like **2 million flights a year and 1.2 million of them were in and out of the 5 main London airports.** In fact, here's a cool video of 24 hours in London (also from 2015 so probably wildly inaccurate at this point, but has some nice neon colours.)

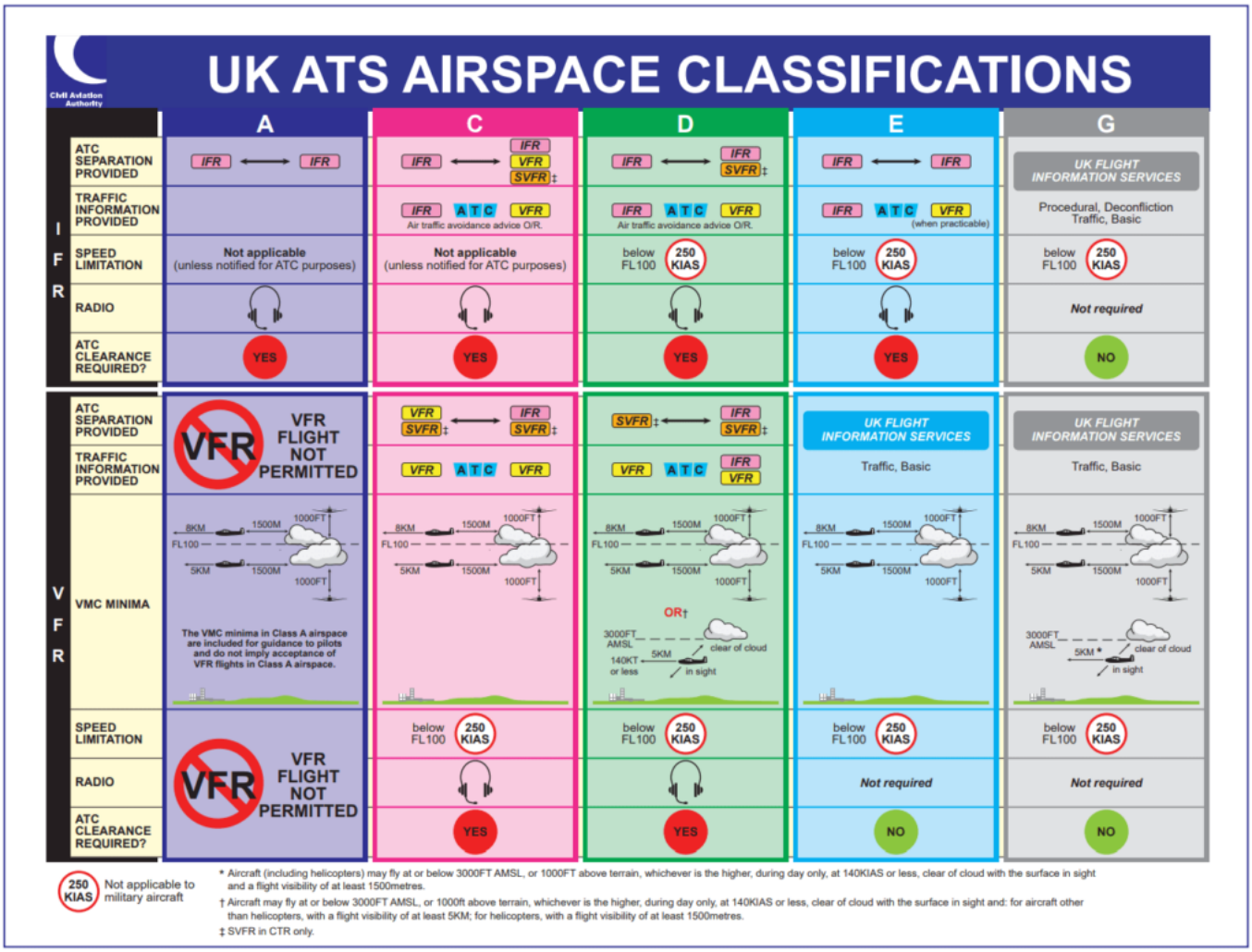
Right, so, it's busy. What are some things you need to know.

- **The constant frequency changes.** So many of them. But generally well managed on ATC.
- **The headings after departure.** For reasons known only to ATC, it seems to be easier for them to manage all the traffic out of the London area by keeping you on a heading for lengthy times.
- **Transition levels and altitudes.** Not set at a specific number – they can change with the weather, and at different airports. Watch out if there are extreme QNHs going on.
- **The airspace**. Actually, this can have its own section…

The airspace.

It only has **3 FIRs – London, Scottish and Shanwick,** although these are split in UIRs as well.

All the airspace in the UK is **split into 7 types classes – A to G.** Here is a picture:



I will point out, in case you miss it, that **Class G is uncontrolled.**

Class G airspace (and Class E a bit)

If you're in Class G (and some class E if you're VFR) then you get **Flight Information Services.** These work like this:

- **Basic service.** ATC might tell you about activities that might affect you if they have time. Up to you to miss it all.
- **Traffic service.** The use a radar to tell you about specific conflicting aircraft. You only get this if they have time, and still up to you to not fly into it.
- **Deconfliction service.** This is only for IFR flights in class G. It's basically the traffic service but they'll throw in some 'how to miss it' guidance as well, which you can ignore if you want.
- **Procedural service.** I don't really understand this so have just copied and pasted their description – *Only available to IFR flight. A non-surveillance service in which deconfliction advice is provided against other aircraft in receipt of a Procedural Service from the same ATCO; the ATCO will not be aware of any other aircraft.*

All this information is in here, with some more information if you need to know more.

When will you ever be in Class G?

Remember this started as a post about London, sort of? Well, now it is **a post about Biggin Hill specifically**, because that's where you – a BizAv aircraft maybe routing over from the US on some nice business trip – might find yourself in Class G airspace.

First, let's talk **Air Traffic Zones (ATZ)**. If the longest runway is longer than 1850m, then these zones are generally 2000' high and 2.5nm around the aerodrome – if shorter than that you generally have a 2nm ring.

To go in or out of an ATZ you need to either:

- Have permission from the ATC unit there if it has one
- Have information from flight information service if it has one
- If there is no ATC or FIS, then be talking to an air/ground communication service.

Read more here.

So, Biggin Hill has an ATZ and it's a funny sized one and it's right in Class G airspace, and if you fly there you probably want to know about the procedures to go in before you.

Biggin Hill stuff

We were told this by a very helpful Opsgroup member who had just been there.

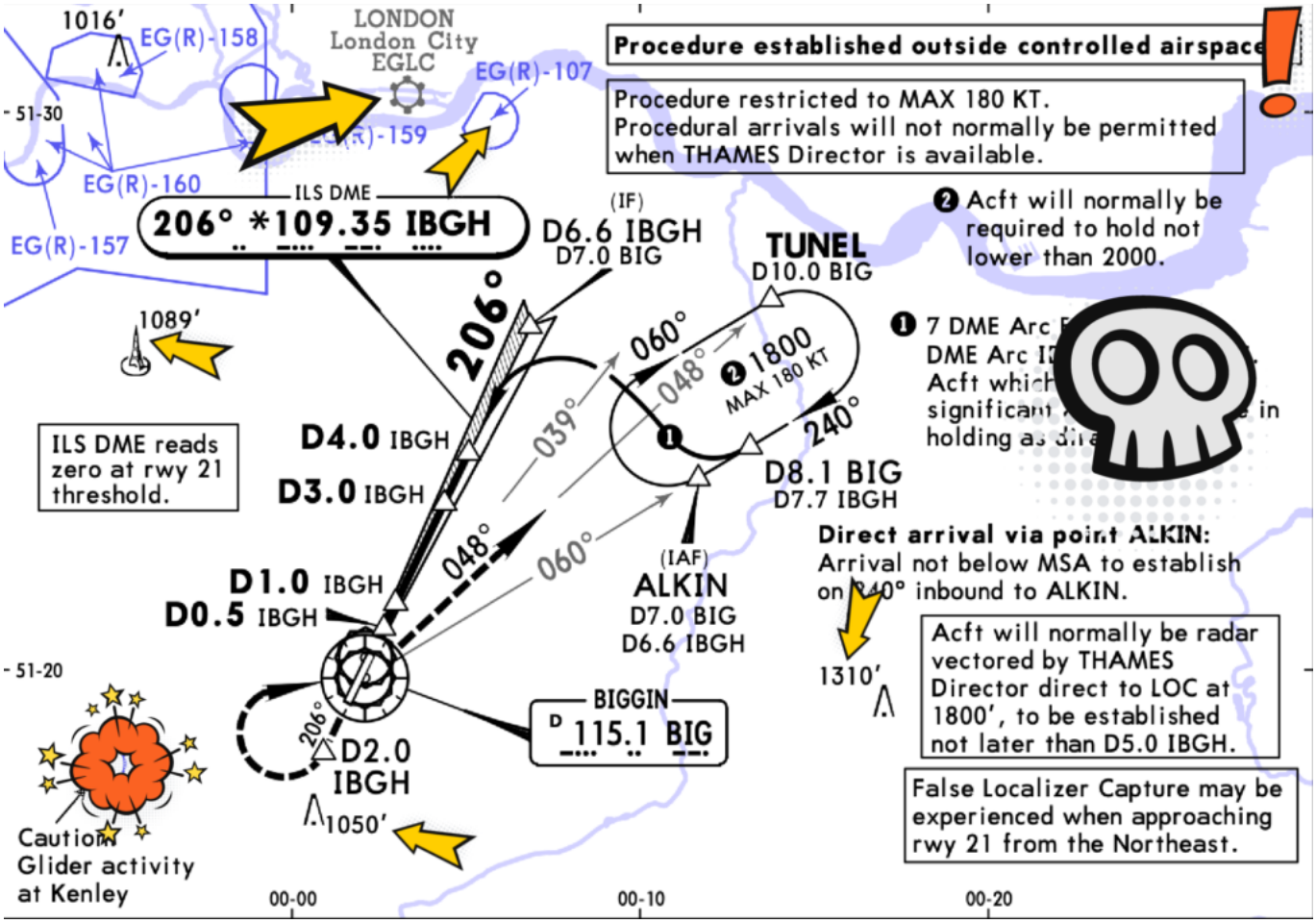
It is in class G, has an ATZ, and a tower. The tower give you all the permissions and clearances you need.

Right above Biggin Hill you're **straight up into Class A (2500').** Your instrument approach starts below Class A and is outside the ATZ… so many non radio carrying, non transponder transmitting aircraft could be wafting about all around you. You might get one of those service I mentioned above, but you might not, and **you will always have to make sure you don't fly into stuff.** So watch out.

Also because of its airspace, you can probably expect some extra track miles as you head in and out from the west. **Arriving – count on an extra 15 minutes, departing – be prepared for an extra 10 minutes or so.**

They also only really land onto runway 21, and if you depart 21 then it's an EARLY right hand turn for noise abatement.

Here's an Airport Lowdown on all of this.



Finally, some other bits on other London airports.

1. Don't go to London City unless you have been trained (it needs prior training) and your aircraft is **certified for steep approaches** or its going to get quite embarrassing fairly quickly. If you are going to London City then take a look at the platform and missed approach altitudes because they're low. Why? Because it is directly under the flight paths for Heathrow and Gatwick.

2. Don't head to Heathrow without a bit of fuel for holding. **You usually hold for Heathrow.**

3. Don't fly level for too long if you're heading to Heathrow. They have quite **strict NABT arrival procedures** and you might get fined (and will definitely get shamed!) if you don't try and do a CDA.

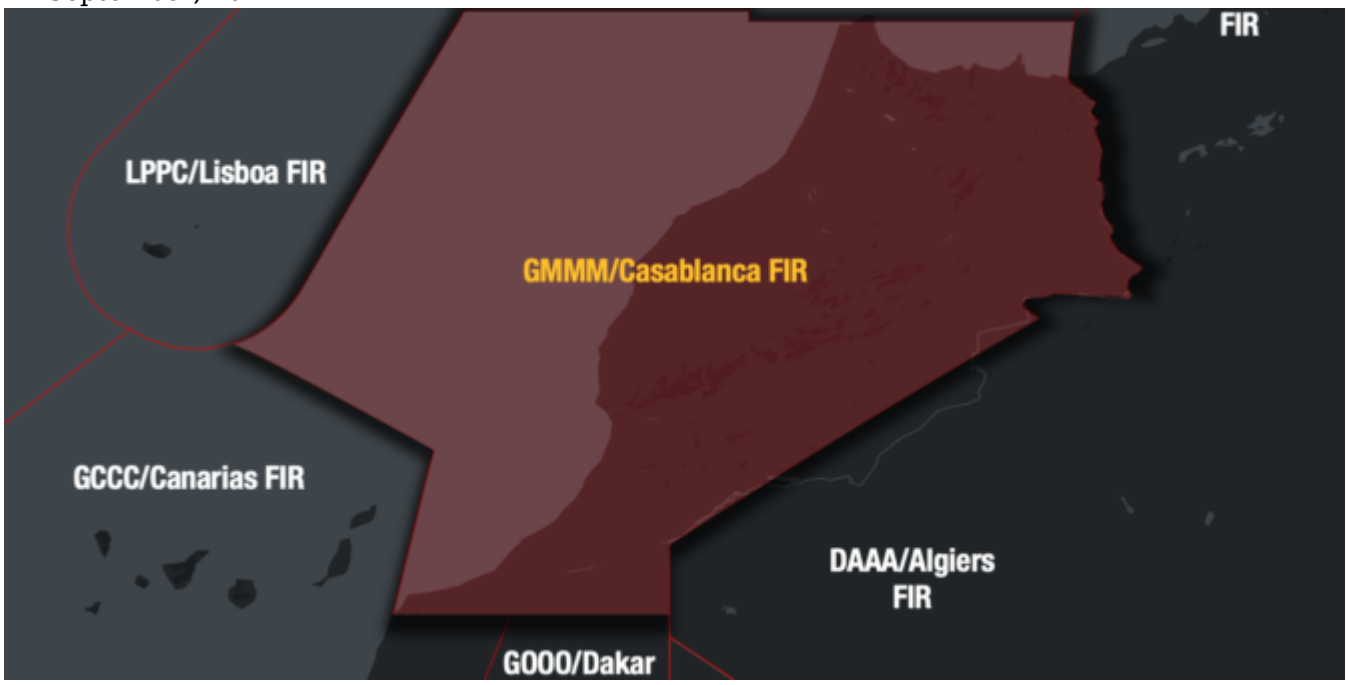
4. Don't plan on using many of them at night. Really, **Southend and Stansted are your only options at night** – everywhere else is either closed or has noise curfews in place. Here's something we said on that.

5. If you're not from the UK you're more than likely going to need to **register for a TCO before December 2022** if you want to operate any kind of commercial flight into the UK. It looks like a hideous process and we don't know much about it so if you have questions, email these folk – TCO@caa.co.uk

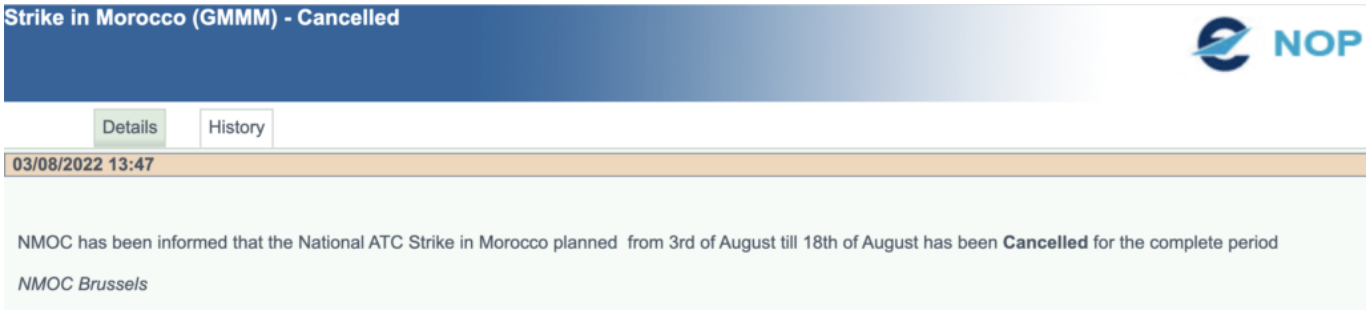
6. London is awesome. If you want some recommendations on top spots to visit then ask.

Morocco ATC Strike Cancelled!

Chris Shieff
14 September, 2022



Update 1500z Aug 3: And bam! Just like that, the ATC strike in Morocco is **cancelled!** There's no more info yet, but normal ops now expected for the whole period Aug 3-18. So say Eurocontrol on the NOP site.



———————

Story from Aug 2:

News broke last week that Moroccan ATC are threatening to strike for a **full two weeks from August 3 – 18**, and it will affect the entire **GMMM/Casablanca FIR**. Similar strikes elsewhere typically last just hours or at worst a day or two.

While it will not be a complete walk-out, the airspace may be heavily restricted – a busy air corridor linking Western Europe to Sub-Saharan Africa and South America. On average Moroccan airspace services over a thousand flights a day, and ATC want to put the brakes on hard.

It's all found in this letter written by the union responsible. Here's our breakdown of what it says, along with some nice pictures.

Let Me In!

If you want to come in, you had better get in line. If the strike goes ahead, only **one aircraft per hour** will be allowed through each entry point to the GMMM/Casablanca FIR.

Trickle effect at airports.

All major airports in Morocco will be affected by heavy restrictions on aircraft movements. In each case, only two aircraft will be allowed depart each hour.

Who's not affected?

There will be **limited exemptions,** but they won't apply to most operations. Aircraft engaged in state, RFF, medevac or humanitarian ops will be exempt. And if you experience an **emergency**, of course you'll be allowed in asap.

You will also be able to get special handling permission by including 'STS/AFTMX' in Item 18 of your flight plan to get around the restrictions. This will be by prior approval only though. To ask for it, you'll need to contact the CAA directly. You can reach them at civilair@menara.ma or on +212 537 67 94 07.

Watch out for Western Sahara

If you're hoping to avoid the hold-ups in the GMMM/Casablanca FIR, you may be tempted to route further south over the **Western Saharan region.**

Something to be aware of first – there are still **active airspace warnings** in place for this disputed territory. Despite being quiet in the news lately, there is a long running conflict happening there. Anti-aircraft weaponry has previously been identified as a possible threat to low flying aircraft below FL200. **The risk to overflights** in the upper flight levels is very low, but take extra care if planning for diversions or emergencies.

You can read a full briefing on the situation here. We've also written this article which may also help.

Right now it's just a "potential" strike.

The nature of industrial action is that it can be hard to predict until it actually happens. On August 1, Eurocontrol advised the strike was imminent but also noted that the GMMM Notams were conspicuously quiet. We also reached out directly to the Moroccan CAA, but so far *crickets*.

Other ATC strikes in Africa

It must be the season! Also be aware that on August 25 another major strike is planned affecting **five FIRs in Western Africa**, along with another over **Madagascar** in the east. You can read more about that one here.

NAT Conundrums Volume III: To GOTA and beyond!

David Mumford
14 September, 2022

Ah, NAT conundrums! We love them so much, we're into our third Volume already!

Volume I covered the following three conundrums:

1. To SLOP, or not to SLOP?
2. What's the difference between the NAT Region and the NAT HLA?
3. Can I fly across the North Atlantic without Datalink?

Volume II covered these additional three:

4. Do you need to plot on Blue Spruce Routes?
5. Do we still fly Weather Contingency Procedures on Blue Spruce routes?
6. When can we disregard an ATC clearance and follow the contingency procedure instead?

And this post, Volume III, looks at GOTA airspace. It's such a juicy topic, it gets an entire Volume all of its own.

So here goes…

Where is GOTA airspace?

This section of airspace is found off the coast of North-eastern Canada, FL290 to FL600 inclusive.

Here it is, outlined in red:

Why are we talking about it?

Because lots of aircraft transit this area when flying across the North Atlantic. Also because the requirements here were very tricky for us to track down on "paper" (i.e. the Canada AIP, NAT Doc 007, etc), and were only really made clear after speaking with a real human being at Transport Canada. *We like human beings!*

So here's what we discovered…

You don't need datalink in GOTA airspace

No, you don't. We thought you did, but we were wrong.

When we sat down to update our North Atlantic Plotting chart last year, we wanted to draw nice clear lines on the map to show where datalink was required. But we were bamboozled by GOTA.

The ICAO NAT Doc 007 says that you don't need datalink in:

"Airspace where an ATS surveillance service is provided by means of radar, multilateration and/or ADS-B, coupled with VHF voice communications as depicted
in State Aeronautical Information Publications (AIP), provided the aircraft is
suitably equipped (transponder/ADSB extended squitter transmitter)."

It then says to check in State AIPs to see if any of their airspace fulfils this criteria.

So that's what we did. But checking in Canada's AIP brought up this for GOTA:

7.2.1 Gander Oceanic Transition Area (GOTA)

The implementation of additional surveillance and communication sites along the north-east coast of Canada allowed for the provision of enhanced services and led to the creation of the Gander oceanic transition area (GOTA).

The lower limit of the GOTA is FL 290; the upper limit is FL 600. The GOTA is Class A controlled airspace.

The GOTA consists of airspace FL 290 and above, from 6530N 060W, east to the Reykjavik area control centre (ACC) boundary, south to 6330N 055W, south along 055W to the Gander domestic boundary, north along the Gander/Montreal domestic boundaries, north to the Edmonton boundary, and then back to the point of origin (see Figure 7.2.1 for reference).

Surveillance services are provided by Gander ACC. The automatic dependence surveillance - contract/controller-pilot data link communications (ADS-C/CPDLC) log on address for aircraft in GOTA airspace is CDQX.

And this for Data Link Mandate (DLM) Airspace:

7.2.4 Data Link Mandate (DLM) Airspace

7.2.4.1 General Information

The objectives of the NAT Data Link Mandate are to enhance communication, surveillance, and air traffic control (ATC) intervention capabilities in the NAT region. ADS-C provides conformance monitoring of aircraft adherence to cleared route and flight level significantly enhancing safety. ADS-C also facilitates search and rescue operations including the capability to locate the site of an accident in oceanic airspace. CPDLC substantially improves air/ground communications capability and therefore controller intervention capability.

7.2.4.2 DLM Flight levels

DLM airspace encompasses FL290 to FL410 inclusive throughout the NAT region.

7.2.4.3 Flights Permitted to Operate within NAT DLM airspace

The following flights may flight plan to operate in NAT DLM airspace:

1. Flights equipped with and prepared to operate FANS 1/A (or equivalent) CPDLC and ADS-C data link systems (see ICAO Doc 7030 3.3.2 and 5.4.2).
   (a) The appropriate equipage to be indicated in Item 10 of the ICAO flight plan is:
   - D1; and
   - One of J2, J5 or J7
2. Non -equipped flights that file STS/FFR, HOSP, HUM, MEDEVAC, SAR or STATE in item 18 of the flight plan.

Note: Such flights may not receive an ATC clearance that matches flight planned requests depending on tactical situations.

So none of that really answered our question of **whether or not you need datalink in GOTA airspace.** The trail went cold...

via GIPHY

Our chat with Transport Canada in 2021:

Deep in the doldrums of lockdown, we sent Transport Canada (TC) some emails asking them the question directly. Here's a massively paraphrased transcript of that email exchange:

Us: We have been trying to determine if the GOTA requires datalink? It appears to meet the definition of ATS Surveillance Airspace but we can't identify anywhere in the Canadian AIP which specifically states this.

TC: The GOTA is in fact DLM airspace.

Us: Really? So operators without datalink must cap their flight below FL290 through the GOTA airspace until they reach that datalink exempt airspace over Greenland, at which point they can climb to the higher levels?

TC: Yes. Well… flights equipped with ADS-B may operate at DLM levels within the GOTA.

Us: Oh. Now we're confused. Oh well, it's Christmas now. Chat next year!

TC: Merry Christmas.

Our chat with Transport Canada in 2022:

Us: We have been trying to determine if the GOTA requires datalink? It appears to meet the definition of ATS Surveillance Airspace but we can't identify anywhere in the Canadian AIP which specifically states this.

TC: Didn't you ask this *exact* same question last year?

Us: Yep. But then… you know… Christmas…

TC: Ah yeah. Ok. As long as you are HLA Certified (MNPS & RVSM) and you have ADS-B, transponder and VHF you wouldn't require all the DLM equipage. GOTA is technically Gander Oceanic airspace (NAT HLA airspace), but as they have Ground based Radar sources, space-based ADS-B and VHF coverage in the area it has been delegated to Gander Domestic. Due to this, the airspace is considered Class A surveillance airspace and follows the similar regulations as you would in other Canadian domestic Class A airspace.

Us: What about that ADS-B requirement?

TC: Well, technically ADS-B isn't required as it is considered class A surveillance airspace. So lack of ADS-B wouldn't prevent you from entering the GOTA area. That said, ADS-B equipage is preferred by many of the controllers. This is because the ground based radar isn't always guaranteed to the outer limits of the GOTA airspace. This makes identification and separation easier for the domestic controllers when the aircraft have ADS-B.

Us: So tell us again, what do you need in GOTA airspace?

TC: Required equipment for GOTA airspace is transponder, automatic pressure-altitude reporting equipment and VHF. As soon as you leave that airspace you would need other equipment depending on what airspace you enter.

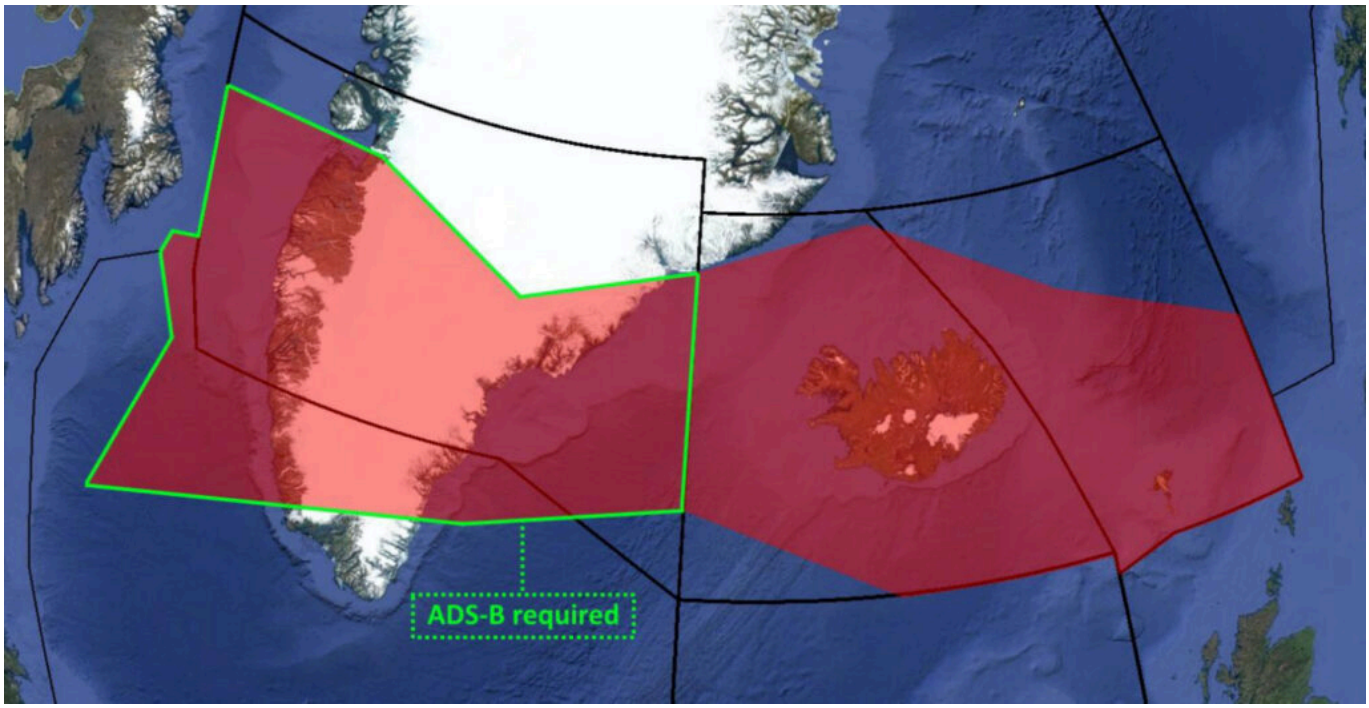
"As soon as you leave that airspace…"

Yes indeed, a good point, worthy of further investigation! Because no-one just zips around solely in GOTA airspace, do they?

So here's a look at the airspace adjacent to GOTA, and what you need where…

Datalink Exempt airspace over Greenland, Iceland, and a bit of Gander Oceanic

There's an interesting picture in the NAT Doc 007 doc that looks like this:



This the datalink exempt ATS Surveillance airspace over Greenland, Iceland, and a bit of Gander Oceanic where you can still fly if you don't have datalink.

This area is bounded by the following:

Northern boundary: 65N000W – 67N010W – 69N020W – 68N030W – 67N040W – 69N050W – 69N060W – BOPUT.
Southern boundary: GUNPA – 61N007W – 6040N010W – RATSU – 61N020W – 63N030W – 62N040W – 61N050W – SAVRY

So, putting that on our nice NAT Plotting Chart, it looks like this (outlined in green):

Us: What are the requirements for this airspace?

TC: HLA Certification (MNPS & RVSM), ADS-B & VHF.

Us: Nice.

HLA airspace

So now we're talking about the bit to the south of the datalink exempt airspace, outlined here in fruity pink:

Us: What are the requirements for this airspace?

TC: HLA Certification and full DLM certification, FANS 1/a (ADS-C(D1) & CPDLC(J2, J5 or J7)). Depending on the route of flight and the tracks that day there may be other requirements as well (ie. PBCS Certification for PBCS tracks).

The Blue Spruce Routes

So here's what we said in a previous post on these…

The Southerly ones: *These go over Greenland linking Canada with Iceland via waypoint OZN, and are not fully contained in the exempted airspace. So if you're flying these southerly Blue Spruce routes you will have to meet the NAT DLM requirements or fly outside of the vertical parameters of DLM airspace (i.e. below FL290 or above FL410). In other words: you need datalink to fly on the southerly Blue Spruce routes between FL290-410.*

The Northerly ones: *These are the ones going overhead BGSF/Sondrestrom airport. These do fall within the exempted area of airspace – so datalink is not mandatory if you're flying here.*

Us: All that stuff we told people in our previous post… did we get that right?

TC: Yeah, pretty much. The primary purpose of Blue Spruce routes is for aircraft with only one long range navigation system. This would normally exclude them from the exemption area anyway, as they are usually kept below HLA airspace (FL280 or below) as they would normally need state HLA approval to fly a blue spruce route with one long range navigation system at FL290 and above.

Gander's datalink exempt airspace won't be datalink exempt for much longer!

You: Hold on… which bit of airspace are we talking about now??

Us: This bit, outlined in black. It's the bit of airspace in the datalink exempt area which is controlled by Gander Oceanic.

So, this is where the plot thickens!

Us: Can you tell us why the plot has thickened, exactly?

TC: Yes, we can. Do you guys actually know anything, or do just come to us for all your answers?

Us: We only know how to massively paraphrase email exchanges.

TC: Okay. So here's the deal. As we are decommissioning the VHF and ground based ADS-B sites in southern Greenland we will no longer have the datalink exempt area in the northern portion of Gander oceanic HLA airspace. At that point, all Gander oceanic airspace will become DLM airspace. Although GOTA will stay datalink exempt.

Us: Decommissioning VHF and ground based thingies, you say?

TC: That's right. Nav Canada put out a circular last year and updated it again this year advising that the ADS-B and VHF sites in that area will be decommissioned. The current circular is AIC 15/22. The tricky part is, it discusses just the ADS-B and VHF sites, but many people don't make the connection from that to the exemption area. When the VHF sites are decommissioned we won't have the equipment to qualify for DLM exemption in that area. Nav Canada is keeping one frequency until December 29, 2022 to enable users to continue to use the area for this year, but that final one will be decommissioned at that time. The 127.9 frequency will continue to be used by Gander IFSS for the Blue Spruce Routes. When it gets closer to that date, there should be an ICAO NAT Ops Bulletin out and NAT Doc 007 will be amended. So just to clarify, barring any major unexpected changes, that airspace will become strictly DLM airspace on December 29, 2022. At that point it will follow the same regulations as the rest of the NAT DLM airspace.

Us: Bonza.

So, to recap…

- **Datalink Airspace:** Remember, NAT DLM airspace only applies from FL290-410. Below or above that, you don't need datalink in the North Atlantic.

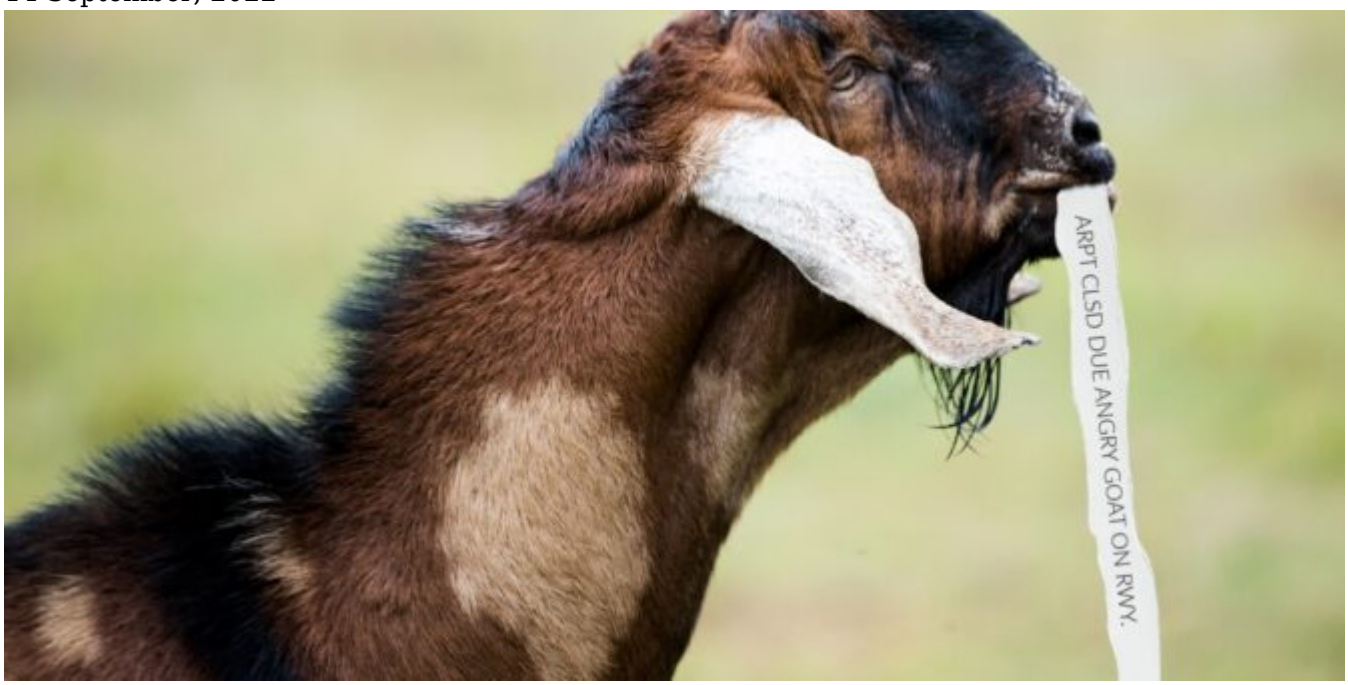
- **If you have full datalink (CPDLC and ADS-C):** You can go where you like, and you didn't really need to read this post.
- **For GOTA airspace:** You need a transponder, automatic pressure-altitude reporting equipment and VHF. If you have ADS-B, that's helpful for ATC.
- **For the Blue Spruce Routes:** You need datalink for the southerly ones, but not the northerly ones. (If you're flying on these then you're probably doing so below FL290 anyway, in which case you're below NAT DLM airspace and don't need datalink).
- **For the datalink exempt airspace over Greenland, Iceland, and a bit of Gander Oceanic:** You don't need datalink, but from 29 Dec 2022 you will do in the bit controlled by Gander.

Questions

Just send us an email at news@ops.group and we'll try to find out the answer.

Canada: The AGN and what to do with it

OPSGROUP Team
14 September, 2022



What's an AGN, I hear you cry? Aviation Grid Network? Active Galactic Nucleus? Angry Goat Notams?

Well, unless you're a Canadian operator, operate a regular scheduled service there, or work in the tiny room in the corner of the basement in Transport Canada's Ellesmere Island Office where this was invented then you possibly won't know.

But if you operate *at all* into Canada then you *probably-might not-but maybe should-know* what it is. It is the **Aircraft Group Number**, and because someone asked us about it and we didn't have a clue, we figured some of you may not either.

Disclaimer: We have no idea if there is a Transport Canada office on Ellesmere Island, we made that up. We just found it really, really hard to find anyone at Transport Canada who seemed to know anything about it until we emailed a really important person whose name was on one of the advisory circulars. They were really helpful.

The Aircraft Group Number.

Anyway, so the AGN is basically the Canadian equivalent of the FAA's ADG stuff for aircraft classification and airport design (we think).

It is published for Canadian airports, and the whole point is to **provide information on stuff like runway or taxiway width, length and other physical characteristics**, and also things like **separation from obstacles in the runway environment.**

Basically, a lot of important stuff you need to know if you want to operate there. **It is measured based on the 'most critical' aircraft operating in.** They measure, consider and then the relevant AGN plops out the other end and is assigned.

Any given aircraft might actually end up with more than one AGN depending on the airfield element being looked at.

- So it *'aligns the certification standards to the actual (or planned) operation at the site by linking the standards to specific aircraft characteristics, aerodrome operating visibility conditions, and level of service."*
- In other words, it provides a simple *"method for interrelating the numerous technical specifications concerning the aerodrome and the characteristics of the critical aircraft."*
- In *other* other words, it checks what can safely get in and out, and then **anyone wanting to go there can see if its suitable for their aircraft type (and its AGN).**

Here's the Advisory Circular on it if you want a read.

So why are we telling you about it?

It is actually something you are probably familiar with even if you didn't know the acronym, and when you're thinking about heading to an airport you (hopefully) check stuff like this anyway.

But, what we aren't sure about is whether it is **a guidance thing or a restriction thing?**

The original question

The question which sent us spiralling into an endless pit of Advisory Circulars and uncertainty came from **a non-canadian BizAv operator** (you know who you are, and thanks for that!).

They did have a valid question though.

They wondered if they could still plan and airport for things like tech stops and medical emergencies if it's a category below the aircraft AGN (but is perfectly landable at)? **Because your AGN varies for different elements…**

So we read through the bundle of ACs and frankly still didn't have a clue. So we started emailing everyone at Transport Canada and finally got a nice response from someone pretty important and knowledgable.

The answer.

Well…

Let's start in Advisory Circular 602-005 (effective 2021-06-04), the subject of which is *'Publication Enhancements to Airport Information in the Aeronautical Publications.'* Don't be put off by the title, this is *all about* the AGN.

First up we get to the background and its in Section 3.0 that we discover this very important statement straight out of the **Canadian Aviation Regulations –**

"Before taking off from, landing at or otherwise operating an aircraft at an aerodrome, the pilot-in-command of the aircraft shall be satisfied that

(a) there is no likelihood of collision with another aircraft or a vehicle; and

(b) the aerodrome is suitable for the intended operation."

So, the AGN helps determine this.

But then there is this…

If an air operator is conducting **scheduled passenger services at the airport then they are bound by Part VII regulations in respect to the AGN limitations and any other limitation related to the airports' certification…**

So we still weren't entirely sure…

A non-scheduled flight (so a lot of BizAv sorts) doesn't fall under that particular regulation, **but the AGN is considered a limitation and part of an airport's certification.**

Given it is telling us whether (very simply) our aircraft will fit (ok, whether obstacle clearance, runway width, etc etc is suitable), then it doesn't sound like something you would really want to shrug at and say *"ah well I reckon I still will…"*

But by the same token, **AGNs are determined using the most critical aircraft currently doing scheduled operations**. So if you're looking at a military base (that is available for civilian ops when needed) then that AGN might not "work" on paper, but the airport may well work for you in reality.

Then came the answer

Hot off the press – **"It's the pilot-in-command's decision to verify if the aerodrome is capable of accommodating the AGN of the aircraft. The published AGN serves as a tool and aids in the decision making."**

There it is, clear as can be.

You still have to make the decision!

For that, throw in some common sense and airmanship.

On fire? All bets off, anywhere works.

Tech stop of medical diversion? Probably not the wisest to plan to use an airport whose AGN falls below the category you require. Chances are if you mess up there are going to be some pretty big insurance and legal questions getting asked like *"the AGN literally told you the obstacle clearance wasn't enough so why did you try?"*

And remember it isn't the whole picture.

Just using the AGN also isn't a good idea because **it doesn't take into account all the info you need.** It doesn't, for example, cover airport operating hours which is quite important if you're intending on using an airport because – if it ain't open, then that's going to be difficult.

There is a whole load of information you'll need beyond just the AGN in order to determine suitability. The AGN is only *one piece* of information (albeit it a piece filled with a lot of smaller pieces of information).

We are happy to ask some more questions if you need.

We hadn't come across this before and this isn't a solid answer, so **get in touch if this impacts your planning, and if you've spotted an airport whose AGN is lower than your aircraft's.** Especially if you know for a fact your aircraft has operated into there perfectly safely.

Send us some specific details and we'll dig deeper! Email us at: news@ops.group

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It's raining space junk over Europe

OPSGROUP Team
14 September, 2022

Update July 31: *Space debris from a rocket launch in China last week splashed down harmlessly in the Indian Ocean on July 30. It made headlines for a few reasons – it was very large, was on an uncontrolled trajectory, and could have landed in Western Europe. Future launches may carry the same risks – the next one is planned for October.*

———————

Something big this way falls.

A large bit of space junk is due to re-enter, and so far they aren't exactly sure where.

The Space Junk.

It is part of the **Long March CZ-5B** – the core stage of the rocket launched July 24 to send models of the Chinese Space Station up into space.

This hefty lump of junk is actually one of the **biggest bits to ever re-enter,** weighing in at an impressive 17 to 23 tonnes and measuring 53 meters. That's after bits have burnt off…

The Re-Entry.

It is due to fall back around **July 30 or July 31.**

It is being tracked by the **EUSST (EU Space Surveillance and Tracking) agency** which you can visit here.

Here is the **current re-entry window.** The latest is saying Sunday July 31 at **1107z** (but with a +/- 29 hour uncertainty window which is about 38 orbits).

And here is the **current re-entry track…**

It is predicted to most likely effect parts of Southern Europe – **Bulgaria, France, Greece, Italy, Malta**, **Portugal, Spain** being the most likely "fall" areas. Again, as it falls closer, this will be narrowed down.

Are we worried?

Not really. They're tracking it and as it gets closer and a clear idea of where it will fall is available, **Notams on airspace closures** will be issued.

Here is the EASA SIB with all their information and advice to date on it.

And here are a few other Space related things to read while you wait for CZ-5B to make its blazing appearance in our skies.

Feeling the Heat

OPSGROUP Team
14 September, 2022

It's getting hot outside. *Actually scrap that, it already is hot out, and in some places it's getting even hotter!* Which means our poor little airplanes are suffering, struggling, sweating their little airplane socks off.

We've written up some bits on this before, and you know it all already – *watch the temperatures, watch the performance, watch the climb gradients, watch the big old storms puffing up around hot spots.*

If you want a full recap then you can read that all here.

Here's a quick refresher.

A swig of cool lemonade for the pilot brain…

- **Planning:** Make sure you're not at risk of heading outside the operating envelope.
- **MELs:** Check the APU, the packs, basically anything that produces cold air because if there are problems there, you might need to think about your crew, passengers and freight too.

- **Engines:** Keep an eye on them, particularly during start.
- **Brakes:** Watch them brake temps. Plan the taxi, and think about how best to brake to keep them as cool as you can.
- **Fuel:** It has hot limits as well as cold limits.
- **Performance:** Yup, hot = not so dense = not so good.
- **Climb:** Hot, high, heavy? You might not meet those restrictions and it's better knowing that before you go than trying to drag your airplane up over stuff.
- **Approach and Landing:** Turbulence from thermals can get testing.

And here are some pointers on the really 'scorching' issues…

Batteries.

The one in your airplane is fixed so not much you can do about it other than turn the APU on/ plug in some cold air tubes or push your airplane into a shady hanger. But all the other removable bits filled with **Lithium Ion batteries** are worth considering.

Things like your **Defibrillators** for example. These usually have max temperatures (50 degrees rings a bell) so you may find you need to **move them, remove them, take them off** with you overnight.

Cargo

Passengers can complain and you can throw water on them. Cargo less so.

A sad result of excessive heat at KMIA/Miami airport was the death of thousands of baby chicks recently. Whilst air temperature might be reading ok, **asphalt can be 40-60 degrees F** hotter than the air around it.

Storms

Hot weather means storms. If you see something in front of you, or on the weather radar, be careful about going over the top – if they are building then you're going to meet some pretty rough air up there if you aren't well clear.

A general recommendation is 5000' for big'uns.

Then there are tornadoes.

Actually, the number of days each year that see tornado activity has fallen, but the **number of mega outbreaks** (30 or more in a day), the density of clusters and the general strength have gone up. So 3:1 to tornadoes really.

NOAA has a tornado watch page that is worth watching (checking out during the season).

The National Weather Service Twitter account is also a good spot for live updates.

They can be hard to predict, but do cause disruptions if they are near airports (not to mention potential damage). Texas is the most hit state, but there have been numerous warnings and watches out across the US including Pennsylvania, Ohio of late.

And then there are fires.

Wildfires are cropping up across the US. This site is good for monitoring these.

The risk of fires to aviation is less *burning destruction*, and more *smoky ash visibility reduction.* They can also create a secondary risk from **increased airborne firefighting traffic** in the areas.

Europe has seen a big increase in serious wildfires this this year, with the **Mediterranean area particularly badly affected.** Portugal, Spain, Greece, Italy, Croatia – all burning to varying degrees. This may cause some inflight disruption, and may cause parking issues and ground disruption particularly at smaller airports.

Humidity

This is for you and your passengers.

India in particular has been hitting the 'wet-bulb' limit for human survival. Sounds doomsdayish? Well, it can be.

The wet-bulb temperature is basically what you get if you wrap a water soaked cloth around a thermometer. If this exceeds around 35 degrees C then that't the time to really start sweating, so to speak, because above this we actually become unable to reduce our body temperature even by sweating, sitting in the shade, or drinking water. Prolonged exposure to this will result in potentially fatal heatstroke.

So keep an eye on the temperature, the dew point, and **any staff you have outside!**

Environmental stuff.

The real reason I wrote this post…

It was so hot in England (yes, England!) that **EGGW/Luton airport's runway melted.** OK, melted might be an exaggeration, but a chunk of asphalt shifted and caused a lot of disruption for a day, and it was only **only 37 degrees C.**

EGVN/Brize Norton experienced a similar problem.

Airports, or rather the folk who manage them, in the likes of Dubai and the Middle East are used to these temperatures and what it can do to asphalt, which is probably why they regularly overhaul them. But places *less familiar* with soaring temperatures aren't.

Watching those Notams is the best advice for this.

Keep an eye on airports in countries with less infrastructure as well. Again, **India has been struggling with power cuts** and blackouts due to extreme temperature and this may well impact airports just as much.

Climate change?

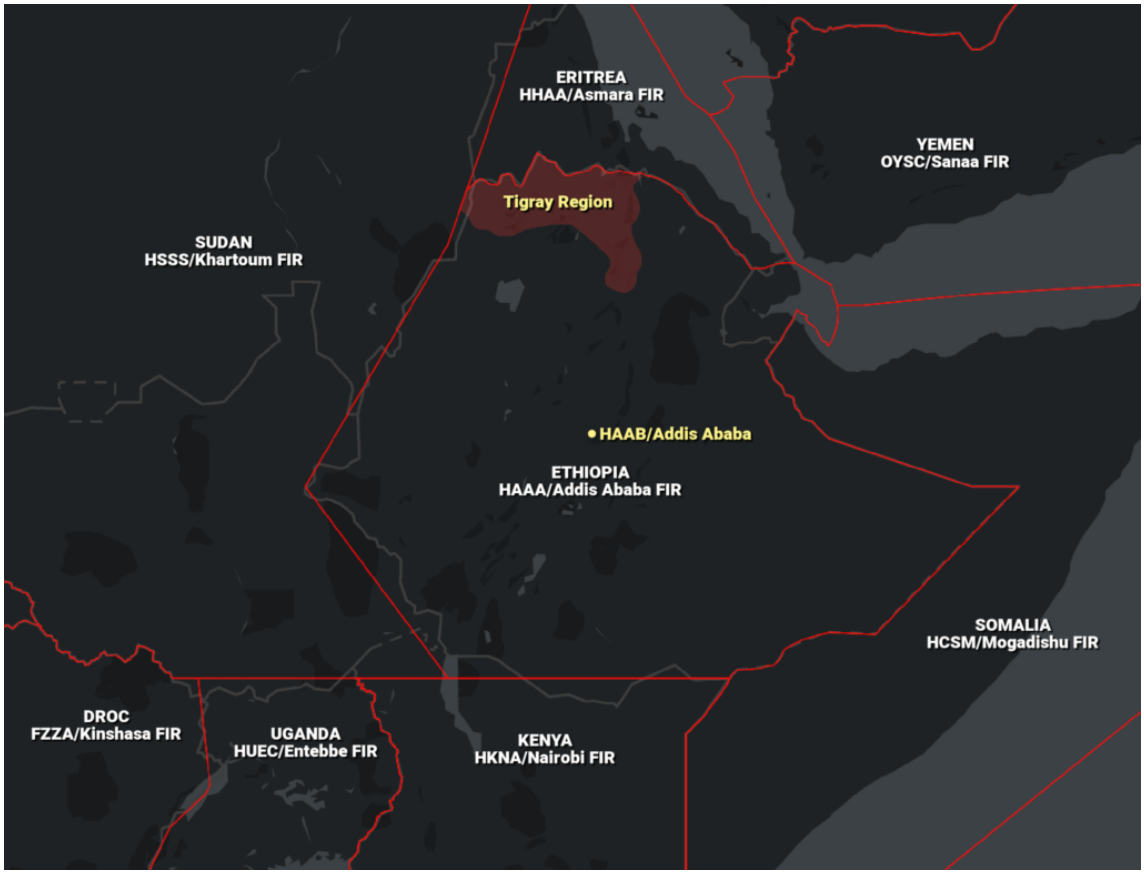
Here is something Eurocontrol said about it all. Don't worry, it's not a *"what to do about it"* lecture, but more *"things to look out for because of it"* guidance.

Ethiopia Airspace Update

Chris Shieff
14 September, 2022

Update – July 26, 2022

There has been no major fighting in Ethiopia's northern Tigray region since late Dec 2021. A ceasefire agreed in March 2022 has mostly been upheld, and Ethiopia's federal and Tigray regional governments look set for negotiations soon.

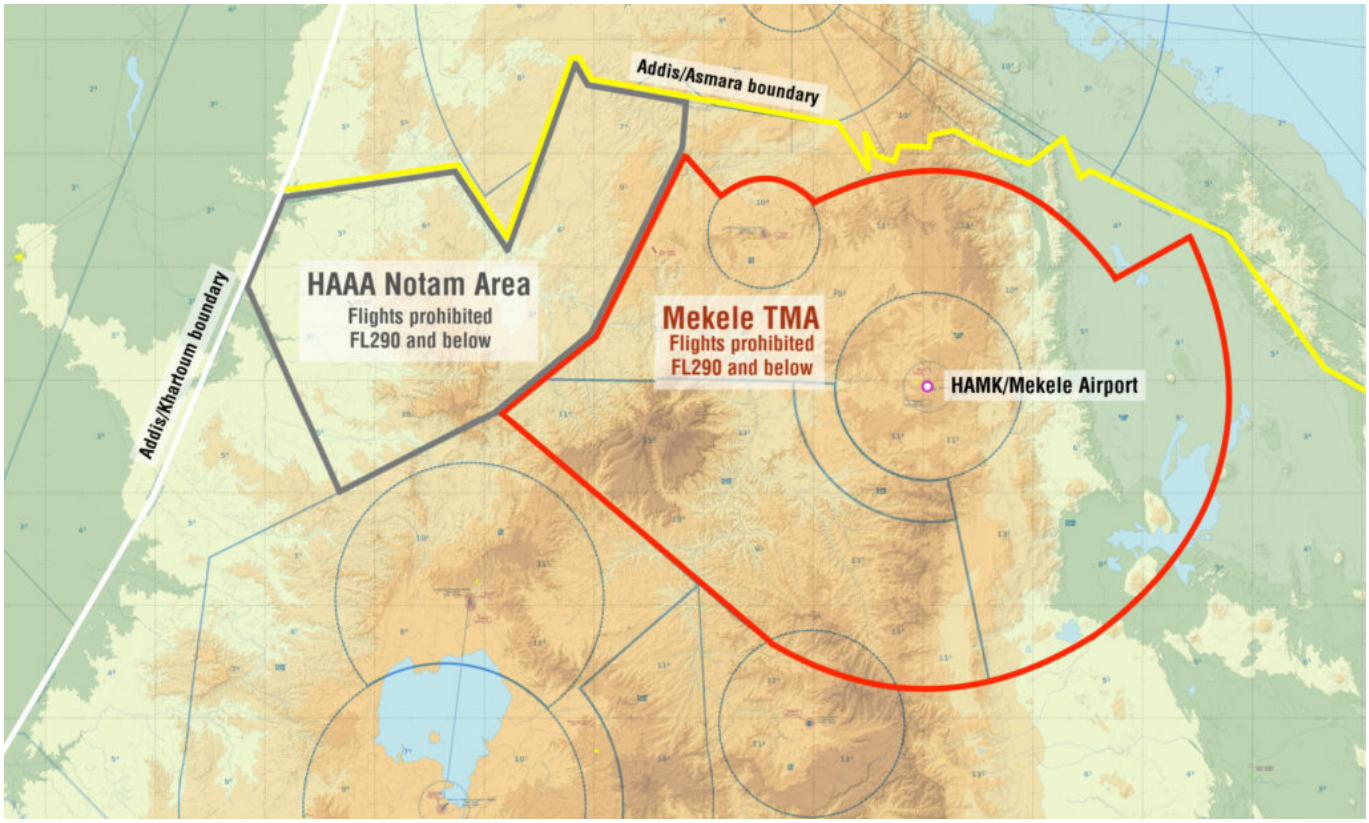


For the time being though, **airspace in the north of the country should still be avoided** – several states maintain active airspace warnings for the HAAA/Addis FIR, and Ethiopia still have a Notam in place banning all flights at FL290 and below.

Here's the current version of the Notam, the content of which hasn't changed since its first iteration:

HAAA A0220/22 - FLIGHT IS PROHIBITED TO FLY AT OR BELOW FL290 WITHIN
MEKELE TMA AND WITHIN THE AIRSPACE DEFINED BY JOINING
THE FOLLOWING SUCCESSIVE POINTS AND LINES
135914.7N 0362048.9E
130042.8N 0365122.9E
ETOBU(132132N 0373433E)
TILUD(134116N 0375950E)
EVITO(142911N 0382424E)
THE COMMON FIR BOUNDARY BETWEEN ADDIS AND ASMARA AND
THE COMMON FIR BOUNDARY BETWEEN ADDIS AND KHARTOUM
REF AIP SUP A 04/2021. GND - FL290, 27 MAY 09:00 2022 UNTIL 27 AUG 09:00 2022.
CREATED: 27 MAY 09:00 2022

Better yet, here's a picture of what this actually looks like:



Update – Nov 18, 2021:

- The US published a new airspace warning and Background Information Note for Ethiopia, cautioning against overflights of the HAAA/Addis Ababa FIR below FL290. The conflict between the Ethiopian military and opposition forces had intensified. Aircraft below FL290 were at increased risk from anti-aircraft fire.
- The US, the UK, Germany and France all issued security warnings advising their citizens to

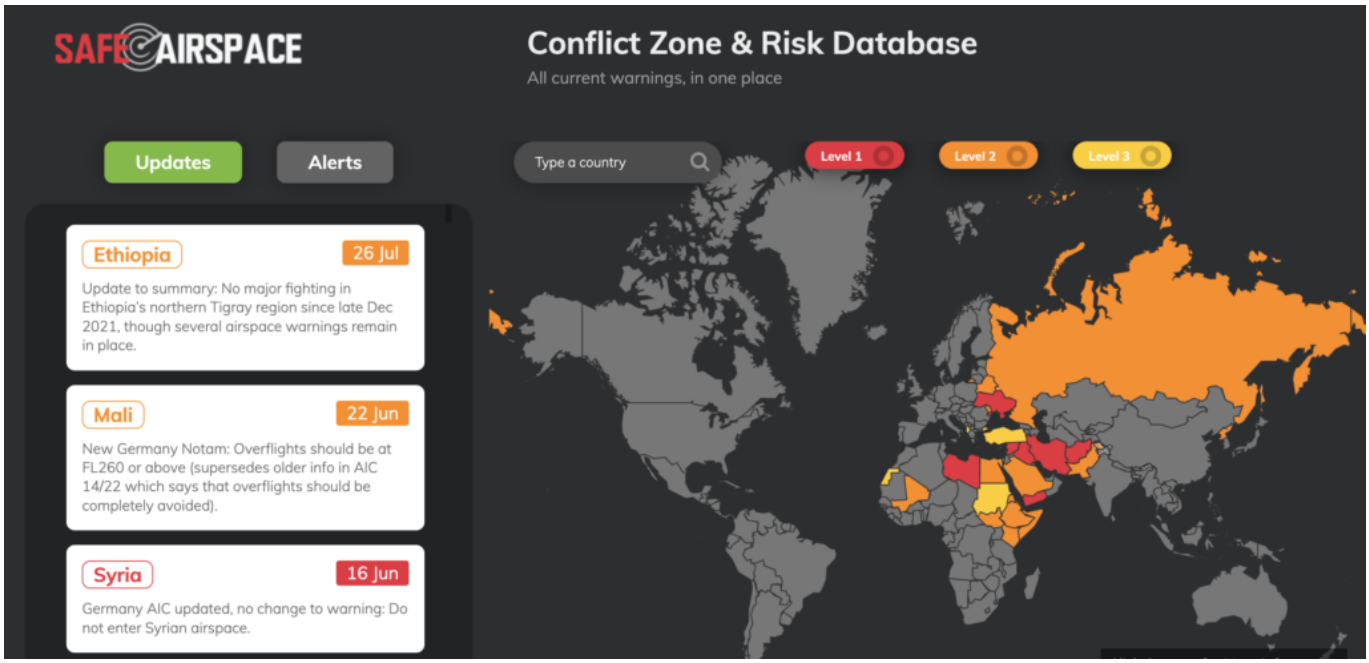
leave immediately.

Update – Nov 9, 2021:

- Ethiopia is on the verge of civil war. The government declared a six-month nationwide state of emergency on Nov 2, following increased fighting between the Ethiopian military and opposition forces in the Tigray region in the north of the country.
- Concern that ATC services in the HAAA/Addis FIR may be affected with little notice. Overflights of Ethiopia may be at increased risk of anti-aircraft fire at all levels.
- Several factors impacting risk to overflights: military aircraft being used in combat roles, unmanned aircraft operating in region, unstable political situation on the ground, and conflict spilling over into adjacent regions. All of this pointed to an increased risk of misidentification and miscalculation – aircraft mistaken for something of military interest, or simply caught in the crossfire.
- Opposition forces in Tigray have access to conventional surface-to-air missile systems that can reach aircraft as high as FL260. They have also previously shown an intent to target aviation interests with rockets and ballistic missile attacks on airports within the region, as well as across the border in Eritrea. Other military interests in the area have weapons capable of reaching much higher – including the Ethiopian military. More sophisticated systems are present in or near the region that are capable of reaching as high as FL490. For context, in August 1999 the Ethiopian military shot down a Learjet near the border with Eritrea. Then in May 2020 they also downed an Embraer 120 in Somalia. Both were misidentified.

Further reading

SafeAirspace.net is our conflict zone and risk database. Click here for a full briefing on the situation in Ethiopia.



Hedging Bets: Why Africa is Low on Fuel

Chris Shieff
14 September, 2022

Scour the OPSGROUP vault over the past twelve months, and you'll find a bunch of alerts we've posted about **jet fuel shortages**. In fact, we even wrote an article about the problem.

You'll also see that a disproportionate number of them are for **Africa** – or more accurately, *Sub-Saharan* Africa. Also known as the epicentre of 'tricky tech stops.'

Cape Verde, Nigeria, Sierra Leone, Senegal, Zimbabwe, Burundi, and South Africa have all graced our news feed in recent times for being low on gas. The problem for ops is that it is no coincidence. And for the next year at least, **fuel availability** is set to become public enemy number one there for flight planners and pilots alike…

Feeling the pinch.

From an air travel perspective Covid is (more or less) behind us, and demand for jet fuel is surging. But at the same time, the world's ability to produce it has fallen for the first time in three decades. Sanctions on Russia have been a big part of this – not surprising considering it produces ten percent of the world's oil.

The pinch becomes **higher prices** for everyone. In more developed economies, supply isn't a problem – the turbulence of the market is absorbed with price hikes. Which is why refuelling jets at your local FBO has become so eye-waveringly expensive. But if your pockets are deep enough, the fuel is there to be used.

But this just isn't the case in less developed regions – especially Africa, which is facing its worst supply shortage in forty years.

Drip Feeding

Many sub-Saharan countries have limited ability to refine their own oil domestically. And the refineries often operate below capacity. And so they are **reliant on imports** – so much so that the continent ships in three quarters of what it needs.

The problem then becomes the balance sheets of importers. Their pockets aren't that deep, so they can only import small amounts at a time, effectively drip feeding their economies.

Combine the two issues, and there just isn't much room for **fuel reserves** to ride out any bumps in the road. This strategy of storing less and refining less can be risky, especially in 2022. It leaves African countries extremely vulnerable to market forces they can't predict or control – exactly what is happening right now. Local crises such as civil war can also deepen the problem.

Hedging Bets

It's no secret that oil exporters are in it to make money – like most businesses. The big gamble is **what will happen next**. When prices are low, exporters may store oil in expectation of things picking up again. This often takes the form of full oil tankers, which can supply African countries with small shipments of oil while in transit.

But right now, jet fuel is in demand. **Fuel hedging** doesn't help either. Importers hedge their bets and if they think that more prices rises are coming, they enter into contract to secure prices now as it will save them money later. That's where the cash flow to buy and store it comes in handy. Many African countries aren't that lucky, and their lines of supply have been drying up as bullish prices charge on.

The result? **Long term fuel shortages,** and no guarantees things will get better in a hurry.

Crystal Ball

So, if fuel shortages at African airports are so intrinsically related to global prices, what does the future hold? There may be some relief on the horizon.

The super-charged rise of oil (and therefore jet fuel prices) is set to slow down, and in some forecasts even abate. But none show an outright collapse from the giddy heights they have reached today.

But of course, this is all conjecture. As Covid taught us, the world and the reaction of markets are **unpredictable.** Things have a habit of going either way, driven by forces we often don't see coming. But while the cost of jet fuel remains high, shortages are set to become a feature of the landscape for operations in Africa for some time yet.

US LOAs: What's the point of the C052?

OPSGROUP Team
14 September, 2022

Someone asked us about C052. Here's the answer.

Do you need it?

Well, my friend, to answer that you will need to answer these:

1. Are you Part 91, registered in the US?
2. Do you want to fly approaches that uses GPS RNAV stuff?
3. Do you want to fly these outside the US National Airspace System?

If you answered 'yes' to the above 3 then you probably need a C052

Are you now wondering *'Why exactly do I need it?'* or *'I have no clue about the C052!*"?

If you answered yes, read on. If you answered no, then move on.

Tell me about the C052

The C052 is a LOA.

In fact, it is *'an optional LOA provided upon the request of part 91 operators in order to show evidence of authorization and training to conduct Area Navigation (RNAV) Global Positioning System (GPS) approaches should they be required to provide such evidence to a civil aviation authority (CAA) outside of the United States.'*

So you need C052 if you want to **fly RNAV GPS approaches outside of the the US**, in countries where approval from your home state is required. Like anywhere that falls under EASA for example.

The C052 tells foreign authorities that you are trained and approved to fly GNSS based approaches, and this keeps them happy.

Hang on, do I actually want to fly GNSS based approaches?

Well, take a look at airports you visit and see if they have the following –

- A non-precision approach without vertical guidance, like an LNAV or an LP?
- An approach with vertical guidance like an LNAV/VNAV or LPV?
- A GLS approach?
- Titles which say RNAV (GNSS) or RNP approach?
- PRM?

Ok, then yeah, C052 is still for you.

I don't fly to Europe though. So where else do I need it?

Europe is the main spot, but there are others as well. **Hong Kong** for example. This LOA will allow you to fly them **anywhere that authorisation is required.**

One of the best ways to confirm is on the approach charts (it might say authorisation required) or in the Country Rules and Regs.

The UK used to have more stuff like **LPV approaches**, but since the UK lost access to EGNOS after Brexit, these LPV approaches haven't been possible.*

**Good news here though – Inmarsat have recently run tests on the new satellite system stuff that will replace EGNOS access for the UK. Watch this space for LPVs again. And C052 requirements for the UK. We aren't sure yet if it will be needed (it wasn't in the past).*

Something else to know about it.

The older LOA C052 used to mention LOA B034, but this is now out of use.

Because you also don't need approval to fly RNAV GPS approaches in US airspace, the best way to confirm your aircraft is eligible and airworthy for C052 stuff is **through your airplane flight manual** (from the manufacturer).

You might also want to get the C052 if you want a C073. **The C073 authorises you to use MDA as a DA/DH**, and you gotta have the C052 to get the C073

These guys can help.

Aviation Manuals can help you actually get the LOA if you want. We've mentioned them before, and actually they've mentioned the subject of C052 LOAs before, so here's a link to that.

I'm sure there are other places who can help too, we just happen to find these guys really helpful because they always answer our questions on stuff.

Some useful other things to read.

- The FAA advisory circular.
- An FAA notice about the C052, effective May 2022.
- A post about LOAs – a quick rundown of what each one is for.
- Another post about LOAs – a guide on getting your LOA approved.

No SELCAL On The NAT?

Chris Shieff
14 September, 2022

ICAO are hurriedly upgrading the **SELCAL** system to allow for new codes. There's only a finite number of them available, and double ups are becoming are a problem. The potential for more than one aircraft to receive the same call in the same airspace is cause for concern.

ICAO have been onto it for some time, and on November 3 there is a soft deadline for Air Navigation Service Providers (ANSPs) to upgrade their ground equipment to communicate with the new codes.

But there is a **problem** on the NAT. Most of the ANSPs won't be ready in time. Which means if an aircraft has one of the new codes, for up to six months they will not have SELCAL when crossing the pond.

Here's a quick rundown of why, and what the impact will be.

SELCAL 101

If you are one of the few who already know what **'32-tone' SELCAL** is, top marks and feel free to skip this part.

If you don't, fear not. This ain't no radio shack, but a little bit of tech stuff will help here. All you need to know is the alphabet and how to count to ten. Chances are if you're flying a plane, you already have that covered. Let me explain.

Unless you actually like the soothing sounds of static for hours on end, or distorted mumblings from halfway across the globe, chances are you have heard of Selective Calling (SELCAL). It does the listening, so we don't have to.

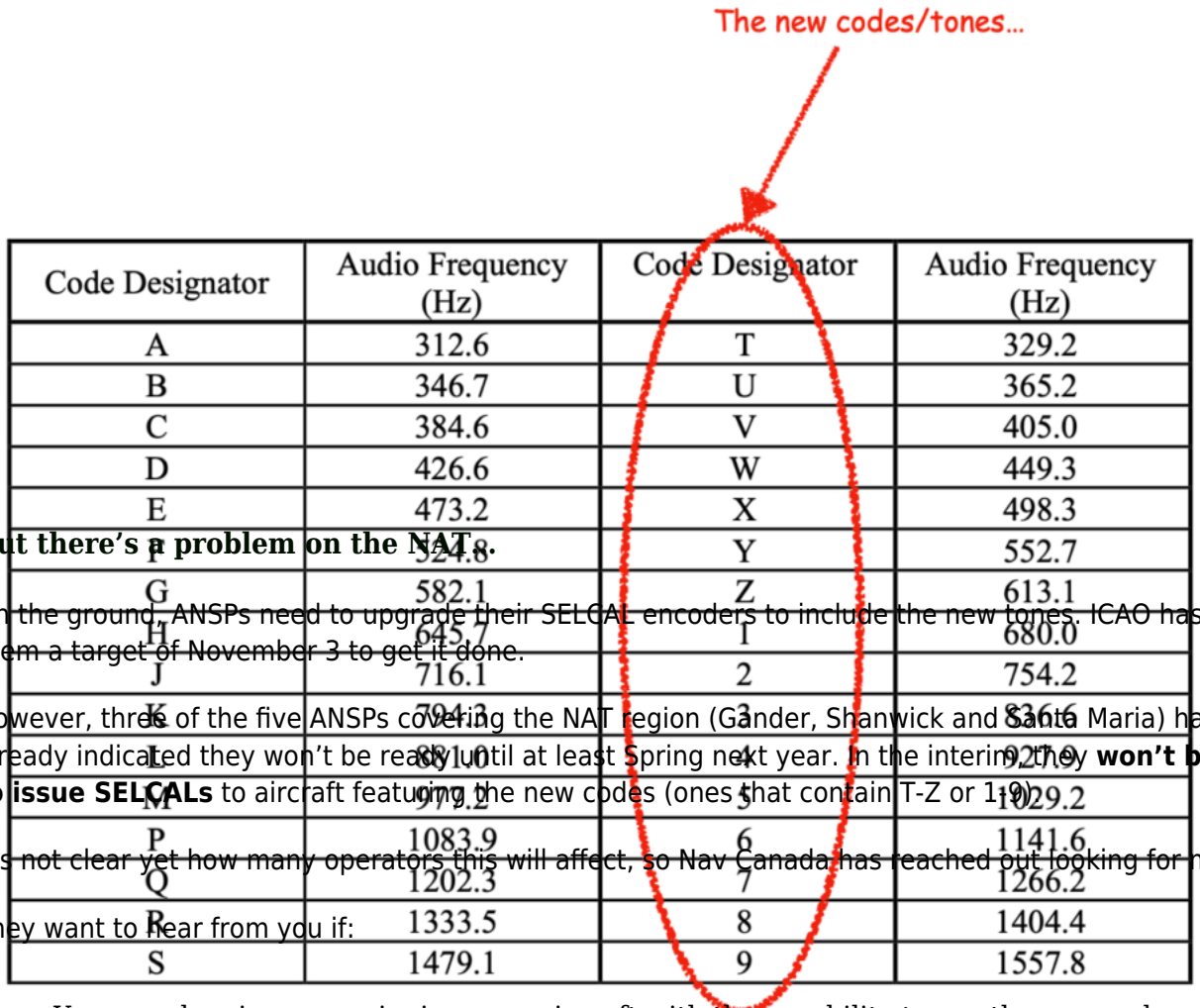
In a nutshell it is **a signaling system that lets us know via HF or VHF when ATC is trying to get a hold of us**, so we don't need to listen out all the time.

Here’s how it works. On the ground a SELCAL encoder transmits four audio tones at a time. Each tone is assigned a letter. When the four tones correspond to your aircraft’s four-letter code, a decoder in your avionics hears it and triggers a SELCAL with a noise and flashing light. That’s your cue to call ATC back. Simple.

Enter the problem. Until now, only 16 letters (and therefore tones) have been available. That means there are just shy of 11,000 codes for aircraft to use. And so far, 37,000 have been allocated. Which means **double ups.** And the problem isn’t going away.

There is an increasing risk that multiple aircraft in the same airspace may receive the same SELCAL, and that could spell **danger**. ICAO knows that, and so they’re adding 16 new tones (comprised of letters and numbers). That will bring the total to 32. And voila, ‘32-tone’ SELCAL.

This will create almost a quarter of a million unique code options and will cut the problem off at the knees.



Code Designator	Audio Frequency (Hz)	Code Designator	Audio Frequency (Hz)
A	312.6	T	329.2
B	346.7	U	365.2
C	384.6	V	405.0
D	426.6	W	449.3
E	473.2	X	498.3
F	524.8	Y	552.7
G	582.1	Z	613.1
H	645.7	1	680.0
J	716.1	2	754.2
K	794.3	3	836.6
L	881.0	4	927.9
M	977.2	5	1029.2
P	1083.9	6	1141.6
Q	1202.3	7	1266.2
R	1333.5	8	1404.4
S	1479.1	9	1557.8

But there's a problem on the NAT.

On the ground, ANSPs need to upgrade their SELCAL encoders to include the new tones. ICAO has set them a target of November 3 to get it done.

However, three of the five ANSPs covering the NAT region (Gander, Shanwick and Santa Maria) have already indicated they won't be ready until at least Spring next year. In the interim, they **won't be able to issue SELCALs** to aircraft featuring the new codes (ones that contain T-Z or 1-9).

It's not clear yet how many operators this will affect, so Nav Canada has reached out looking for more info.

They want to hear from you if:

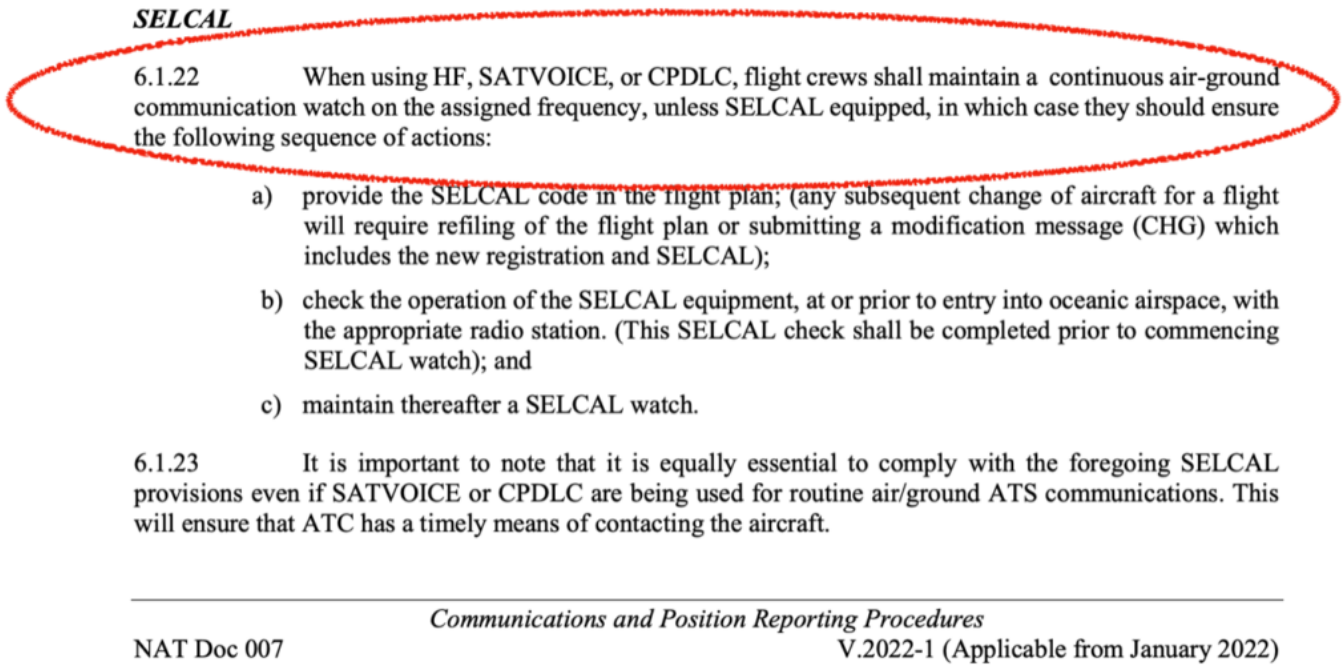
- You are planning on equipping your aircraft with the capability to use the new codes.
- You have already applied for one.

You can email that info to kelly.mcilwaine@navcanada.ca, and cc in ocarrollk@iata.org. They want hear from you before August 31.

What will the procedure be without it?

NAT Doc 007 (6.1.22) seems to have the answer, and it's not great. As a general rule, any aircraft that

can’t be reached by SELCAL **must maintain a listening watch** on the assigned frequency – and unfortunately that means hours of annoying static (even if your CPDLC is working just fine). Hardly ideal.



SELCAL

6.1.22 When using HF, SATVOICE, or CPDLC, flight crews shall maintain a continuous air-ground communication watch on the assigned frequency, unless SELCAL equipped, in which case they should ensure the following sequence of actions:

a) provide the SELCAL code in the flight plan; (any subsequent change of aircraft for a flight will require refiling of the flight plan or submitting a modification message (CHG) which includes the new registration and SELCAL);

b) check the operation of the SELCAL equipment, at or prior to entry into oceanic airspace, with the appropriate radio station. (This SELCAL check shall be completed prior to commencing SELCAL watch); and

c) maintain thereafter a SELCAL watch.

6.1.23 It is important to note that it is equally essential to comply with the foregoing SELCAL provisions even if SATVOICE or CPDLC are being used for routine air/ground ATS communications. This will ensure that ATC has a timely means of contacting the aircraft.

Nav Canada has confirmed to us that this will indeed will be the case. An AIC will soon be published, which is due out in September.

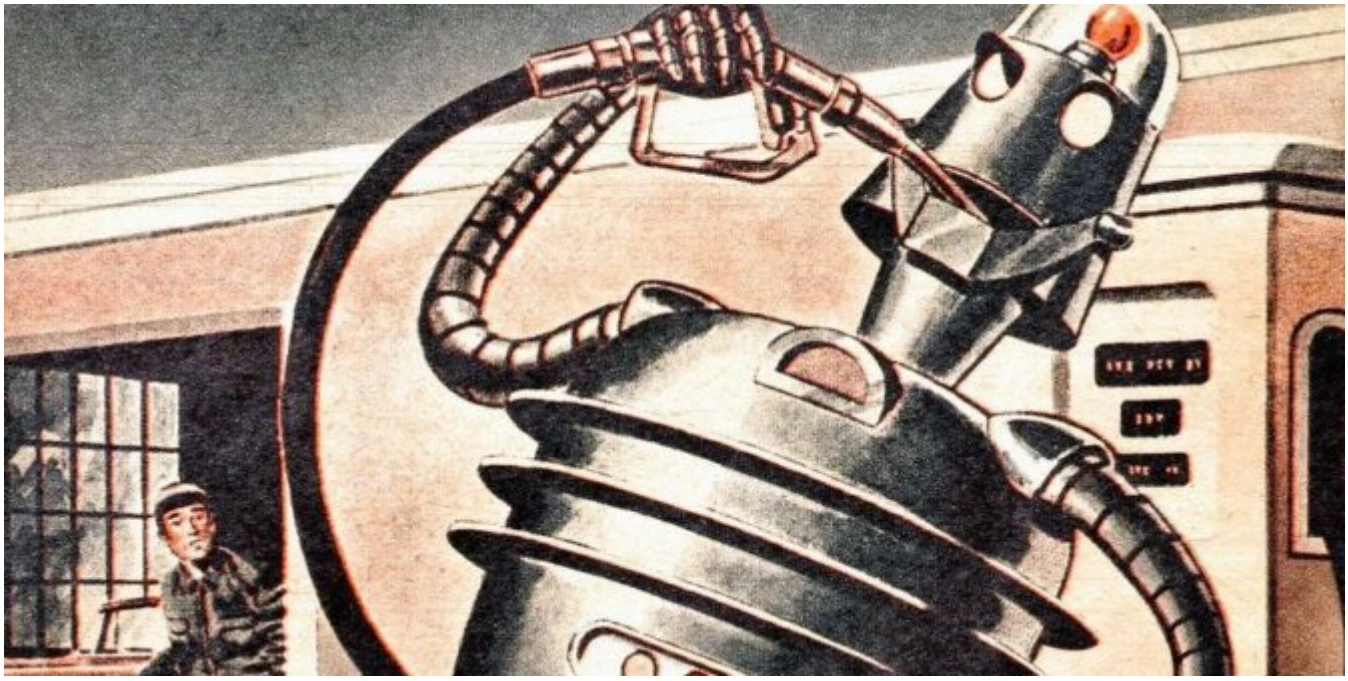
Need more info?

You can read more on ICAO’s SELCAL upgrade project here.

Or feel free to reach out to us directly on news@ops.group and we’ll do our best to help find the answers you’re looking for.

EASA Fuel Rules: A Picture Book

OPSGROUP Team
14 September, 2022



The new EASA Fuel Rules. A horrendous, confusing document that seems to have been written in the form of an unsolvable riddle. Last time I tried to read it I did actually give up and read some (generally quite lame) aviation riddles instead to relax.

Here's my favourite.

You are sitting on an aeroplane. There is a horse in front of you, and a car behind you. Where are you?

Back to the EASA riddle.

We are on attempt four thousand now and are slowly managing to wade through it, with the help of some **useful input from other people** along the way. Thanks *people,* you know who you are.

We have taken what (we think) we know, and have made a book. Well, a PDF actually which you can download here.

Before you read this, we do think you should read this though. **It's our first post on the EASA fuel rules** and it covers who this actually applies to.

Click above for the PDF version (which you can also download directly).

If you prefer, try this "Book" version …

What it is.

A handy thing in PDF form, filled with old Sci-Fi book covers, because I like them, which you can maybe **use alongside the actual EASA document** to help you wade through it a lot more easily.

What it isn't.

A replacement to EASA's document, something to actually use as an official fuel policy decider guide or an actual textbook.

Think you've spotted an error?

Well don't be shy, share it! We'll even add your name into the book (only if you want us to). Email us at: news@ops.group

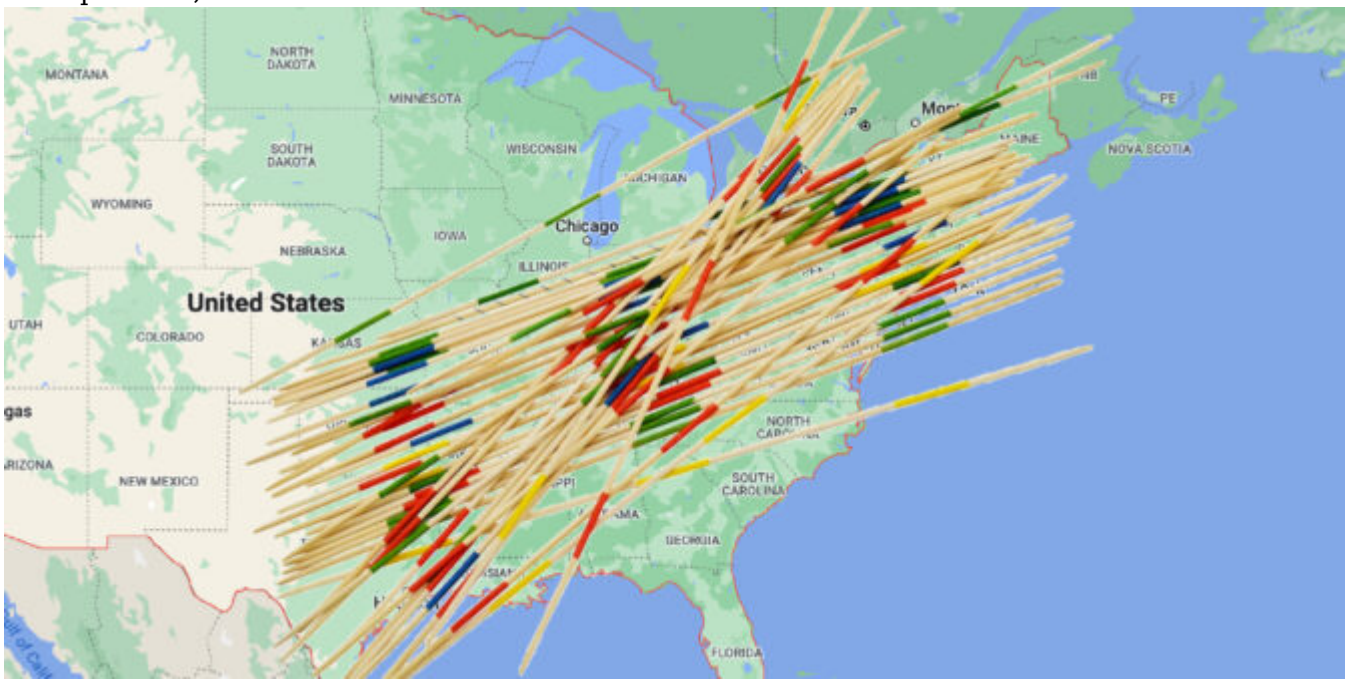
Don't worry, we won't be offended. Like I said, fourth or fifth thousandth attempt and still not sure we've totally *got to grips* with it. We're also not an actual fuel planning operator so chances are a lot of you do know more than us on this so let us know and we'll let others know, and hopefully the combined heads of all might help us finally and definitively solve this riddle.

If you want more (official) info, then check out the Webinars EASA has recorded on it all here.

FYI, the answer to the other riddle is: On the aeroplane.

The FAA Northeast Corridor Atlantic Coast Routes Project

OPSGROUP Team
14 September, 2022



Update 18 July 2022: The FAA has postponed the final phase of its 'Northeast Corridor Atlantic Coast Routes Project.' A whole bunch of new and modified routes along the East Coast were meant to become active from Nov 3. This has been pushed back until 20 April 2023 to avoid the busy summer and winter peaks. The new procedures will still be published in September, but will not be authorized for use until then.

Where are we talking about?

The Airspace: All along the Atlantic East coast of the US.

The Airports:

- KBWI/Baltimore Washington
- KIAD/Dulles
- KDCA/Ronald Reagan
- KHEF/Manassas
- KADW/Joint Base Andrews
- KPHL/Philadelphia
- KEWR/Newark
- KTEB/Teterboro
- KLGA/La Guardia
- KDOV/Dover Air Force Base
- KWRI/McGuire Air Force Base
- KCHS/Charleston
- KJZI/Charleston Executive
- KATL/Hartsfield-Jackson
- KRDU/Raleigh-Durham

What's changing?

Q, Y and J Routes are changing – some have been amended, some have been deleted and some are brand new. There are also someone SIDs and STARs. Basically, the whole airspace is getting PBN-ed up!

The main change is a large number of new or modified routes (more than 150 in fact) which will replace the existing **high-altitude route structure** up and down the East Coast. Basically, J Routes are out, new or amended Q and Y Routes are in.

Why? Because PBN (less ground-based Navaids).

This will include **super high sector routes** (that's FL400 and above). The full details of the Sector 30 super high sector routes are not yet known but we are expecting:

- 09 DIW Ultra High from FL360-390.
- 50 YKT Ultra High between FL360-390.
- 30 MSN Super High FL400 and above.

Tell me the specifics.

22 Q-Routes (including 9 new ones) and 4 Y-Routes are getting amended.

If you want the full list, go check out the official FAA presentation which you can download via the NBAA site.

What does it all mean for folk flying there?

It means much more **efficient ATC** as it will help reduce their workload, and also the messiness of the

current route structure. This means time and fuel savings for the operators operating in this region, as well as increased safety!

What has happened so far?

You're going to have been seeing a lot of this already, it's been going on since 2019 with 106 route changes implemented so far.

- In May 2021 two Q-Routes (Q75 and Q475) were amended.
- Through the rest of 2020 a large number of J-Rouete were deleted, and modified Q-Route were brought in.
- AR7 and AR25 were removed.
- There was also the whole **Florida Metroplex** stuff, which we mentioned before here.
- And a bunch of new, amended, deleted SIDs and STARs at the major airports along this region

So what do you really need to know?

The route changes will be published September 8. They will go active 20 April 2023. If you do absolutely nothing else, just be aware that **if you file a flight plan from that date you're going to be filing the new Q-Routes**, and you're also going to be PBN-ing a lot more.

Where can you go for more info?

The official FAA presentation is probably the best spot to find the answers to your questions. Here the link (to the link) is again.

And here is some other stuff on NAS changes like the Northwest Corridor.

You can also ask folk directly, depending on where you are/which area you want to know about, or contact the lead FAA people on the project: paul.m.withers@faa.gov /joseph.b.tinsley@faa.gov

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