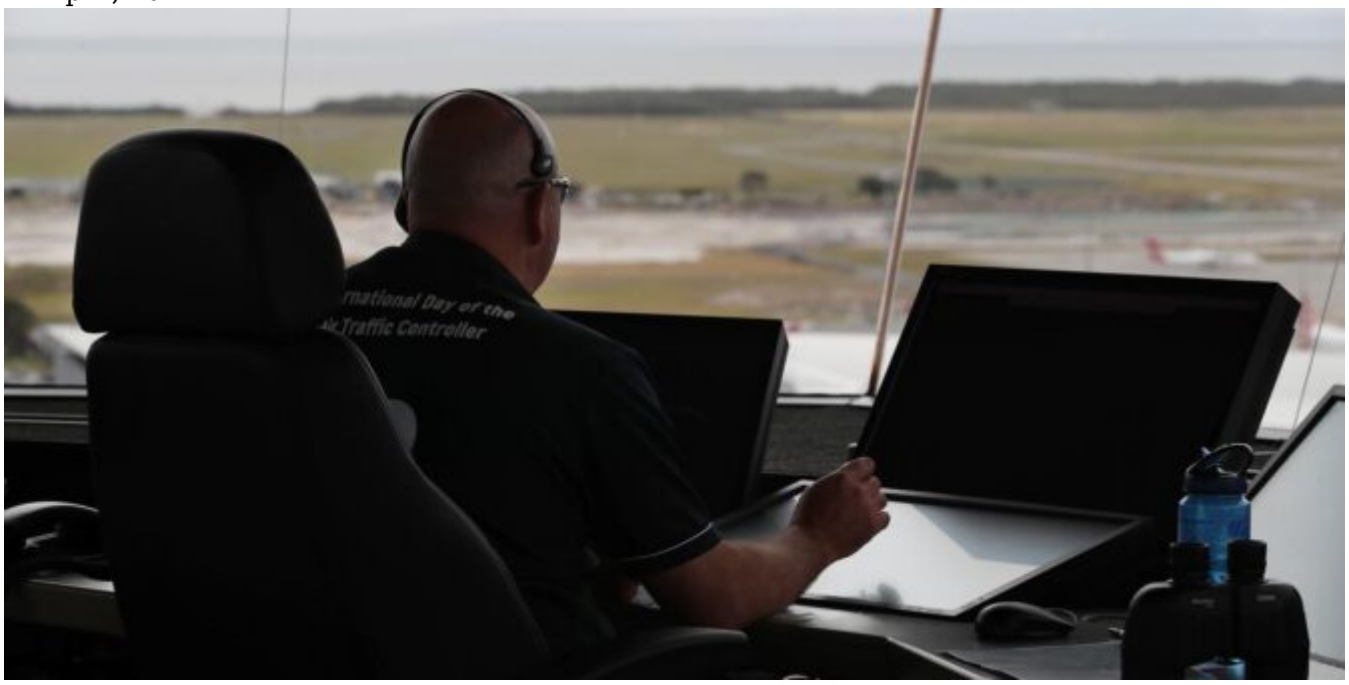
TIBA in Australia: What’s Going On?

Chris Shieff
17 April, 2024



Key Points

- **TIBA still seems to be an issue in Australia – shortage of ATC resulting in big bits of restricted Class G airspace, often at short notice.**
- **We wrote about this last year, including guidance on what to do (see updated post below), but now IFALPA have published a Safety Bulletin saying the problem is still ongoing.**
- **Amid accusations of understaffing, Australian ATC has announced they intend to strike. This process will take a few weeks to action, and so we’ll likely see disruptions from May. This may include full 24hr work stoppages and will be notified in advance via the YMMM/Melbourne and YBBB/Brisbane FIR Notams.**

Since early in 2023, we’ve seen large sections of **restricted TIBA airspace** (traffic information broadcasts by aircraft) established by Notam up Australia’s East Coast in both the **YMMM/Melbourne** and **YBBB/Brisbane FIRs.**

In fact, there were 340 instances of uncontrolled airspace between June 2022 and April 2023 alone. And it’s **still happening.**

The cause here appears to be a fundamental **shortage of air traffic controllers.**

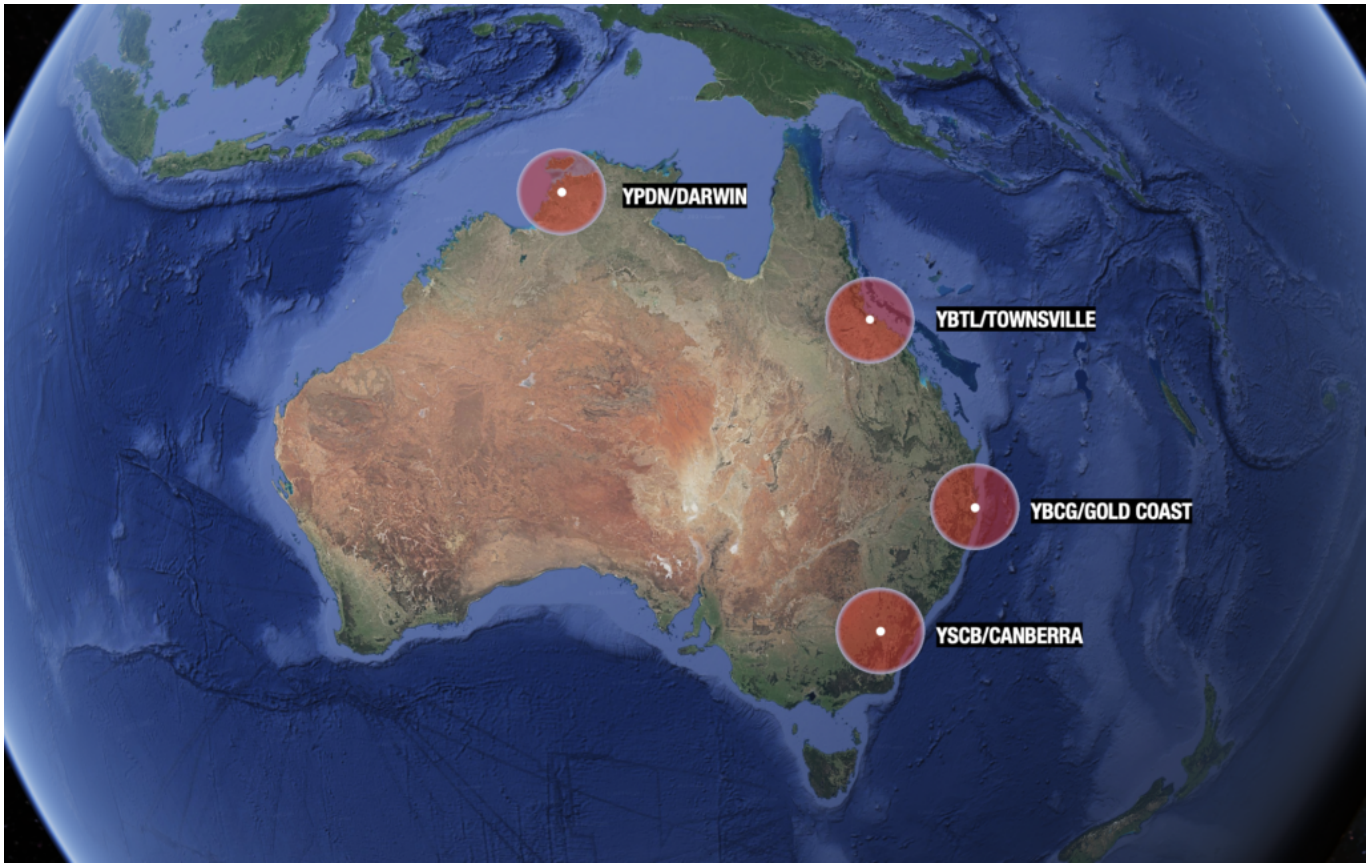
Where has this been happening?

In the South, look out for TIBA airspace east of **YSCB/Canberra** airport, Australia's capital city found inland from Sydney.

Further north there has been a greater effect as large portions of coastal airspace near **YBCG/Gold Coast** and **YBTL/Townsville** airports have been impacted. This is an **extremely busy air corridor** – 80% of Australia's population live on the East Coast.

At the top end of Australia, **YPDN/Darwin** airport has also been affected which can result in re-routes for international traffic headed up into South-East Asia and beyond.

Here's what those hotspots look like on a map:



TIBA airspace has been reported in or near these hotspots.

It's not all the time.

TIBA airspace is being **activated by Notam**, typically for hours at a time. A look at today's batch indicated all is ops-normal. However, a local airline captain has advised OPSGROUP that it is currently a frequent occurrence.

Broadcast, or avoid?

The vast majority of airline traffic appear to be **avoiding the TIBA airspace.** This typically involves less direct routes at the expense of delays and fuel. Helpfully, for major city pairings the NOTAMs contain suggested routes that will keep you clear. But expect SIDs or STARs you may be less familiar with.

In fact, major carriers have policies in place that prevent them from using TIBA airspace anyway – unless they happen to be in it when it is activated.

That's not to say there won't be other traffic taking advantage of the more advantageous routes though. The East Coast is characterised by a **huge variety of traffic** including charter, skydiving, medevac and survey all of which may have valid reasons for using TIBA.

It can still be used safely, but with the procedures below (a heads up: **dual comms are a requirement**).

How on earth do I 'do TIBA'?

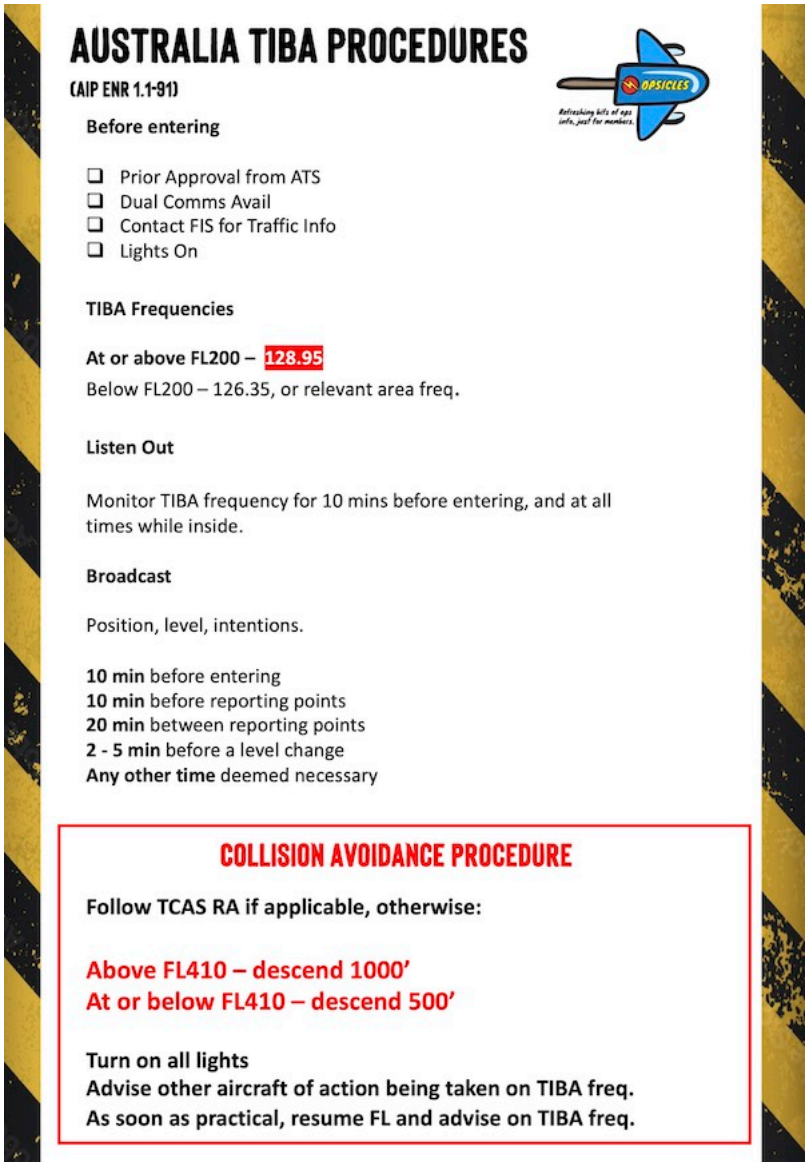
First things first. **Whatever you do, don't enter without permission.** Australia's TIBA airspace is typically restricted – in the sense **you will need PPR to use it**. The relevant Notams are quite helpful, and provide all the information on how to get it. Here's an example.

Your approval will typically involve a phone call beforehand, and a chat to a flight information service in

adjacent airspace for traffic information.

Once you're in, you are totally responsible for terrain and collision avoidance. Turn that radio up and make sure you're both alert and monitoring both the TIBA frequency and the relevant ATS one – now is not the time for controlled rest. Whoever is on the radios is going to be busy.

The Australian AIP then takes over. You can find the procedures in full here (time saver: flick to ENR 1.1-91). We've also put together a summary of those in this handy little briefing card which may be useful to keep in your flight bag:



OPSGROUP members: click to download hi-res PDF.

Other questions?

You can also get in touch with CASA via this link, or alternatively Airservices Australia here with questions. Both have been very helpful in answering our pesky conundrums in the past.

That MMEL Thing: Here’s an Update

David Mumford
17 April, 2024

It looks like there might finally be a solution to the long-running **MEL vs MMEL issue for US operators headed to Europe**, keen to **not get a ramp check finding!**

The *brief* Backstory

Since 2017, US aircraft have been getting hit with ramp check findings in Europe because EASA decided that the **D095 LOA** wasn’t good enough – they wanted to see a **D195 LOA** instead, but it was taking operators a long time to get these approved by the FAA in the US due to a big backlog of applications.

The Solution

The FAA has published an updated Advisory Circular (AC 91-67A) which **speeds up the process of getting this D195 LOA.**

The NBAA have reported that the FAA has also updated guidance to its field offices, who will now issue the LOA after a brief review, provided the application is accompanied by an “attestation letter”.

The *slightly longer* Backstory

Over the past few years, ramp checks on some US aircraft in Europe highlighted an important issue – EASA and the FAA have **different interpretations of the ICAO standards** regarding deferring aircraft discrepancies.

In the US, with FAA authorization operators can use a master minimum equipment list (MMEL) to defer repairing certain equipment. But in Europe, **MMEL cannot be used in lieu of an MEL specific to each aircraft or fleet.**

The European Aviation Safety Agency (EASA) began requiring all aircraft transiting European airspace to have an approved Minimum Equipment List (MEL) for each, individual aircraft (i.e. a **D195 LOA**). An MEL that references the MMEL was not acceptable (i.e. a **D095 LOA**).

This was a pain for US operators, as to get an individual MEL approved under the LOA from the FAA takes time – but by not doing so, they ran the risk of **getting a ramp check finding** in a European country. (France seems to be the place where this happens most often!)

At the start of 2018, the rumour was that the FAA and EASA reached an agreement: the FAA would start requiring international operators with D095 LOAs to obtain new D195 LOA's instead, and in return **EASA would halt any findings** for a period of 12 months to allow for these new LOA's to be issued. There was no official announcement on this, but SAFA data did indicate that ramp check findings for use of D095 were greatly reduced for a time.

The FAA proposed a policy change to **phase out the D095 LOA** over the next 3-5 years, and to work out a streamlined approval process to **issue everyone with D195's instead**.

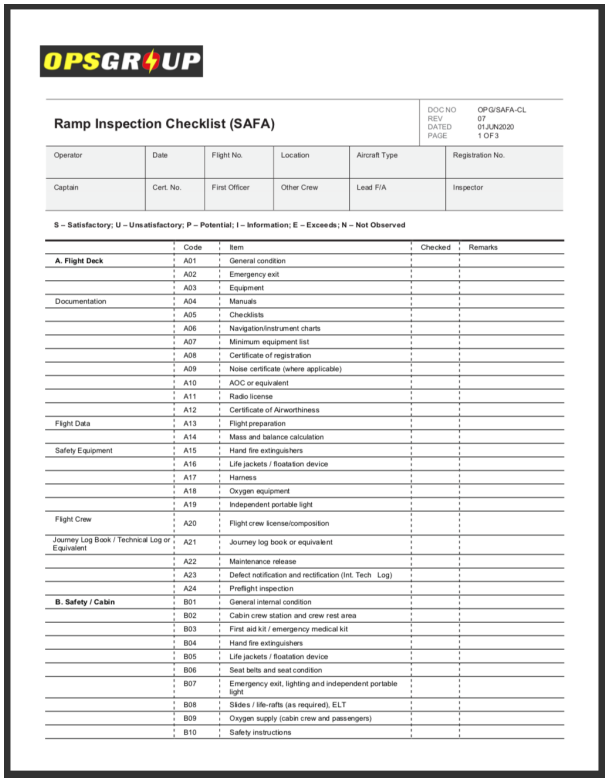
The French CAA said they would **stop issuing ramp check findings** once the FAA has launched the new policy.

FSDOs across the US then started processing the **backlog of D195 requests** from operators (there were lots!). In the meantime, US operators with the D095 LOA continued to face the same old MMEL findings on ramp checks in Europe.

How to prepare for a ramp check in Europe?

Here's the article we wrote all about how to make a ramp check painless.

And here is a copy of the OPSGROUP SAFA Ramp Checklist. Download it here.



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Ramp Inspection Checklist (SAFA)

DOC NO OPG/SAFA-CL
REV 07
DATED 01JUN2020
PAGE 1 OF 3

Operator	Date	Flight No.	Location	Aircraft Type	Registration No.
Captain	Cert. No.	First Officer	Other Crew	Lead F/A	Inspector

S – Satisfactory; U – Unsatisfactory; P – Potential; I – Information; E – Exceeds; N – Not Observed

	Code	Item	Checked	Remarks
A. Flight Deck	A01	General condition		
	A02	Emergency exit		
	A03	Equipment		
Documentation	A04	Manuals		
	A05	Checklists		
	A06	Navigation/instrument charts		
	A07	Minimum equipment list		
	A08	Certificate of registration		
	A09	Noise certificate (where applicable)		
	A10	AOC or equivalent		
	A11	Radio license		
	A12	Certificate of Airworthiness		
Flight Data	A13	Flight preparation		
	A14	Mass and balance calculation		
Safety Equipment	A15	Hand fire extinguishers		
	A16	Life jackets / floatation device		
	A17	Harness		
	A18	Oxygen equipment		
	A19	Independent portable light		
Flight Crew	A20	Flight crew license/composition		
Journey Log Book / Technical Log or Equivalent	A21	Journey log book or equivalent		
	A22	Maintenance release		
	A23	Defect notification and rectification (Int. Tech Log)		
	A24	Preflight inspection		
B. Safety / Cabin	B01	General internal condition		
	B02	Cabin crew station and crew rest area		
	B03	First aid kit / emergency medical kit		
	B04	Hand fire extinguishers		
	B05	Life jackets / floatation device		
	B06	Seat belts and seat condition		
	B07	Emergency exit, lighting and independent portable light		
	B08	Slides / life-rafts (as required), ELT		
	B09	Oxygen supply (cabin crew and passengers)		
	B10	Safety instructions		

Keep a copy with you and run through it before you head to Europe.

Further Reading

- SAFA Ramp Checks: The Top 5 Offenders
- SAFA Ramp Checks – Guidance Material
- How are ramp checks performed?

China-Taiwan M503 Airway Dispute

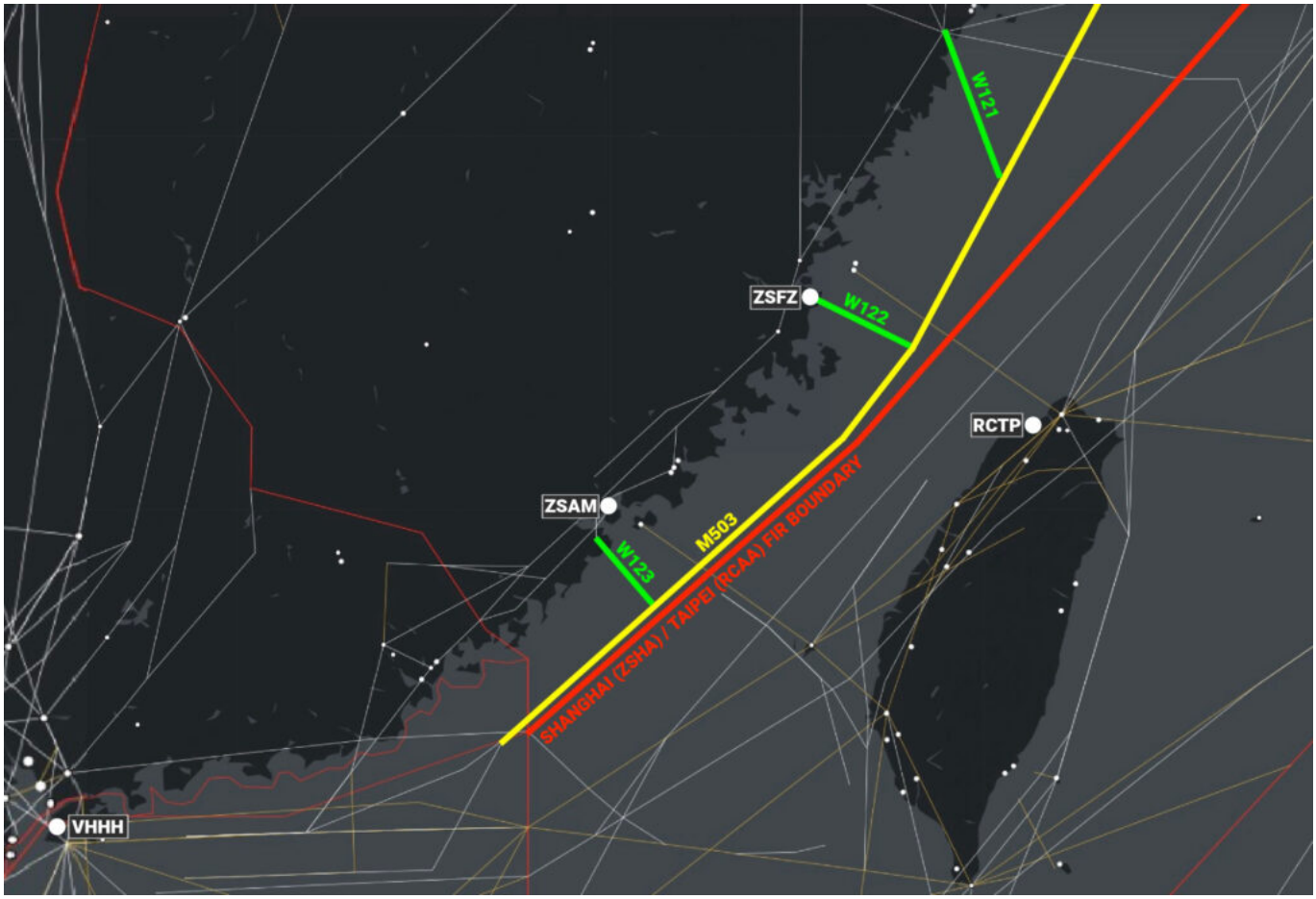
David Mumford
17 April, 2024

China has cancelled all concessions previously made to Taiwan regarding the **M503 airway** that runs along the ZSHA/Shanghai and RCAA/Taipei FIR boundary.

What does this mean in practice?

- **China have moved the airway 6nm back towards the FIR boundary.**
- **They have started allowing eastbound flights on the the W122 and W123 connecting routes.**

So now, of all these routes, the only one that is not bi-directional is W121 (westbound only).



Taiwan aren't happy, same argument as before: they say the airway is too close to existing routes that serve airports in outlying groups of Taiwan-controlled islands, and thus poses a risk to safety. China have ignored them.

Can I use M503?

China only allow airway M503 to be used under certain conditions:

1. **Aircraft must be RNAV2 capable.**
2. **The flight must be going between VHHH/Hong Kong or VMMC/Macau and certain Chinese airports: ZSPD/Shanghai Pudong, ZSQD/Qingdao, ZSYT/Yantai, ZYTL/Dalian.**

Everything else transiting east-west across this region will need to use the congested parallel A470 airway along the southeastern coast of mainland China.

April 2024: Israel/Iran Situation, All Call active

OPSGROUP Team
17 April, 2024

Attn all Members:

A briefing with all known information on the Israel/Iran situation is now live in the OPSGROUP Members Dashboard. Situation summary, group intel, airspace closures, reroute options, and operator/crew reports.

ALL CALL currently active, please continue to report any information in confidence to team@ops.group.

Briefing URL: https://ops.group/dashboard/briefings/middle-east/

Airport Fire Fighter Strike in Australia

Chris Shieff
17 April, 2024

Disruption looms at Australian airports on **April 15.** Rescue fire fighters have announced a **four-hour strike from 06:00 – 10:00 local time** at twenty-seven airports across the country – including the majors.

It seems the cause extends beyond just pay and conditions with **safety concerns over staffing levels** the United Fire Fighters Union has described as 'dire.'

Here's everything we know, and how to decode the inevitable RFFS Notams soon to grace your pre-flight briefing.

Impact to Ops

The strike will see RFFS categories simultaneously reduce as low as zero (more on these categories below).

While the exact impact of the impending strike isn't clear yet, previous strikes have given us a good idea of what to expect.

Traffic delays could extend beyond the strike period as airlines scramble to re-schedule cancelled or delayed services, with the added addition of peak school holidays. For inbound traffic this means **delays and holding.**

The RFFS downgrades themselves will be **announced by Notam** closer to the time and may also affect the use of Australian airports as **ETOPS alternates.**

'Leaked' Controversy

The plot thickens over the alleged leaking of a safety assessment which supposedly identified **major flaws at several Australian airports** over a lack of staff, procedures, trucks and other frontline fire-fighting equipment for the type of aircraft using them.

If this is correct, YBBN/Brisbane, YPPH/Perth, YMML/Melbourne, YSCB/Canberra and YSSY/Sydney airports are all operating at **high levels of risk in some emergency scenarios** – something that Air Services Australia (who is responsible for RFFS staffing) has denied. The Australian Aviation Authority (CASA) has also weighed in on the issue, and sides with Air Services.

The Fire Fighter Union has also claimed that in some cases, flights have been operating at regional airports (such as YMLT/Launceston and YBSU/Sunshine Coast) with **less than the minimum required RFFS staff**

on watch – although we can't confirm this.

Regardless of who is correct, the two parties are locked in a row that has led to the upcoming strike.

RFFS Categories

The effect of the strike will become apparent in the next couple of weeks via Notams like this:

A5537/23 NOTAMN
Q) EGTT/QFFCG/IV/NBO/A /000/999/5134N00042E005
A) EGMC
B) 2307271800
C) 2307280600
E) RFFS DOWNGRADED TO CATEGORY 5. CREATED: 27 Jul 2023 17:58:00 SOURCE: EUECYIYN

If you're not familiar with what these categories actually mean, here's a quick rundown on how they work.

An airport's RFFS Category refers to the **largest aircraft** it is intended to receive (think length and fuselage diameter).

This dictates the amount of water, agents, vehicles and response time required to fight fires on planes of these size.

With that in mind, here are the current **ICAO RFFS Categories.**

Aerodrome Category (ICAO Index)	Min Number of Rescue and Fire Fighting Vehicles	Airplane Length [m]	Max Fuselage Width [m]	Water [L]		Foam Solution Discharge Rate [L/min]		Complementary Agents [kg]
				Performance Level A	*Performance Level B*	*Performance Level A*	*Performance Level B*	
1	1	0 < L < 9	<2	350	230	350	230	45
2	1	9 ≤ L < 12	<2	1 000	670	800	550	90
3	1	12 ≤ L < 18	<3	1 800	1 200	1 300	900	135
4	1	18 ≤ L < 24	<4	3 600	2 400	2 600	1 800	135
5	1	24 ≤ L < 28	<4	8 100	5 400	4 500	3 000	180
6	2	28 ≤ L < 39	<5	11 800	7 900	6 000	4 000	225
7	2	39 ≤ L < 49	<5	18 200	12 100	7 900	5 300	225
8	3	49 ≤ L < 61	<7	27 300	18 200	10 800	7 200	450
9	3	61 ≤ L < 76	<7	36 400	24 300	13 500	9 000	450
10	3	76 ≤ L < 90	<8	48 200	32 300	16 600	11 200	450

Further Strikes Are Likely

Right now, April 15 is the only scheduled RFFS strike. However, if no deal is struck between the Fire Fighters' Union and Air Services Australia, we are likely to see more.

The good news is that we all also receive **advance notice** of any that are planned. We'll continue to report those as they arise.

If you encounter disruptions during the upcoming strike, we'd love to hear from you. You can reach us on news@ops.group.

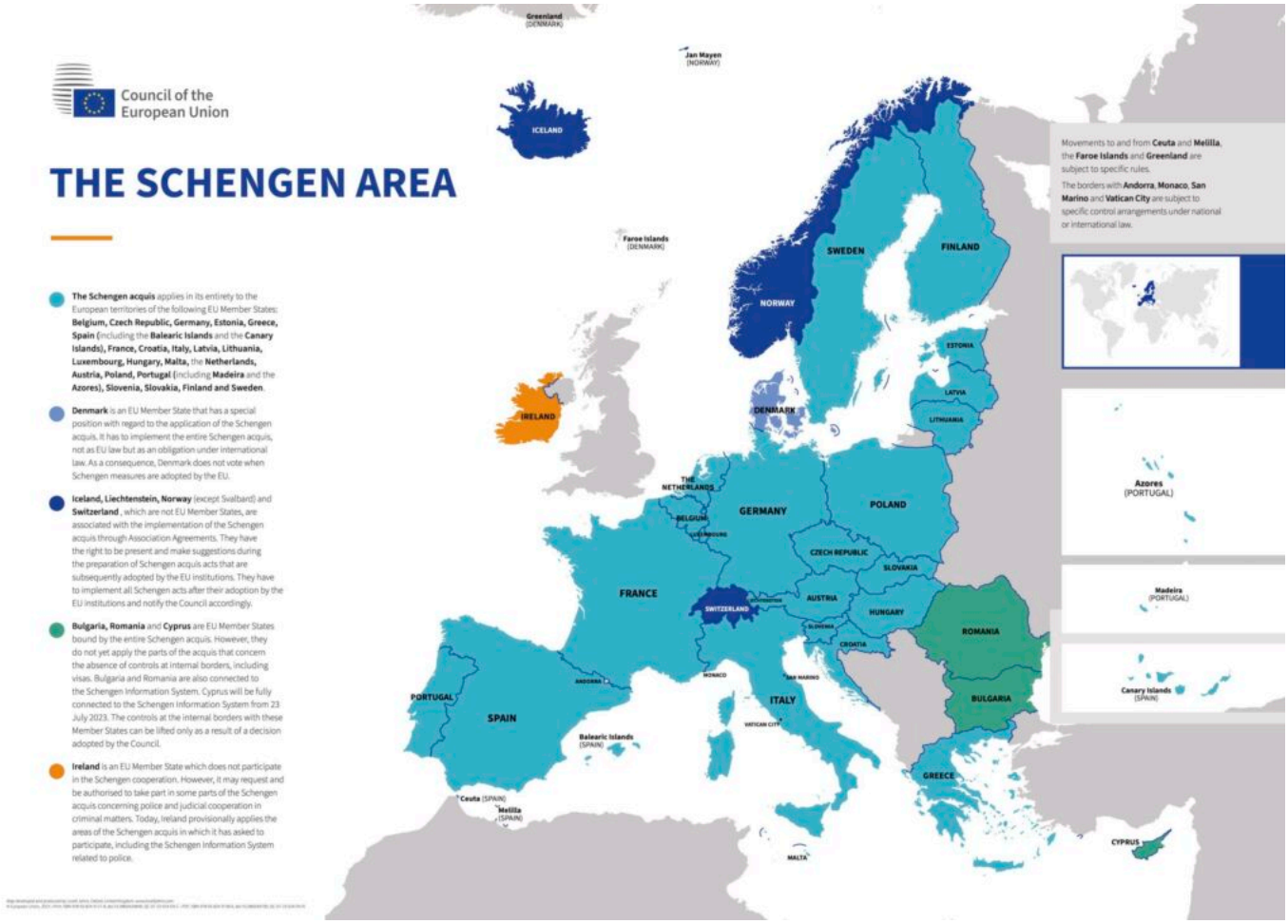
Schengen area expands to almost all EU countries

Mark Zee
17 April, 2024

Effective March 31st, **Romania** and **Bulgaria** are now part of the Schengen area. This means that passengers and crew arriving in these countries are able to move freely within the EU (by air and sea) without any further immigration or border checks. “Schengen Flights” landing in Romania or Bulgaria are not required to clear customs.

The first “Schengen flight” landed at 0020L on March 31 at LBSF/Sofia, from Naples.

The Schengen Area was established in 1985. Before Bulgaria and Romania’s admission, it was comprised of 23 of the 27 EU member countries, along with Switzerland, Norway, Iceland and Liechtenstein. The only remaining Non-Schengen countries in the EU are **Ireland** (because Ireland has a common travel area with the UK, and the UK doesn’t like the Schengen idea very much), and **Cyprus**.



Schengen countries: Austria, Belgium, Bulgaria, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and Switzerland.

Non-Schengen countries in Europe: Ireland, the UK, Albania, Belarus, Bosnia & Herzegovina, Cyprus, Kosovo, Moldova, Montenegro, North Macedonia, Serbia and Turkey.

Non-Schengen countries in the EU: Ireland, Cyprus.

New FAA Approach Warning for Aspen

Chris Shieff
17 April, 2024

Key Points

- **Be careful to select and fly the correct LOC approach at KASE/Aspen – there are two. The normal public use one is the 'LOC-DME-E.' The second is the 'SPECIAL LOC-DME RWY 15' which requires approval to fly.**
- **Some FMS systems have both in their databases which is causing confusion.**
- **There are some safety-critical differences between the two so make sure you shoot the right one.**

The FAA has put out a new Letter to Airmen with a warning for ops at Aspen.

There are two localiser approaches available which is causing potentially **safety-critical confusion.**

The primary (public use) approach is the **LOC-DME E.** The second is the *SPECIAL* LOC-DME RUNWAY 15 which requires prior approval via an LOA from FAA Flight Standards.

Many FMS systems have both in their database, and it's not always crystal clear which is the correct one to select:

The notice goes on to explain that there are some really important differences between the two which could lead to pilots accidentally **busting crossing heights or minimums** and losing safe separation from terrain.

As arguably one of the most challenging airports in the US, it's important to get it right.

What's the difference?

The first is the **minima**. If your ride is a CAT C for instance, the standard 'E' approach will get you down to 3122' AGL.

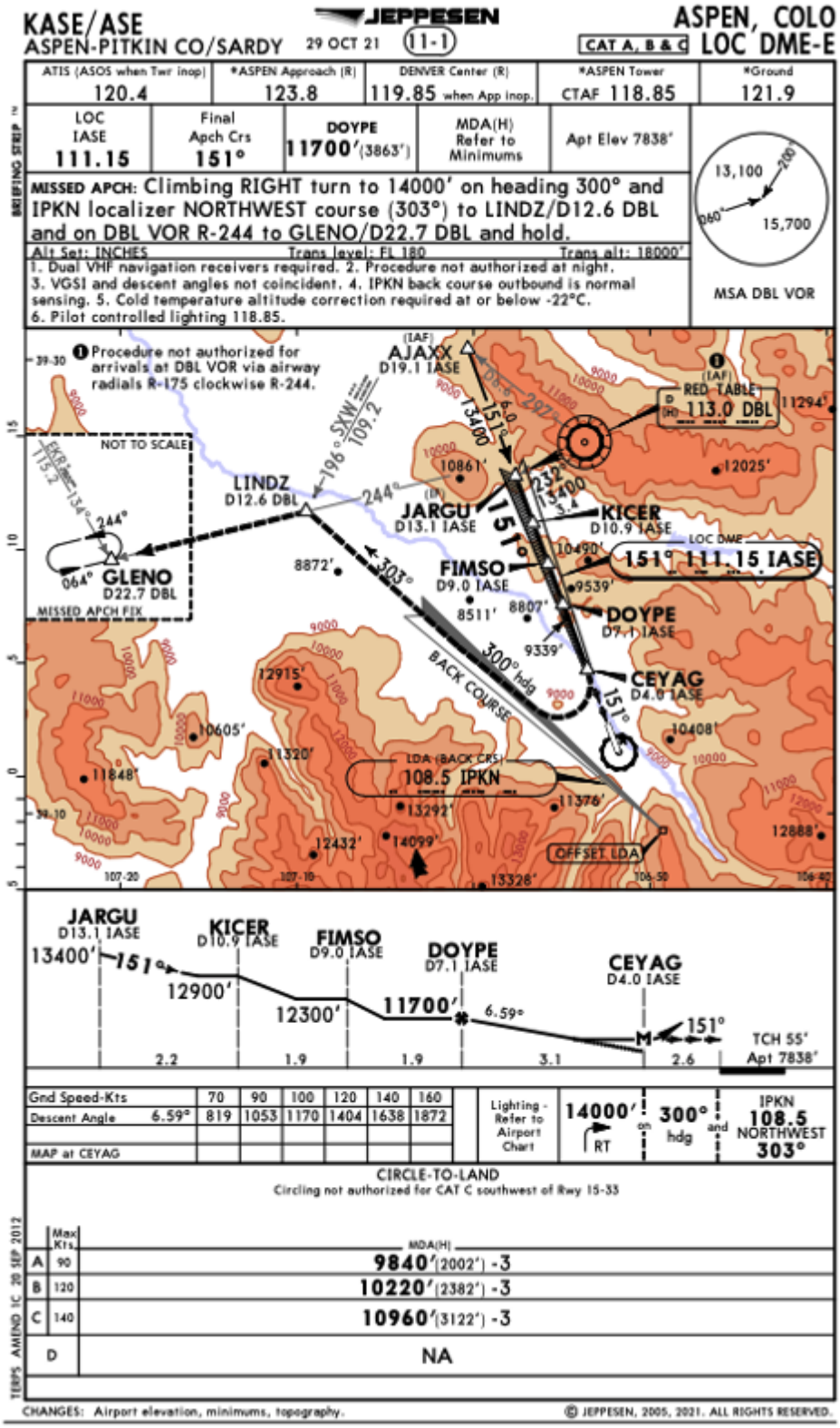
The 'SPECIAL' approach gets you lower – up to two grand closer to terra firma. **Extra simulator training** is required to make this possible. This includes the next big difference – changes to the way missed approaches must be flown.

Some operator-versions of this approach include an ’emergency extraction procedure’ for go-arounds beyond the missed approach point for instance.

…Not unlike an emergency extraction at the dentist, things are going to get white knuckle if you haven’t received the proper training first.

And finally, there is the time of day – the publicly available ‘E’ approach cannot be flown at night. In some cases, the special can with the right paperwork.

The standard ‘E’ approach will be advertised and **offered by default** when the localiser approach is in use. Here’s what it looks like:



The LOA

If you're seeking an **approval** to actually use the SPECIAL LOC approach, you'll need to obtain an **OpSpec C081** special authorisation like the one below. This will include Aspen specific training for all operating crew.

Appendix C. Sample OpSpec C081, Special Instrument and RNAV Visual Flight Procedures: 14 CFR Part 135

a. The certificate holder is authorized to conduct special IAP, departure procedure, Standard Terminal Arrival (STAR) and RNAV Visual Flight Procedure (RVFP) operations specified, by airport and procedure name as listed in Table 1.

Table 1 – Authorized Airports, Procedures and Airplane

Airport Identifier (ICAO)	Procedure Name, ORIG or AMDT NO.	Airport State	Airplane M/M/S	Limitations and Provisions

If you'd like to know more about this process, the NBAA has published this doc which is worth a read.

Have More Info?

We're always on the lookout for intel from pilots out there. If you're familiar with KASE and would like to add to this article, please get in touch with us on team@ops.group. We'd love to hear from you.

NAT Changes 2024: No More Oceanic Clearances

David Mumford
17 April, 2024

Key Points

- **ICAO have published a new NAT Doc 007, effective from March 2024.**

- **Big Change #1: There will be no more Oceanic Clearances on the NAT (now a mess).**
- **Big Change #2: NAT Comms Failure Procedures have been simplified.**
- **Big Change #3: Squawking 2000 ten minutes after OEP will be standard everywhere in the NAT.**

Once (or sometimes twice) every year, ICAO update their **NAT Doc 007 – the main guidance doc for ops over the North Atlantic.** All the specifics about how to operate your aircraft safely through the complex airspace of the region are here!

The new version for March 2024 has just been released!

Where's the new Doc?

You can find it on the ICAO page here.

Big Change #1: No More Oceanic Clearances

The idea is that with all the fancy tools ATC now have at their disposal (CPDLC, RSP and RCP compliance, and space-based ADS-B), we have reached a point where the Oceanic Clearance is no longer required.

It sounds drastic, but think of it this way: **the NAT will now just be the same as the rest of the world – you fly what is loaded in the FMS or as amended by ATC.**

ICAO have also published this Bulletin for flight crews on this specific issue of the removal of Oceanic Clearances. This Bulletin has been updated as of 22nd Jan 2024. **There are now different dates when Oceanic Clearances will cease to be issued in the following FIRs:**

- **Shanwick**: ~~April 9~~ ~~May~~ ~~Q4 2024~~ **December 4**
- **Gander**: ~~March~~ ~~May 3~~ **December 4**
- **Bodø**: ~~March~~ ~~May 6~~ ~~June 17~~ **December 4**
- **Santa Maria**: completed March 21
- **Iceland**: completed March 21

NATS (who manage Shanwick airspace) have published a video about this change, which shows exactly how it will work and what you will need to do.

Big Change #2: Simplified Comms Failure Procedures

As per Chapter 5 of the 007 Doc, from March 2024 here's what you do:

- **Comms failure before entering the NAT:** assuming you don't divert, you enter the NAT via the Oceanic Entry Point at the level and speed resulting from whatever radio comms failure (RCF) procedures you just had to do in adjacent airspace.
- **Comms failure after entering the NAT:** maintain the cleared route/level/speed until reaching the Oceanic Exit Point (ideally don't change route/level/speed unless you have to), then get back to your flight planned route "in the most direct manner possible" no later than the next significant point.

- **Comms failure if operating to an airport in the NAT:** follow the standard PANS-ATM procedures. *What are these?* – head to an airport aid/fix, hold until the ETA as per the flight plan, do a normal instrument approach, land!

Big Change #3: "Last Assigned Code" Procedures Standardized

A bonus one we spotted! We don't have to wait til April 2024 for this either – it has already happened. **Essentially, squawking 2000 ten minutes after OEP is now standard in the NAT.**

Since the dawn of time, everywhere on the NAT, this domestic code had to be retained for 30 minutes after entering NAT airspace. But back in July 2023, the UK changed it to 10 minutes for the entire EGGX/Shanwick FIR, and since then, all the other NAT FIRs have updated their rules to say the same – so this new 10-minute rule has now become the standard across the NAT Region. **One exception**: if you're in the Reykjavik CTA, don't do it (they still have you on radar).

Phew, we survived!

Another year, another NAT Doc! Well, let's hope so – they do sometimes release a sneaky Version 2 update. But for now, we can relax.

Did you spot any other big updates in this new NAT Doc? If you do spot anything significant that we missed, please let us know! You can email us at news@ops.group

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US: Total Solar Eclipse Incoming

Chris Shieff
17 April, 2024

Key Points

- **On the afternoon of April 8, a total solar eclipse will be visible across a large portion of Mexico, the US and Canada.**
- **If you're lucky enough to be flying, it may be a once-in-a-career type thing. The next one won't happen in the US again until 2044.**
- **There will be some impact on flight ops too. The FAA has published a list of airports on either side of the eclipse track, along with guidance on what flights in the area should expect on the day – check it here.**

What's so special about this one?

It is 'total' – in other words, the moon will pass directly between the sun and earth completely blocking the face of the sun. The sky will darken as though it were night (or very close to it). The sun's outer atmosphere will become visible as a halo.

This 'path of totality' as it were, will begin over the South Pacific before hitting Mexico's Pacific Coast at around 11:07 PDT.

From there it will enter the US over Texas, and travel across Oklahoma, Arkansas, Missouri, Illinois, Kentucky, Indiana, Ohio, Pennsylvania, New York, Vermont, New Hampshire and Maine.

Across the border it will then be visible in Canada over Southern Ontario, Quebec, New Brunswick, Prince Edward Island and Cape Breton.

The show will end east of Newfoundland at 17:16 NDT.

In each instance complete totality will last for **approximately 4 minutes**. However, depending on your direction of flight, this may be longer in the air.

Here are the exact timings NASA has published for each region:

Location	Partial Begins	Totality Begins	Maximum	Totality Ends	Partial Ends
Dallas, Texas	12:23 p.m. CDT	1:40 p.m. CDT	1:42 p.m. CDT	1:44 p.m. CDT	3:02 p.m. CDT
Idabel, Oklahoma	12:28 p.m. CDT	1:45 p.m. CDT	1:47 p.m. CDT	1:49 p.m. CDT	3:06 p.m. CDT
Little Rock, Arkansas	12:33 p.m. CDT	1:51 p.m. CDT	1:52 p.m. CDT	1:54 p.m. CDT	3:11 p.m. CDT
Poplar Bluff, Missouri	12:39 p.m. CDT	1:56 p.m. CDT	1:56 p.m. CDT	2:00 p.m. CDT	3:15 p.m. CDT
Paducah, Kentucky	12:42 p.m. CDT	2:00 p.m. CDT	2:01 p.m. CDT	2:02 p.m. CDT	3:18 p.m. CDT
Carbondale, Illinois	12:42 p.m. CDT	1:59 p.m. CDT	2:01 p.m. CDT	2:03 p.m. CDT	3:18 p.m. CDT
Evansville, Indiana	12:45 p.m. CDT	2:02 p.m. CDT	2:04 p.m. CDT	2:05 p.m. CDT	3:20 p.m. CDT
Cleveland, Ohio	1:59 p.m. EDT	3:13 p.m. EDT	3:15 p.m. EDT	3:17 p.m. EDT	4:29 p.m. EDT
Erie, Pennsylvania	2:02 p.m. EDT	3:16 p.m. EDT	3:18 p.m. EDT	3:20 p.m. EDT	4:30 p.m. EDT
Buffalo, New York	2:04 p.m. EDT	3:18 p.m. EDT	3:20 p.m. EDT	3:22 p.m. EDT	4:32 p.m. EDT
Burlington, Vermont	2:14 p.m. EDT	3:26 p.m. EDT	3:27 p.m. EDT	3:29 p.m. EDT	4:37 p.m. EDT
Lancaster, New Hampshire	2:16 p.m. EDT	3:27 p.m. EDT	3:29 p.m. EDT	3:30 p.m. EDT	4:38 p.m. EDT
Caribou, Maine	2:22 p.m. EDT	3:32 p.m. EDT	3:33 p.m. EDT	3:34 p.m. EDT	4:40 p.m. EDT

Don’t stare at the big shiny light!

It may go without saying, but **be careful of your eyes**. If the sun is anything but completely obscured, peering at it through a camera, telescope or your eyes will fry your corneas without appropriate protection. This will cause problems when it comes time to land again.

Your trusty Ray Bans won’t do it either – NASA says that sunglasses aren’t enough. You’ll either need to source yourself some funky eclipse glasses (which are thousands of times darker), a handheld solar viewer or use an ‘indirect’ viewing method.

Sidenote – don’t stare at it through a hole in a piece of cardboard either. No idea why, but this is what springs to mind to many. You’ll simply blind yourself through a very small hole. NASA have said no-bueno to that idea too.

Busy GA Traffic

Aside from a great view, an **influx of traffic to GA-friendly airports** is expected along the eclipse’s path. It’s a relatively narrow band of the most premium viewing (130nm wide) and so people will be travelling far and wide to get a good view.

As such, expect **ATC-related delays and parking restrictions** at larger airports along its path. It’d be worth checking ahead with your handling agent to ensure there will be no impact to your operation.

The FAA has published a list of airports on either side of the eclipse track – check it here.

If you’re headed into un-towered fields in something fast and fancy be aware you are likely to encounter more traffic than usual. Some of it will be transient and potentially not as proficient at being seen and heard as commercial operators are.

Gram Famous

Chances are you’ll want to take a picture of the eclipse with your smart phone. Here is a handy article with some tips to how to set up your camera and get the best results.

Better yet, share them with us on team@ops.group. We'd love to see them and show the rest of the group.

More Info

NASA has everything else you need to know about the eclipse on their website here.

Oceanic Errors on the North Atlantic

David Mumford
17 April, 2024

ICAO have updated their “Oceanic Errors” NAT Ops Bulletin – the doc which has all the advice for operators on **how to avoid the common mistakes when flying the North Atlantic.**

These include: Gross Nav Errors, Large Height Deviations, and Longitudinal Separation busts. There’s also some advice on Flight Planning, SLOP, and some datalink things to watch out for.

You can download the NAT Ops Bulletin here:

Looks like there are no big changes in terms of content for this updated version when compared with the old one from last year – they’ve improved the language to be more friendly to human ears, and corrected some of the references. But if you operate over the North Atlantic it’s still worth a read, as there’s lots of **top tips on how to avoid the most common gotchas!**

Haiti Crisis: Airport Attacked, Aircraft Shot

Chris Shieff
17 April, 2024

Key Points

- **Worsening gang violence in Haiti. A state of emergency is now in place, and the US Embassy has issued a new warning for its citizens to leave immediately.**
- **Aviation has also come under direct threat, with reports of several armed attacks at MTPP/Port-au-Prince in recent days. All flights have been cancelled until further notice and the airport is now effectively closed.**
- **There are no official airspace warning for Haiti. However, conditions on the ground have been likened to an active war zone. For flights, normal services are unlikely to be available, and crew security cannot be guaranteed.**

Airport Attacks

On March 4, several dozen heavily armed gang members attempted to **take control of MTPP/Port-au-Prince airport.**

They breached the airport perimeter and exchanged machine gun fire with police but ultimately failed. Airport staff were forced into hiding. Soldiers have since been stationed there for protection.

Since then, **all flights have been cancelled.**

This followed a separate attack last week where an A321 was damaged by a bullet after landing. Sustained gun fire was reported along the access road to the airport during this time.

Don’t look to the MTPP Notams for help – you won’t find anything. However, the media has reported several closures of the airport in recent days in light of these events.

Gangs are fighting fiercely for resources and revenue. This includes control over key transport routes hindering freedom of movement and further empowering the gangs – which is **why the airport is being actively targeted.** Gangs may also have the additional political motivation to interfere with ops at the airport in an attempt to stop the existing president from being able to re-enter the country.

State of Emergency

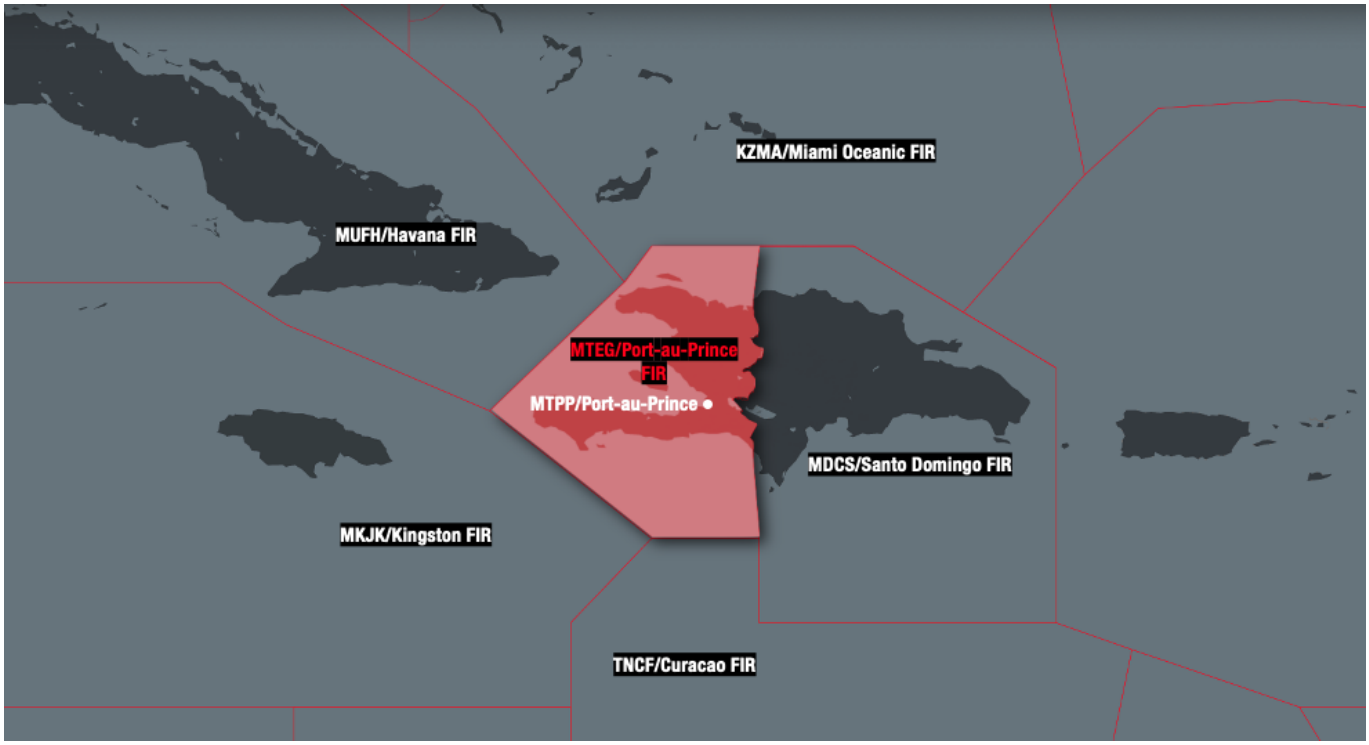
The Haitian Government declared a state of emergency on March 3, which will apply until further notice. On the same day, the US Embassy issued its own warning **asking citizens to leave.**

The Embassy itself is periodically closing, and its staff are highly unlikely to be able to help anyone who finds themselves in trouble.

Impact on Overflights

The FAA does not currently have any active airspace warnings in place for Haiti.

The country operates its own small chunk of airspace – the **MTEG/Port-au-Prince FIR**. Adjacent sectors include Cuban, Dominican Republic and US airspace. Its Notams are also conspicuously quiet.



No restrictions on overflights have been published, with flight tracking still showing sporadic airline traffic overflying– although the bulk appear to be transiting further east over the Dominican Republic.

The Dominican Republic has banned all passenger and cargo flights to and from airports in Haiti (MDCS Notam A0111/24 refers), but this does not restrict overflights.

The gangs however have shown an active intent to target **government infrastructure** – its not clear yet what effect this may have on controllers' ability to perform their duties at short notice.

At the very least, a solid contingency should be in place right now for a **short notice reversion to Class G.**

Special care also needs to be taken for the possibility of **unplanned landings or diversions** – especially to Port-au-Prince. Normal services are unlikely to be available, and **crew security cannot be guaranteed.**

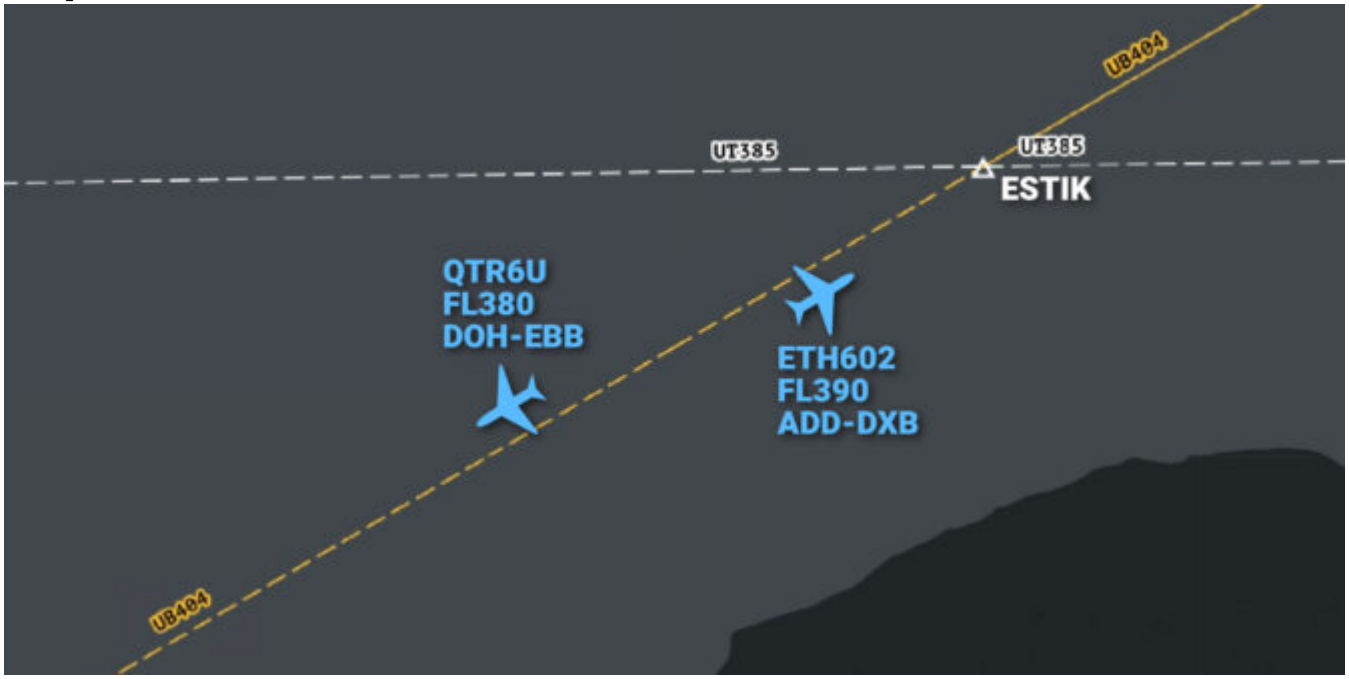
As the situation evolves, keep an eye out for updated information from aviation authorities such as the FAA who may publish background information or additional flight restrictions.

We will report any we see on our conflict zone and risk database, safeairspace.net.

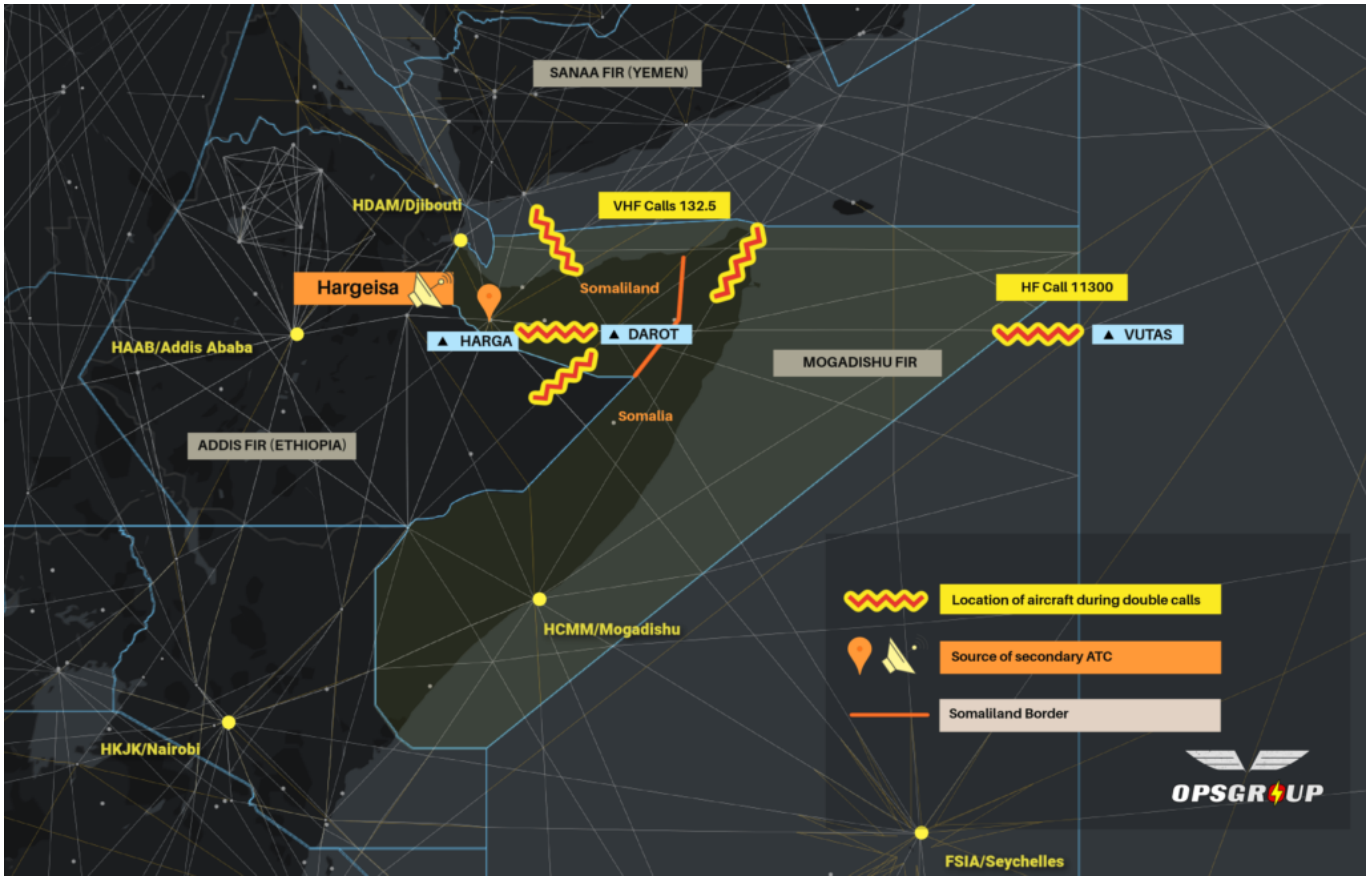
If you have any other information you'd like to share with us, don't hesitate to get in touch via news@ops.group.

TCAS Saves the Day in Somalia

David Mumford
17 April, 2024

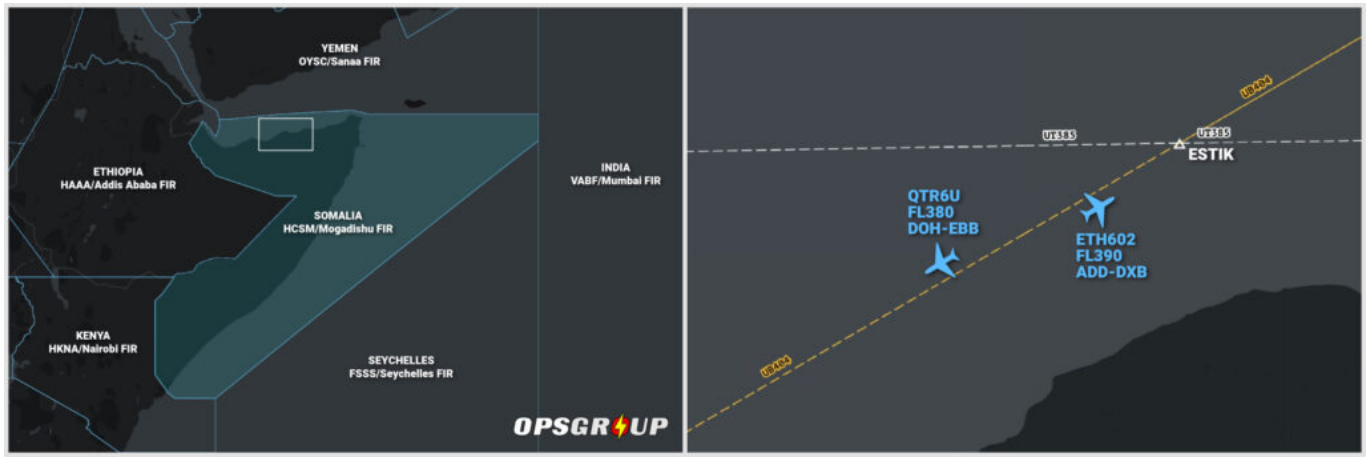


Last week we told you about a new risk emerging over Somalia, where **several enroute aircraft reported being contacted by unauthorized ATC units.** These "fake" controllers have been issuing climb/descent instructions that conflict with the official ones issued by Mogadishu Control.



This week, the very same thing happened to crews of a Qatar Airways 787 and an Ethiopian Airlines A350 **headed towards each other off Somalia's northern coastline.**

The 787 was instructed to climb from FL380 to FL400 whilst the A350 was cruising at FL390 in the opposite direction on the same UB404 airway – near position ESTIK. **A TCAS alert was triggered, and the 787 descended back to FL380 to resolve the conflict.**



From some reports it looks like the two aircraft were **separated by as little as 2.5 nm** when the incident happened, though the situation was helped by the fact that both aircraft were laterally offset from the airway (yay for SLOP!).

Who should I be talking to?

The two competing ATC centres here are Hargeisa (Somaliland) and Mogadishu (Somalia).

For aircraft transiting the HCSM/Mogadishu FIR, it's Mogadishu ATC that you should be talking to – not Hargeisa.

Mogadishu Control holds authority over the entire Mogadishu FIR, responsible for coordinating and providing ATS services in the Upper FIR. **Hargeisa in Somaliland issues secondary transmissions, posing a potential threat to enroute traffic.**

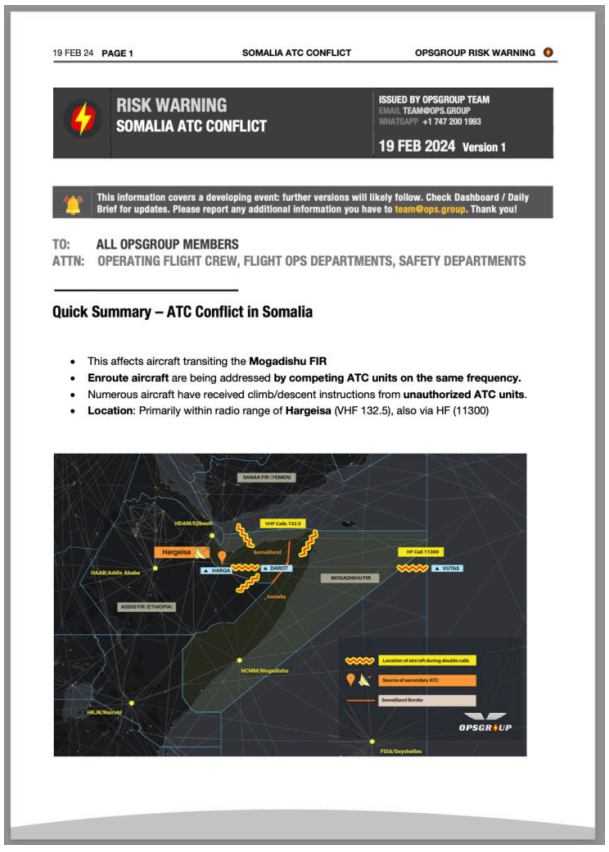
Notably, these transmissions from Hargeisa seem to mimic Mogadishu rather than clearly identifying as "Hargeisa Control" or "Somaliland Control." Reports suggest that **control instructions from Hargeisa aim to create confusion rather than ensure traffic de-confliction**, possibly as a strategy to draw political attention to their recent dispute with Somalia.

Advice to operators

Check our previous post for a **full Risk Warning**, including Crew Reports, Maps, Analysis, and Guidance. *And if you can't access, just email the team and we'll send you a copy.*

The main advice is this:

1. If possible, avoid the Mogadishu FIR.
2. If entering the airspace, expect secondary ATC transmissions from Hargeisa.
3. Limit any contact with Mogadishu to CPDLC only. Only controllers in Mogadishu have access to CPDLC.
4. Do not accept any level changes without ensuring they are genuinely from Mogadishu Control.
5. Avoid requesting any level changes while within the Mogadishu FIR.
6. Listen out on 126.9 (IFBP) and follow the IFBP procedure.
7. Note that related NOTAMs issued by Somalia may not present the full picture, or be updated regularly.


19 FEB 24 PAGE 1 SOMALIA ATC CONFLICT OPSGROUP RISK WARNING

RISK WARNING
SOMALIA ATC CONFLICT

ISSUED BY OPSGROUP TEAM
EMAIL TEAM@OPS.GROUP
WHATSAPP +1 747 200 1993
19 FEB 2024 Version 1

This information covers a developing event: further versions will likely follow. Check Dashboard / Daily Brief for updates. Please report any additional information you have to team@ops.group. Thank you!

TO: ALL OPSGROUP MEMBERS
ATTN: OPERATING FLIGHT CREW, FLIGHT OPS DEPARTMENTS, SAFETY DEPARTMENTS

Quick Summary – ATC Conflict in Somalia

- This affects aircraft transiting the **Mogadishu FIR**
- **Enroute aircraft** are being addressed **by competing ATC units on the same frequency.**
- Numerous aircraft have received climb/descent instructions from **unauthorized ATC units.**
- **Location**: Primarily within radio range of **Hargeisa** (VHF 132.5), also via HF (11300)

Download the Risk Warning (PDF, 9 pages, 2Mb)

Delays and Diversions in Dubai

Chris Shieff
17 April, 2024

An OPSGROUP member reported that on Feb 21, several long-haul carriers were **forced to divert** due to extended airborne delays.

The problem stemmed from the following unassuming needle-in-a-haystack Notam…

A0625/24 NOTAMN
Q)OMAE/QMRXX/IV/NBO/A/000/999/2515N05522E005
A)OMDB
B)2402200800 C)2404060800
E)RWY 30L ARR ACFT MAY EXP HLDG DLA DUE TO
INCREASED SPACING ON FINAL APCH.
REF WIP AS PER AIP SUP 35/2023 AREA C08.

It was later re-issued (after-the-fact), somewhat sheepishly with an actual holding advisory …

A0798/24 NOTAMR
Q) OMAE/QMRXX/IV/NBO/A/000/999/2515N05522E005
A) OMDB B) 2402230854 C) 2403090800 E) RWY 30L ARR ACFT **MAY EXP UPTO 40 MIN HLDG DLA DRG PEAKS** 0001-0300 UTC, 0700-0930 UTC, 1330-2130 UTC DUE INCREASED SPACING ON FINAL APCH. CREW ARE EXP TO KEEP THEIR SPEED UP IF INSTRUCTED TO VACATE AT TWY K6 TO REDUCE RWY OCCUPANCY. REF WIP AS PER AIP SUP 35/2023 AREA C08.

The good news is that you can easily access the referenced AIP SUP online – provided you provide scans of your passport, your contact details, favourite colour, hobbies and the name of your first-born.

OR

You can just read the following summary of what's been going on.

The Trouble SUP

You can read it in full here (but it's heavy).

Basically, what you need to know is that there are **ongoing taxiway works** happening at the airport.

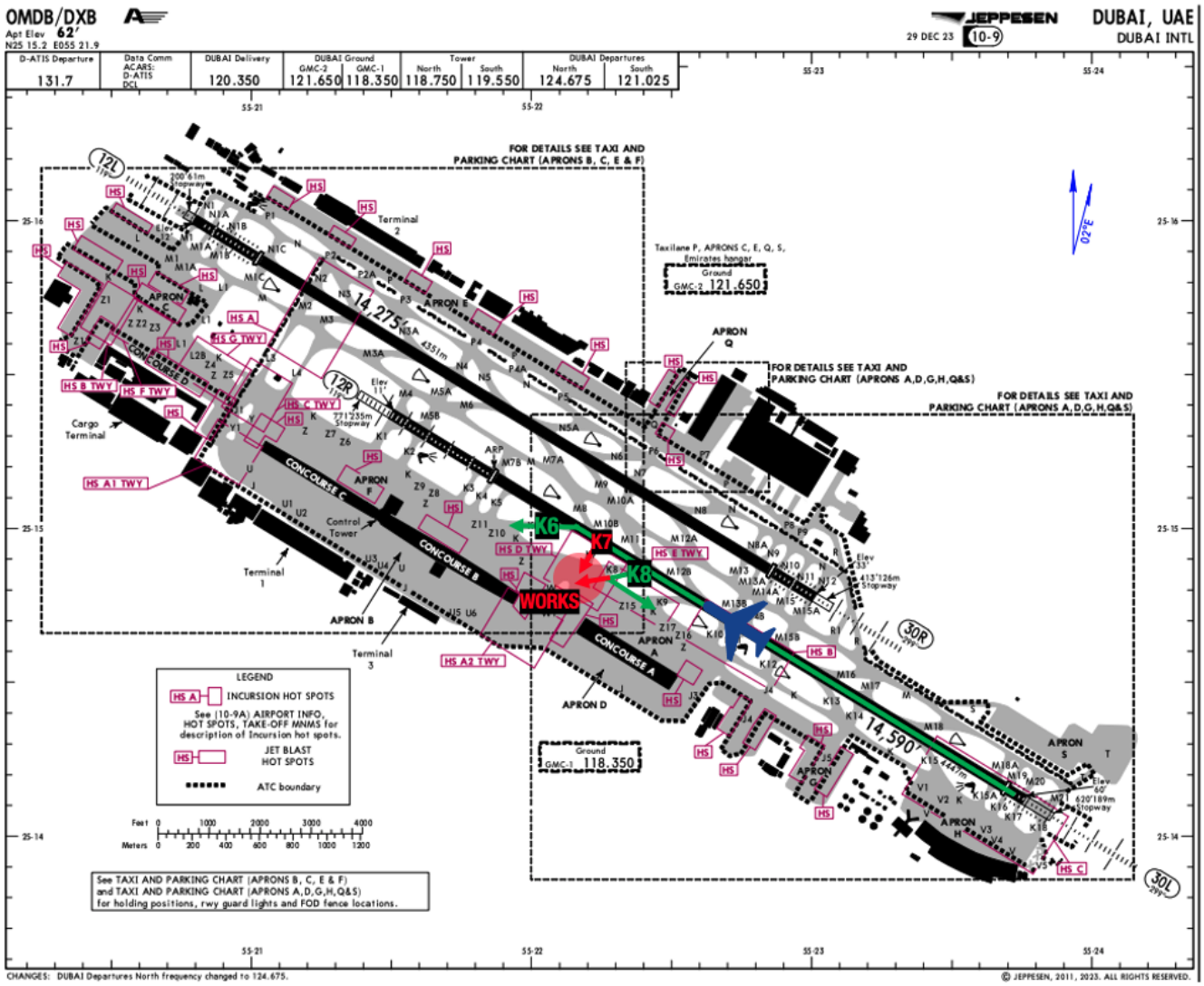
These are divided into areas, and the one causing issues is 'C08'.

For Runway 30L, this is causing a bottle neck for aircraft exiting on the rapids bound for terminals 2 and 3.

The preferred exit (K8) is partially blocked by the works, along with the next non-rapid exit (K7) which is completely closed.

The next option is K6, which is further up the runway. The extra time needed to allow aircraft to vacate means **increased spacing for arrivals.** Word on the street is that frequent A380 ops are also compounding the problem.

Here's what that looks like on a chart.



During peak times, arrivals are stacking up.

Those times are daily between:

- **00:00 – 03:00z (04:00 – 07:00 LT)**
- **07:00 – 09:30z (11:00 – 13:30 LT)**
- **13:30 – 21:30z (17:30 – 01:30 LT)**

If Runway 30L is in use, and you are arriving during one of these periods – carry at least an **extra 40 minutes** of holding fuel.

How long will this last?

The current Notam says until March 9, but may get extended. The SUP doesn't provide an end date, and strangely the original Notam applied until April 6. In other words, your guess is as good as ours…

But wait, there's more.

There are some other Notams hidden in the pile that include **closures of the other runway** (12L/30R) that infringe these times. That's an average of seventy-five arrivals and departures per hour using the one problem runway – **40 minutes may still not be enough.**

Please report back.

If you experience delays in Dubai related to works (or otherwise) we'd love to hear from you so we can share that info with the group. You can reach us on news@ops.group around the clock.

US FAA: Who wants to land on the runway?

David Mumford
17 April, 2024

1. **Flying to an airport in the US?**
2. **Want to land on the actual runway, rather than some taxiway or dirt road which looks a bit like the runway?**
3. **Not afraid of some basic pics showing you how NOT to mess it up?**

Well then today's your lucky day, friend!

Arrival Alert Notices

The US FAA has published things called Arrival Alert Notices at several airports with a history of "misalignment risk" – i.e. where aircraft line up to or land on the **wrong runway, taxiway, or even sometimes the wrong airport**.

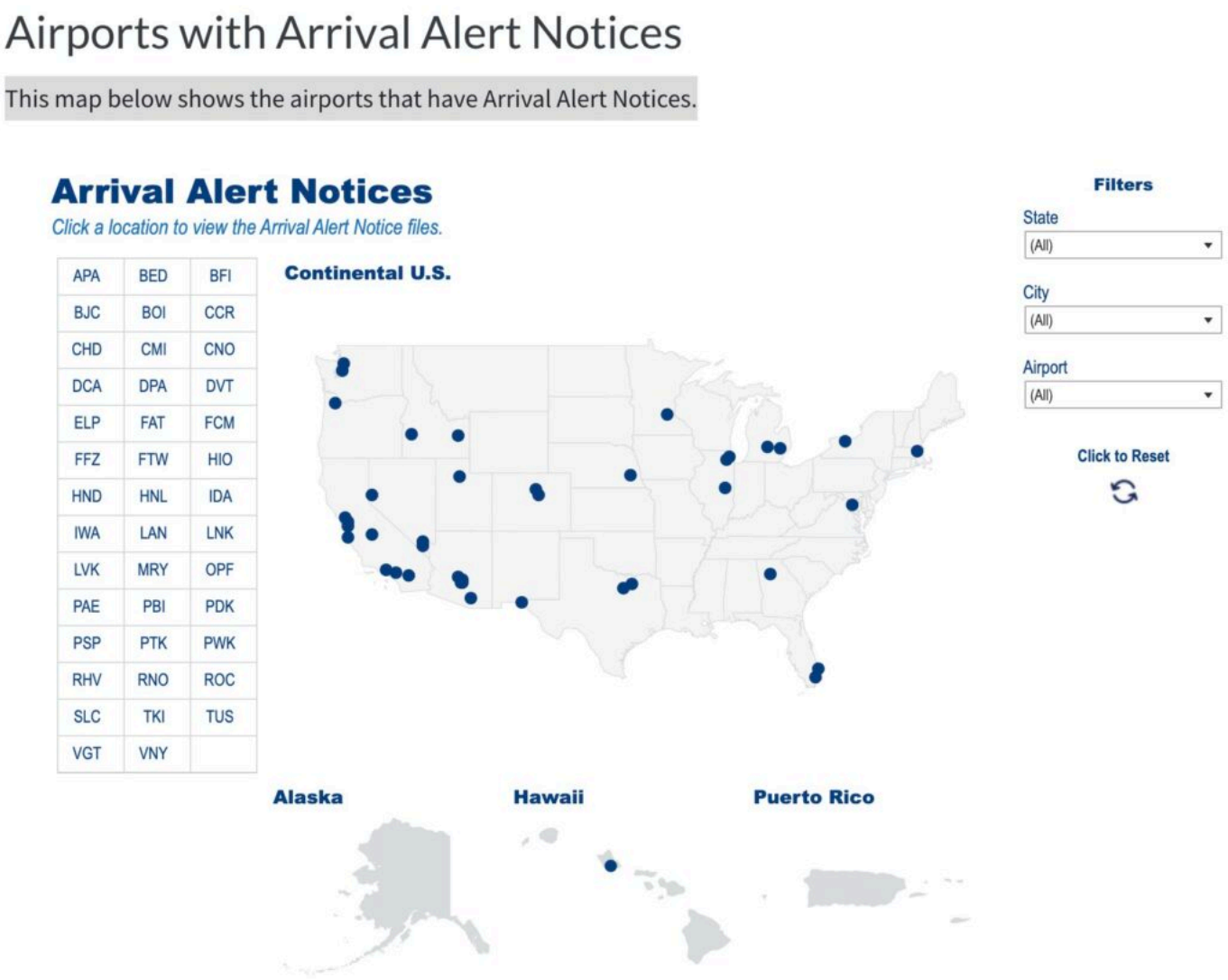
The best thing about these Notices is that they are dead simple. No superfluous symbology, no weird language, just a **nice big picture of the runway with a clear instruction on what to do.**

The FAA published the first batch of these in May 2022, and then a whole bunch more in Jan 2024. So they now have them for **41 airports in total,** all of which have a history of misalignment risk or "wrong surface events" – i.e. times where folks landed on something other than the *actual runway.*

They say that many of these wrong surface events occur “during the daytime and in visual meteorological conditions, and the majority of the time, the pilot has read back the correct landing clearance.” In other words, folks have got it wrong even at the best of times, so it’s probably worth a quick glance at these docs.

Which Airports?

This map on the FAA AAN site shows the airports that have Arrival Alert Notices.



What else is the FAA doing to improve safety?

A whole bunch of things. You can read all about it on their Runway Safety site, but here’s a summary. *And as a cheap marketing trick by way of parting, I will say that the last one on this list is probably the best – so make sure you read to the end!*

1. **Runway Status Lights (RWSL):** In operation at 20 airports, signals potential hazards through illuminated red lights on runways and taxiway/runway crossings. More info.
2. **Airport Surface Detection Equipment, Model X (ASDE-X):** In operation at 35 airports, integrates various data sources to provide ATC with better aircraft positions, and pings up alerts for potential traffic conflicts. More info.
3. **Airport Surface Surveillance Capability (ASSC):** Similar to ASDE-X, ASSC operates at 9 airports, works in all kinds of weather, and lets ATC see aircraft on approach and departure

within a few miles of the airport. More info.

4. **ASDE-X and ASSC Taxiway Arrival Prediction (ATAP):** ATAP is an enhancement to the previous two, and alerts ATC when an aircraft is aligned with a taxiway instead of the runway. In operation at these airports.
5. **Engineered Material Arresting System (EMAS):** We like these things so much, we wrote an article on them. Installed at 70 airports, EMAS are those crushable bits of tarmac at the ends of runways which you can plough into to stop overruns. Very cool. More info.
6. **Electronic Flight Bag (EFB) with Moving Map Displays:** Everyone loves their EFBs and moving maps. So do the FAA – they encourage pilots to use them!
7. **Runway Safety Areas (RSA):** Because many runways were built before the 1000-foot RSA standard was adopted, the FAA implemented the Runway Safety Area Program which made improvements to over 1000 runways at 500 airports.
8. **Runway Incursion Mitigation (RIM):** A national initiative identifying and mitigating specific risks at 80 airports that might lead to a runway incursion. Things like: unclear taxiway markings, airport signage, runway or taxiway layout.
9. **Hot Spot Standardization:** The FAA now has standardized hot spot symbology on their airport charts. We wrote about this here.
10. **Arrival Alert Notices:** i.e. this article!
11. **Automated Closure Notice Diagrams:** They now have a site where you can get a big airport chart showing all the runway or taxiway closures on it. It looks like AI might be involved behind the scenes on this one, so it's a bit clunky for some airports, but it's still pretty cool. Check it out here.
12. **"From the Flight Deck":** This might just be the best of the bunch! This FAA website basically has videos showing how to land at specific airports (real footage), plus a bunch of other useful info: hotspots, things local ATC want pilots to know, airport comms, airspace details and other preflight planning resources. Take a look here!

The North Atlantic Datalink Mandate – 2024 update

David Mumford
17 April, 2024

A period of temporary relief of the North Atlantic Datalink Mandate (NAT DLM) rules ended in Feb 2021. So since then, **aircraft need to be CPDLC and ADS-C equipped to operate between FL290-410 throughout the NAT region.**

Exceptions – areas where you DON'T need datalink

– Everything north of 80°North.

– New York Oceanic East FIR.

– Tango Routes T9 and T290. *The other Tango routes (T213, T13, T16) all require datalink.*

– GOTA airspace. We discovered this in Aug 2022, after some lengthy discussions with the authorities.

– ATS Surveillance airspace, where surveillance service is provided by means of radar and/or ADS-B, coupled with VHF. This includes the Azores, Bodo, and Iceland-Greenland corridor.

Tell me more about this "ATS Surveillance airspace"

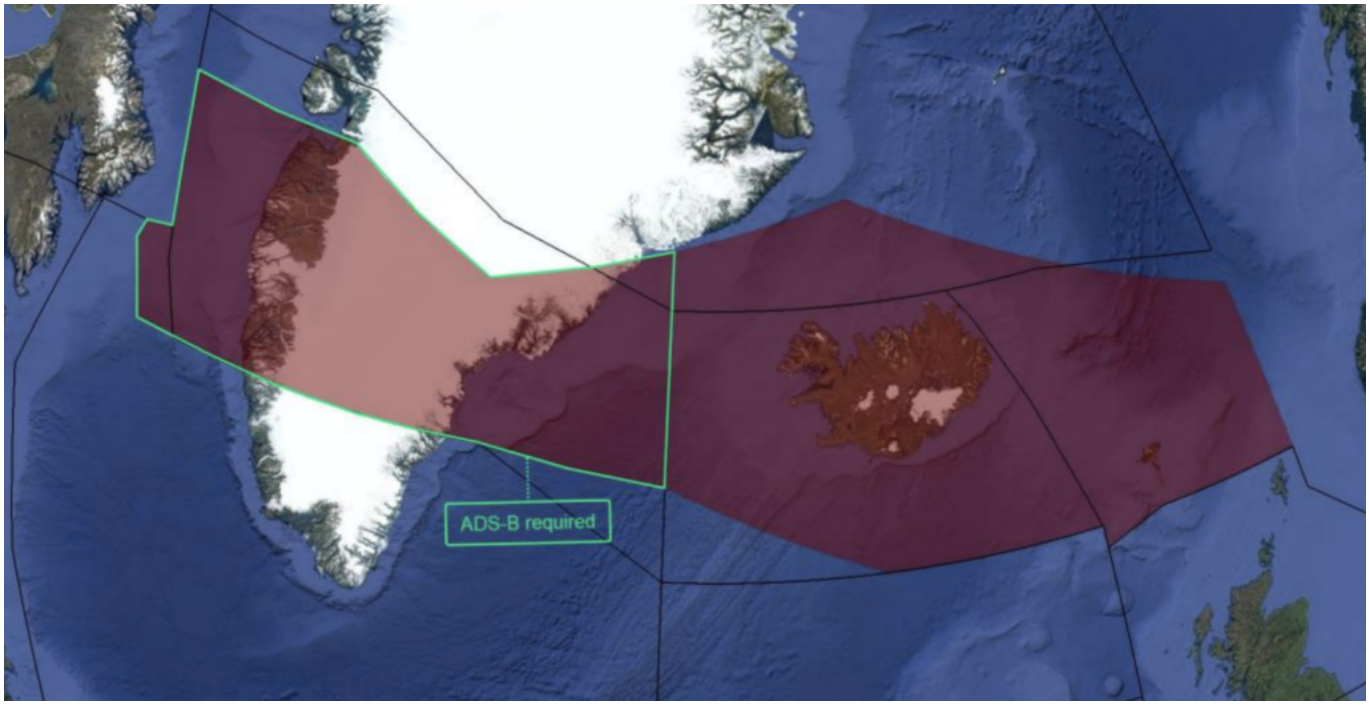
This is a tricksy one.

NAT Doc 007 sets out the exempted ATS Surveillance airspace over **Greenland and Iceland** where you can still fly if you don't have datalink (though if you don't have it, you must have ADS-B!)

This area is bounded by the following:

Northern boundary: 65N000W – 67N010W – 69N020W – 68N030W – 67N040W – 69N050W – 69N060W – BOPUT.
Southern boundary: GUNPA (61N000W) – 61N007W – 6040N010W – RATSU (61N010W) – 61N020W – 63N030W – 6330N040W – 6330N050W – EMBOK.

Here's how that looks:



The southerly Blue Spruce routes

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 CPDLC and ADS-C to fly on the southerly Blue Spruce routes between FL290-410.**

The northerly Blue Spruce routes

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.**

Aircraft without datalink can request to climb/descend through datalink mandated airspace, but will only be considered on a "tactical basis" by ATC (i.e. you have to ask them on the day, and they'll let you know, depending on how busy it is).

Flights that file STS/FFR, HOSP, HUM, MEDEVAC, SAR, or STATE in Field 18 of the FPL, are **permitted to flight plan and fly** through datalink mandated airspace, but may not get their requested flight levels.

For more details about the datalink mandate, check out the **NAT Doc 007** in full here.

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. But watch out here – "full datalink" means you have Inmarsat or Iridium. HF datalink alone (ACARS) does not meet the satcom part of the NAT DLM requirement. So if you want to fly in NAT DLM airspace (FL290-410 in the NAT region) "J2" in field 10a of your FPL isn't enough – you need "J5" for Inmarsat or "J7" for Iridium.
- **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).

NAT FAQ: No Datalink, Where can we go?

If you don't have datalink, this is how to make a crossing.

Libya Airspace Risk: An Idiot's Guide

David Mumford
17 April, 2024

Key Points

- EASA has amended its Conflict Zone Information Bulletin (CZIB) for Libya. **They no longer recommend against flights to "airports located on the coast"** – as long as you *approach from the sea, talk to ATC, and do a risk assessment.*
- This new advice is curious, because it's **not clear there has actually been any reduction in airspace risk here.** None of the Libya airspace warnings issued by other countries (US, Canada, Germany, France, UK, etc), have changed recently. Everyone says the same thing – there remains a high risk to civil aircraft in Libyan airspace (HLLL/Tripoli FIR), and it should be avoided.
- Read on for a 7-Step Idiot's Guide to Libya – a look at airspace risk, with some maps, pictures, analysis, and advice for operators.

An Idiot's Guide to Libya

I'm Dave, and I'm an idiot. It's been 12 days since I last did something stupid.

I know almost nothing about Libya.

Back in the day, I worked for a cargo airline that did flights there. We picked up some cheap fuel in Tripoli before jetting off down to Entebbe to pick up fresh fish to take back to Europe.

God knows why. **Fly to Uganda to get some fish to take back to the UK?** A country literally surrounded by sea needs to send a plane to Africa to get some fish? Makes no sense, does it. But it never occurred to me – **because I'm an idiot.**

I bashed out a few flight plans – Ostende to Tripoli to Entebbe and back again – and hoped for the best. **And most times, things went just fine.**

We stopped operating in 2010. No more Libya, no more Uganda, no more fish.

Good thing too, because four years later, Libya descended into chaos with the outbreak of a **civil war that saw HLLT/Tripoli airport closed after clashes between rival militias destroyed most of the airport's facilities.** The airport remains closed to this day; most flights operate out of the city's other airport – HLLM/Mitiga.

All the standard **"Do Not Travel"** warnings followed soon after, and people stopped flying to Libya.

So here we are, ten years later, and **EASA are now saying it's probably OK to start flying to airports on Libya's coastline** again – as long as you approach from the sea, talk to ATC, and do a risk assessment…

Hmm, sounds weird, doesn't it? Why on earth would we want to do that? Well, let's have a look…

Step 1: Find Out Where It Is

Remember, this is an "Idiot's Guide" where I know almost nothing about Libya. So this is where we start.

Step 1 complete!

Step 2: Find Out How Scary It Is

Yeah but that's travel advice for passengers. **We're pilots, so we want to know about airspace and missiles and stuff…**

Oh dear. None of that looks great either, does it?

Step 3: Actually Read The Warnings In The GIF

Just like the classic 80's tv advert said: **GIFs are for Christmas, Airspace Warnings are for life.**

Or was it dogs? GIFs are for dogs, not just for Christmas? Christmas is for GIFs, not just for dogs?

Something like that. What I mean is – GIFs are hardly a solid basis for a risk decision of this magnitude. It's worth taking some time to check out what the **official airspace warnings** actually say…

Safeairspace.net is our **Conflict Zone & Risk Database.** It will tell you what you need to know about airspace warnings.

The short story for Libya is this: Several countries have airspace warnings for Libya, and all say pretty much the same thing – operators should avoid Libya's HLLL/Tripoli FIR entirely, due to the potential risk from anti-aviation weaponry and military operations. Libya remains an active conflict zone with armed clashes between various rival militia groups across the country, and there is a high risk to civil aircraft.

Starting to get the feeling like we've been here before? That's because we have. We asked all these exact same questions back in 2022, and again in 2023, and decided that **no, Libya probably wasn't safe to fly to.**

But anyway, that was then and this is now. On with the guide…

Step 4: Check The News

August 2023: Major evacuation of aircraft from Tripoli due to violent clashes and gunfire at Mitiga airport. More info.

Aug 2022: Militia air defense forces claimed to have shot down a US drone operating in the vicinity of Benghazi during a period of increased tensions and threats of renewed violence between competing militias vying for control of Tripoli.

June 2022: Failed attempt by militia to enter Tripoli to seize control of government offices, resulting in armed clashes and suspension of flights at HLLM/Mitiga airport.

Jan 2020: Multiple airstrikes targeting HLLM/Mitiga airport. Videos on social media showing planes landing at the airport as shells are falling in the background.

Nov 2019: Militia advancing on the capital, Tripoli, declared a no-fly-zone around the city, threatening to shoot-down civil aircraft attempting to fly to HLLM/Mitiga airport.

And that's just the big-ticket aviation related stuff. For a full history of the endless horrors suffered by the poor people of Libya stretching back to 2011, check here.

Step 5: Ask Someone Who's Gone There

If in doubt, **just look at what other people are doing.**

Here's a report we recently received from an operator who went to Libya:

Step 6: Ask Someone Who Has To Deal With It ALL THE TIME

The ultimate shortcut to solving complex stuff you don't know much about? **Ask someone who knows a whole bunch about it.**

Here's a report from ATC in a neighbouring ACC to Libya:

Step 7: Conclusion

The conclusion to this Idiot's Guide to Libya? **NO. Do Not Fly. Avoid.**

If you need reminding, you can print out this helpful Opsicle, and take it with you in your flight bag.

⬆ You can click the image above to download the PDF.

Postscript: The Curious Case of the EASA CZIB

We mentioned this at the start. And in the middle. Now again here at the end.

In their amended CZIB, EASA are now saying it's probably OK to start flying to airports on Libya's coastline again – as long as you approach from the sea, talk to ATC, and do a risk assessment.

If you're a European airline keen to resume flights to Libya, **you might like this piece of news.** Everyone's risk appetite is different, after all.

Some history here: In July 2023, Italy cancelled its 10-year ban on flights to/from Libya, the idea being to resume airline flights between the two countries at some point. So aircraft are technically no longer banned from Italian airports and airspace if they want to fly from Libya (apart from Libyan operators, who are still banned from EU airspace). You still need to get special permission from the Malta CAA if you want to do this, as per the LMMM Notams.

Why is the amended EASA CZIB "curious"? Because there's no evidence that there has actually been any reduction in airspace risk here. None of the state airspace warnings have changed, and EASA have not provided any of the reasoning behind the decision to ease their warning.

So for now, our advice remains the same: Libyan airspace (the HLLL/Tripoli FIR) should be avoided

entirely.

See you again next year for another look at why you might want to avoid Libya!

Free Route Airspace in Africa

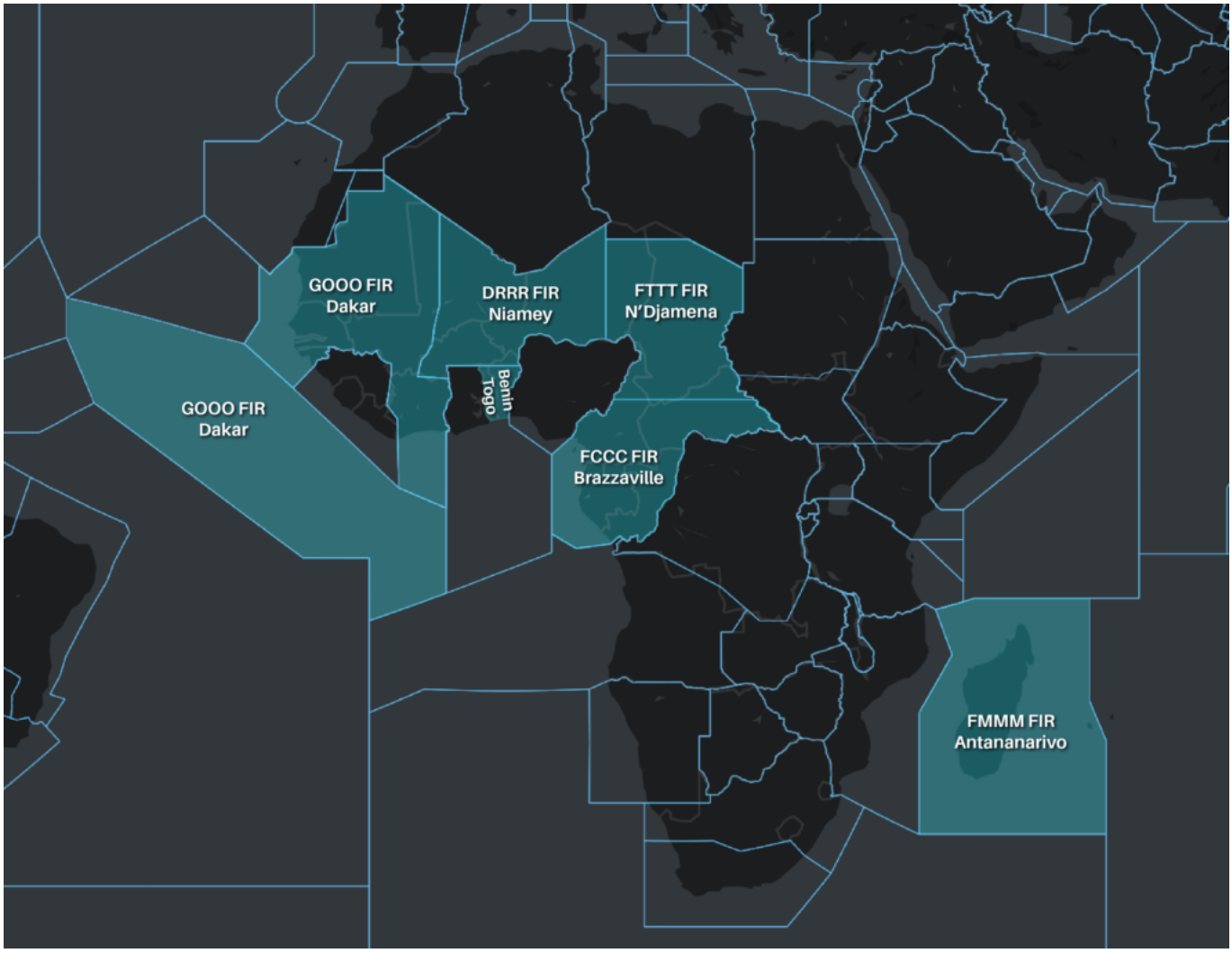
David Mumford
17 April, 2024

Key Points

- **Free Route Airspace (i.e. you can fly direct between waypoints) is now available across most parts of ASECNA airspace in Africa, FL250 and above, as of 25 Jan 2024.**
- **There are a few other places in Africa where FRA is available too.**
- **There doesn't seem to be a map of where all the FRA regions in Africa are, so we made one (check the map right at the bottom of this article!)**

Where is ASECNA airspace?

Here:



Which parts have Free Route Airspace here?

These UTAs: Nouakchott, Bamako, Ouagadougou, Abidjan, Lome, Niamey, Douala, Libreville, and Brazzaville.

These FIRs: GOOO/Dakar, FTTT/Ndjamena, and FMMM/Antananarivo.

Flights can plan direct between the **reporting points of the boundary of the respective UTA or FIR.**

Unfortunately, there **doesn't seem to be one nice big map** showing exactly where these all are.

We grabbed the waypoints from the ASECNA AIP ENR Section 3. We tried plotting all these on one map, but it quickly became very messy. So here's a turgid list of waypoints for you (sorry!) just in case you want them:

Ouagadougou UTA: OPUGO TAREN DEKAS OXIDU UMOVO NAVON TUMUT NANGA BIGOM TUXID ANIXA EBSUD EDGIB ONUSI TAVOT NUSUR.

Douala UTA: OBUDU TAKUM PONDO KEMOX ARKEV DESAM TAPEK VOLMU ARASI BTA IPOVO GEBRO ARDEX RALIN ILBAS IKROP.

Brazzaville UTA: PONDO GADUV INIGO ASSAM TJN NAMOR NARTU UMOSA EDGUM RULDO NASED MISRU ONUDA KITEK ASKON AMPER BOSKI POGBA MERON OPDAK GOPUR MPK PIPLO AGTOM EMSAT BAMAV AMSIK BZ PIRMI LIKAD ARAKI TIMAK NERUP SEMUL ARKOS GARLA ONLEN EDOTO PILVI TAPIL MOVOD NEBEX MISTI ONKAR TAPEK DESAM ARKEV KEMOX.

Abidjan UTA: BIGOM AMSAT TUSEK ONESI SESIG EGADU ARABA GANKA INAKA RASAD EMTAL URAPI ATANI ARLEM IPEKA DEVLI MEGOT UBUTU AMPAS ERMIT GUREL TUXID.

Libreville UTA: BIPIV GEBRO IPOVO BTA ARASI VOLMU ONKAR MISTI NEBEX MOVOD TAPIL PILVI EDOTO ONLEN VORET ILDAN NURIP AGSIM AGRUB GULEP BOVGA.

Bamako UTA: GUREL VOLNA MOPAL UBATI NEGLO GATAX IPUGA MESER KIMGA ILDES EREMO ONTOL ONIMI ONUSI EDGIB EBSUD ANIXA INPOS.

Nouakchott UTA: NEVDI DEMIL POVIN MOKOD TIPAD ILDES EREMO ONTOL ONIMI POTOL ODATA SBITA BRENA BULIS ECHED MIYEC.

Niamey UTA: TERAS ZAWAT INAMA EREBO ERKEL TOBUK IKTAV RAKOM NAMIS INISA IPANO SABSI RIPOL KORUT RISUB DETAR MOLIT USNAV POMPA NANOS UBEVA DOGON GULEN BOVDA LITAK SIRTO TATAT BATIA GAPAG ENOXO BULSA TAREN OPUGO GALIV NUSUR TAVOT MTI ONIMI ODATA POTOL USRUT IPOBA MOKAT.

Lome UTA: GAPAG BATIA TATAT SIRTO LITAK NASTO GANDA TENTU SEVAX OPALA TEMSA POLTO KIPSA EPITI GASLO KETAT NEPRO USTIX PAMPA BUDNO IPORI ARLEX TAMIL ENOXO.

FTTT/Ndjamena FIR: IPONO LIGAT TONBA GARIN DEKTU RAKOM NAMIS INISA IPANO SABSI RIPOL ENBUT RAVOT ONTOP SIGAL KELAK MOMIG ONSEV EBIMU ETRIS GATAG INIGO ASSAM TJN NAMOR NARTU UMOSA EDGUM RULDO NASED MISRU ONUDA KAFIA MONAN KISAL KURAM ILBIB GENEI.

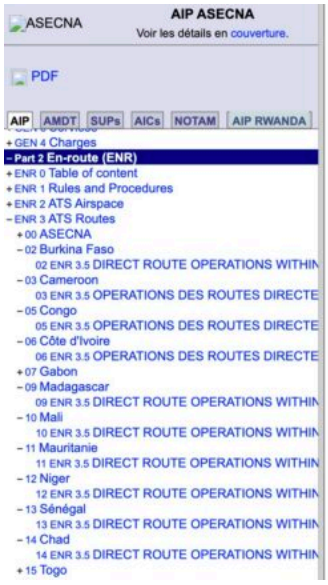
GOOO/Dakar FIR: SEPOM LUMPO MOGSA AKDAK BADIA IPUGA NEVDI BIKIS.

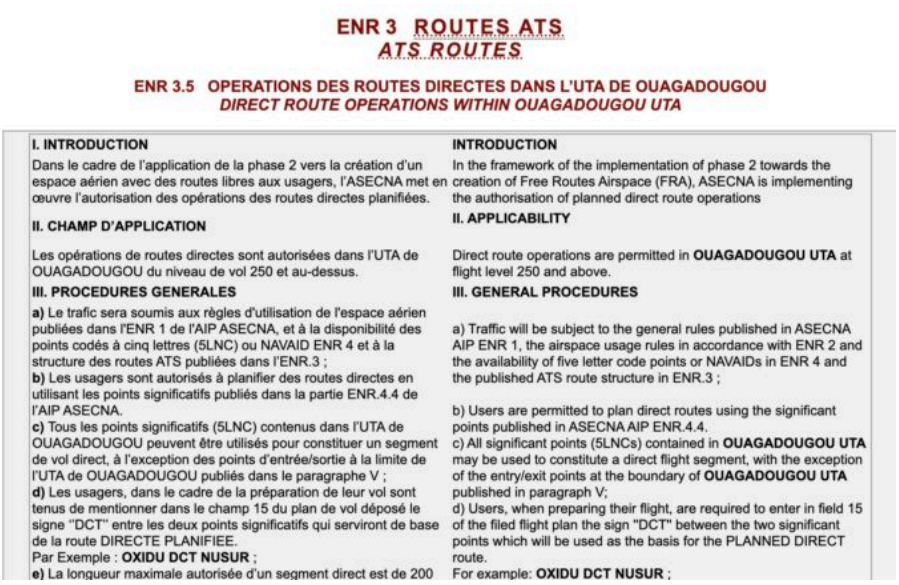
FMMM/Antananarivo FIR: ETGUN TETRO SUNIR EROPA EGMAD NERUL IXEMA IMKIB ETLEG GADNO ETLOP ENDEL SOLAL KINAN TABNO BERIL ATOLA NESAM DENLI ANKOR MIROV RUPIG AMBOD IBMAT APKOT APLEM UVENA DOBUT EGLIP UNKIK GERAG GETIR.

We did make a little map of the **FMMM/Antananarivo (Madagascar)** ones, cos they’re kinda funky:

And we made this little map of the **GOOO/Dakar (Senegal)** ones too, just because the airspace covers a massive area (and there’s also the Dakar Oceanic FIR too) but **you can only plan direct within a very small area:**

For more info, check the full details in the ASECNA AIP ENR 3.5 sections.





ENR 3 ROUTES ATS
ATS ROUTES

ENR 3.5 OPERATIONS DES ROUTES DIRECTES DANS L'UTA DE OUAGADOUGOU
DIRECT ROUTE OPERATIONS WITHIN OUAGADOUGOU UTA

I. INTRODUCTION

Dans le cadre de l'application de la phase 2 vers la création d'un espace aérien avec des routes libres aux usagers, l'ASECNA met en œuvre l'autorisation des opérations des routes directes planifiées.

II. CHAMP D'APPLICATION

Les opérations de routes directes sont autorisées dans l'UTA de OUAGADOUGOU du niveau de vol 250 et au-dessus.

III. PROCEDURES GENERALES

a) Le trafic sera soumis aux règles d'utilisation de l'espace aérien publiées dans l'ENR 1 de l'AIP ASECNA, et à la disponibilité des points codés à cinq lettres (5LNC) ou NAVAID ENR 4 et à la structure des routes ATS publiées dans l'ENR.3 ;
b) Les usagers sont autorisés à planifier des routes directes en utilisant les points significatifs publiés dans la partie ENR.4.4 de l'AIP ASECNA.
c) Tous les points significatifs (5LNC) contenus dans l'UTA de OUAGADOUGOU peuvent être utilisés pour constituer un segment de vol direct, à l'exception des points d'entrée/sortie à la limite de l'UTA de OUAGADOUGOU publiés dans le paragraphe V ;
d) Les usagers, dans le cadre de la préparation de leur vol sont tenus de mentionner dans le champ 15 du plan de vol déposé le signe "DCT" entre les deux points significatifs qui serviront de base de la route DIRECTE PLANIFIEE.
Par Exemple : **OXIDU DCT NUSUR** ;
e) La longueur maximale autorisée d'un segment direct est de 200

INTRODUCTION

In the framework of the implementation of phase 2 towards the creation of Free Routes Airspace (FRA), ASECNA is implementing the authorisation of planned direct route operations

II. APPLICABILITY

Direct route operations are permitted in **OUAGADOUGOU UTA** at flight level 250 and above.

III. GENERAL PROCEDURES

a) Traffic will be subject to the general rules published in ASECNA AIP ENR 1, the airspace usage rules in accordance with ENR 2 and the availability of five letter code points or NAVAIDs in ENR 4 and the published ATS route structure in ENR.3 ;

b) Users are permitted to plan direct routes using the significant points published in ASECNA AIP ENR.4.4.
c) All significant points (5LNCs) contained in **OUAGADOUGOU UTA** may be used to constitute a direct flight segment, with the exception of the entry/exit points at the boundary of **OUAGADOUGOU UTA** published in paragraph V;
d) Users, when preparing their flight, are required to enter in field 15 of the filed flight plan the sign "DCT" between the two significant points which will be used as the basis for the PLANNED DIRECT route.
For example: **OXIDU DCT NUSUR** ;

Where else in Africa has Free Route Airspace?

Good question! We think it's just these places:

Morocco: FL195-FL460 in the Agadir CTA (currently only available between 2200-0600z)

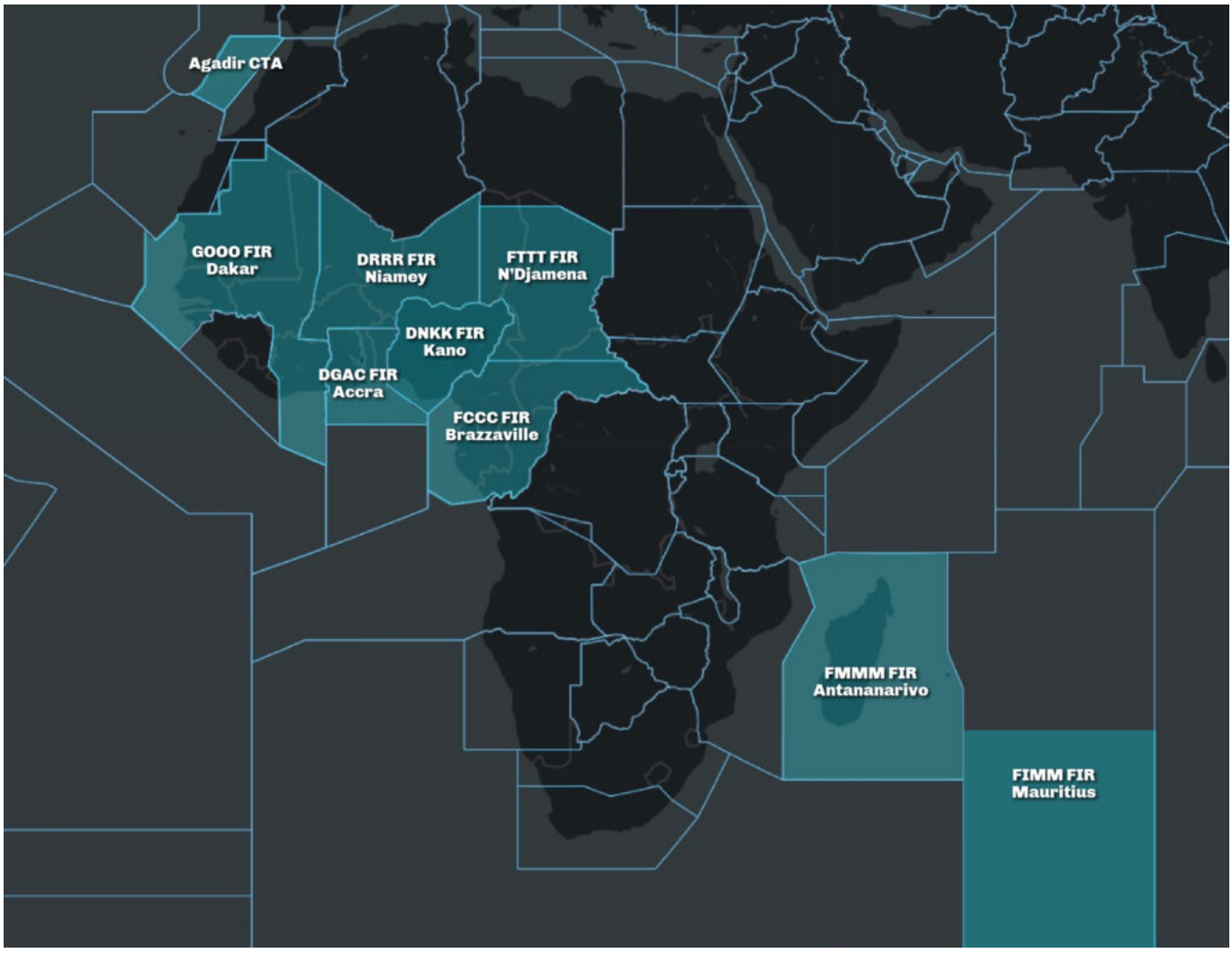
Ghana: FL290-FL460 in the DGAC/Accra FIR between latitudes 2N and 11N.

Nigeria: FL245 and above in the DNKK/Kano FIR.

Mauritius: FL245-FL460 in the southern part of the FIMM/Mauritius FIR South of 25S.

So, putting that all together on one map (which is the thing we really wanted in the first place)...

Here are all the places in Africa which now have Free Route Airspace!

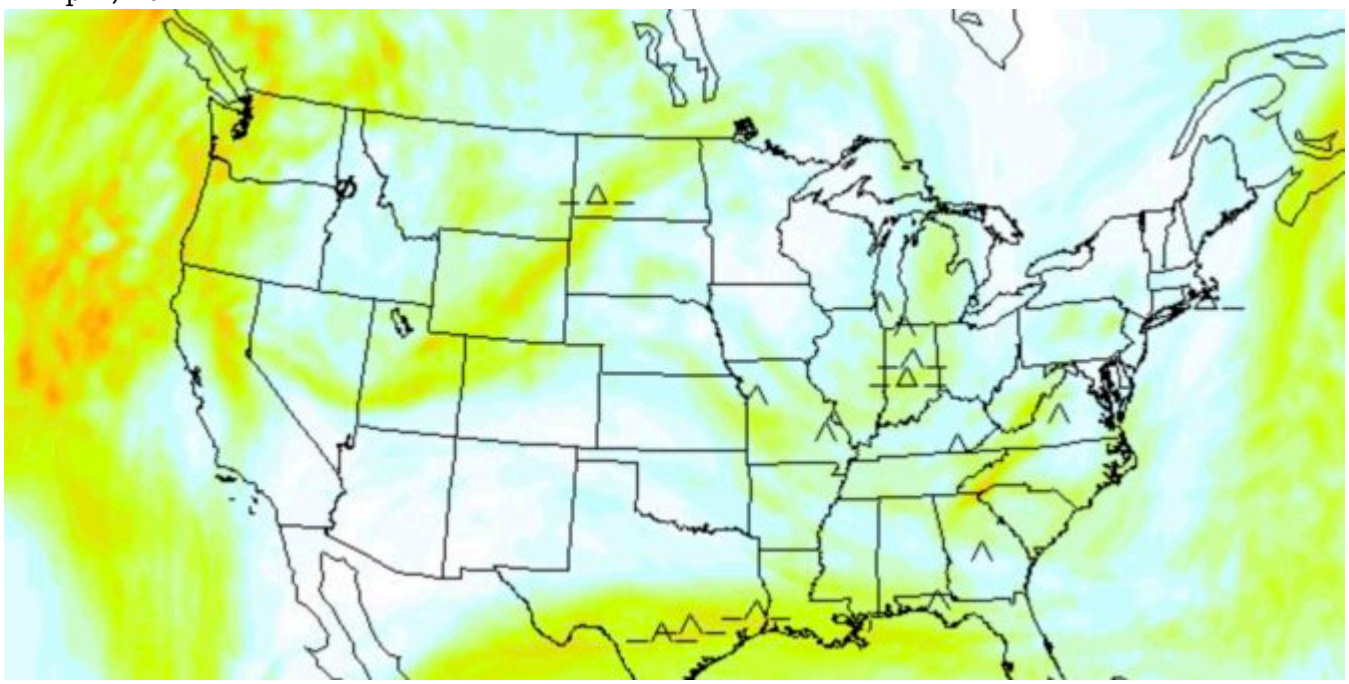


Phew, we made it there in the end.

If you know of any more places which should be added to this map (FIRs, UTAs, CTAs, etc), let us know: news@ops.group

Who is Eddie? And what does he have to do with turbulence?

Chris Shieff
17 April, 2024



The other day, before another oceanic crossing, I settled in to brief myself on that afternoon's flight plan.

As I scalded my mouth with a hastily purchased airport coffee and began to peruse the carefully collated collection of fuel burns and leg times, my eyes fell upon the dispatcher's remarks. As I stared, the following note stared right back at me…

"Sorry guys, unavoidable EDR 60 at TOC…"

Apology accepted. **But what on earth is EDR 60?**

With the weight of the braid on my shoulder, multiplied by a factor of my stupidity as a proficient but highly 'human' aviator, I realised I needed to call in the big guns – this was a job for Google.

A powerful blankness ensued as I surveyed the answer… **Eddy Dissipation Rate.** The official metric of ICAO and World Met Organization turbulence reporting since I was in high school. Had I been living in a cave?

This thing mattered, and so I needed to dig deeper.

Here's what I found out:

…it's an aircraft-independent meteorological field expressed in meters squared per second cubed…

Not helpful. I read on…

…the cube root of the dissipation rate of turbulent kinetic energy…

I took another sip of coffee. I didn't have time for this.

Sign-on was approaching, along with hundreds of passengers expecting me to protect them from this ‘EDR 60′ with my big fancy license. **All I knew was that it meant bumps.** Clearly, I needed to get a better grasp on this.

If you already know what EDR is, and could explain it to me on a napkin, there’s no need to read on. If you’re ‘asking for a friend,’ here is a crash course, written in human.

The Simplest Answer

You don’t need to cube anything. Except maybe the confidence you lost (like me) in not knowing what an EDR is. It’s pretty simple (ignoring the arithmetic of measuring it).

The higher the number, the more intense clear air turbulence may be…if you encounter it. Anything over 50 may result in moderate to severe CAT.

But that interpretation also depends on the type of aircraft you are flying.

So, there may be some nasty stuff around. But if you want to get your head around it, you’ll need to dig a little deeper.

So, let’s dig…

When we talk about turbulence, we refer to **light, moderate, severe, and extreme.** We attempt to categorise these with useful definitions like ‘loss of control.’

The problem is that it is quite challenging to quantify the severity of CAT concerning different aircraft types – **what’s bad in a 152, may not be as bad in a Gulfstream.** It varies from aeroplane to aeroplane, and forecasters don’t know what equipment you operate.

This is where EDR comes into it – **it doesn’t cares about what aircraft you fly.** It is just a measure of something.

An eddy is simply the swirling of fluid. And air behaves like a fluid. A turbulent atmosphere will make these eddies disappear quicker. A calmer one will allow them to persist.

So, if we know what is happening to these eddies, it can give us an indication of how ‘churny’ the atmosphere is, along with a healthy dose of mathematics, of course.

Eddies dissipate quickly = a turbulent atmosphere.

An EDR is measured with a value of between 0 and 1. But seeing a value of 0.4 for instance, doesn’t exactly leap off the page of your flight plan.

So, we multiply it by a factor of 100 to make it easier to use.

Cool, we’re almost there…

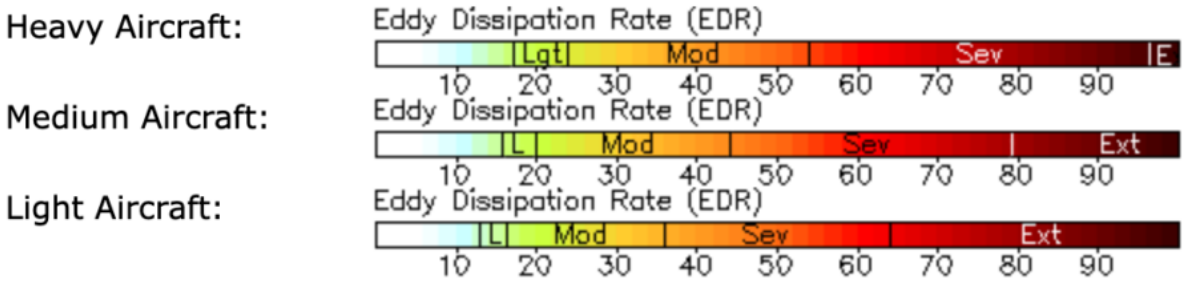
One size doesn’t fit all

Once we have an EDR, we must know what to do with it.

As mentioned, every aircraft is different and will respond differently to turbulence. **This is where weight begins to matter.**

An EDR of 20 might produce moderate turbulence for a King Air, but gently shake the champagne glasses of an A380 and nothing more.

The clever folk at the National Center for Atmospheric Research, therefore did a study and came up with three weight classes to help you understand an EDR:



Where do I find this EDR?

Many non-airline folk don't have the luxury of a friendly dispatcher like I had.

But you can quickly look it up. Better yet, it is as simple as paint by numbers (if you know what to do with the answer).

It would help if you had GTG (graphical turbulence guidance) like the one below. And the colours change depending on how heavy your aeroplane is.

Better yet, the way EDRs are presented can be changed. For instance, cross-sections of a route can also give pilots a good indication of the smoothest levels.

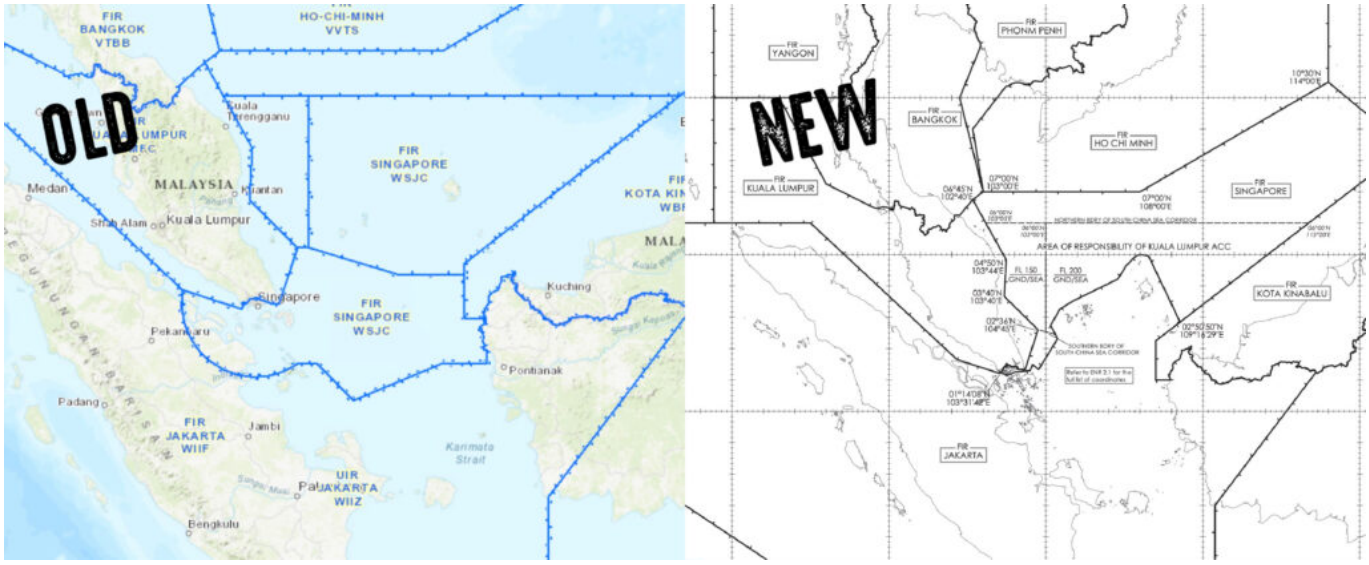
Check out the NOAA website **here**.

March 2024 Singapore Airspace Changes

David Mumford
17 April, 2024

Singapore and Indonesia will **realign their FIRs** from 21 Mar 2024.

They agreed to do this so that the new FIR boundary (between the WSJC/Singapore and WIIF/Jakarta FIRs) will be generally more aligned with Indonesia's territorial boundaries.

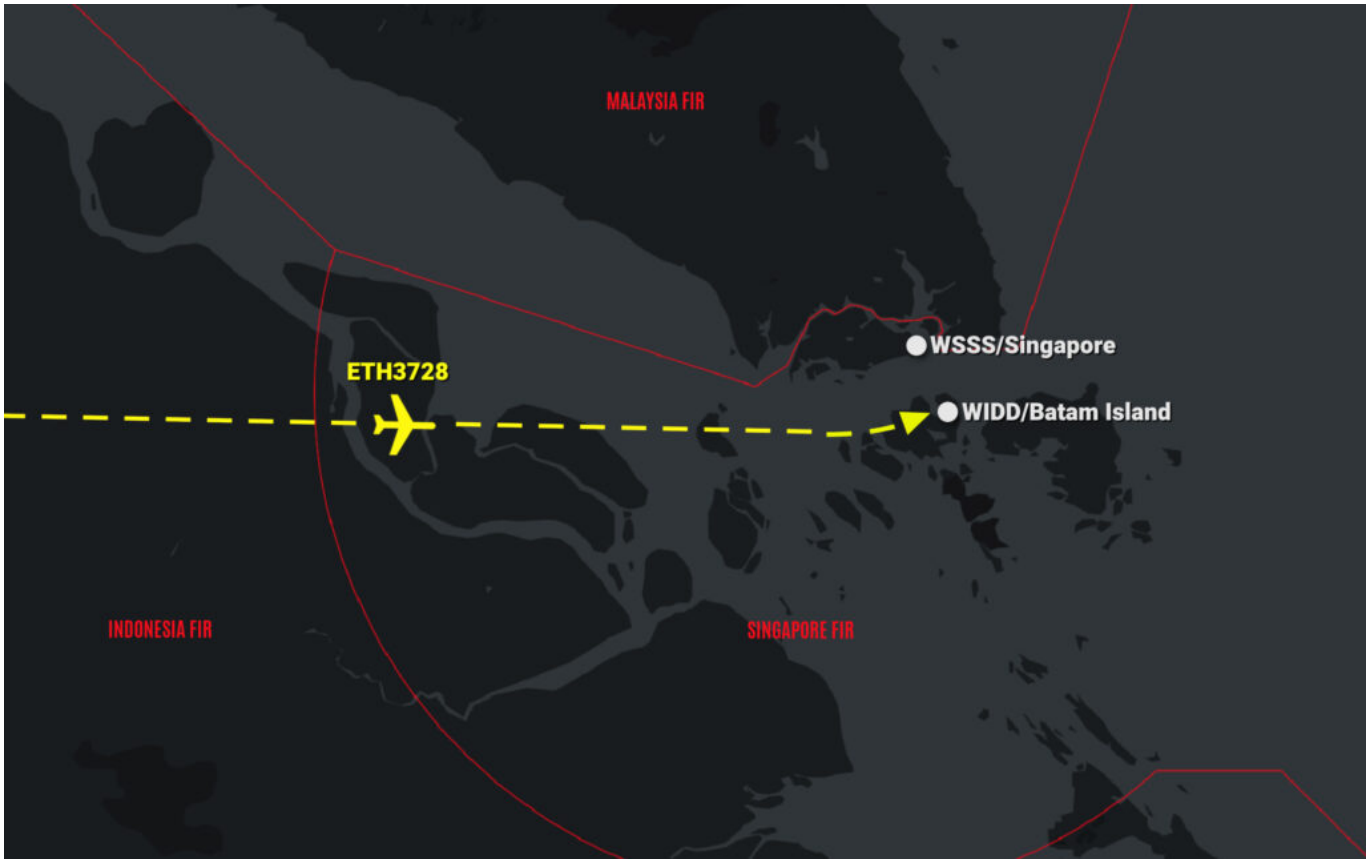


It looks like not much will change in terms of flight ops, as **Singapore will continue to control the airspace. For full details of the upcoming change, check SUP 18/2024.**

But there is one important issue this FIR realignment will hopefully fix for good – it will now be more clear that **overflights of Indonesia's Riau Islands require an Indonesia overflight permit!**

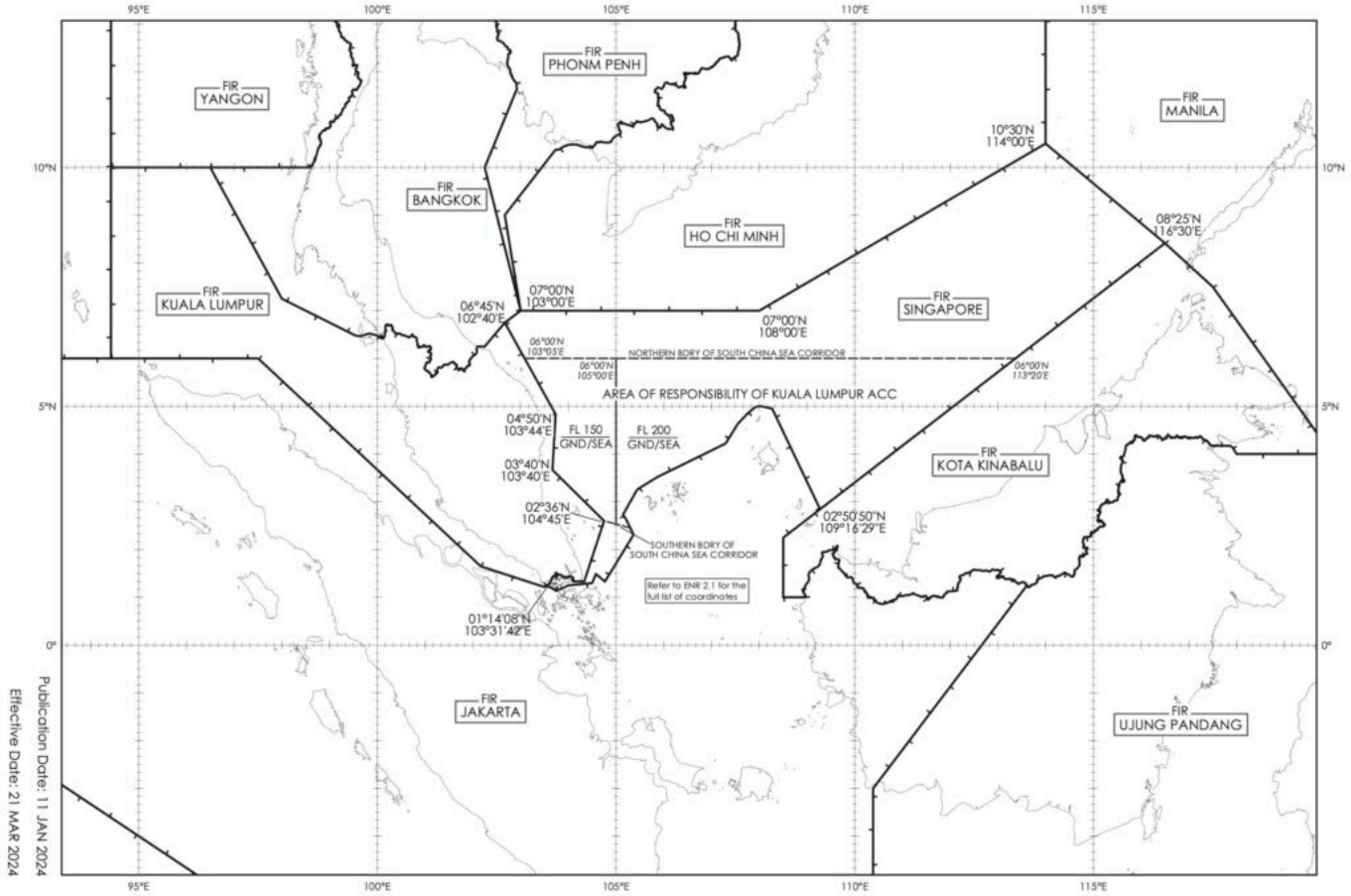
This has been an issue in the past, with some flights not realizing they needed an Indonesia overflight permit to overfly these islands – as they sat under the WSJC/Singapore FIR.

In 2019, two Indonesian F-16s intercepted an Ethiopian Airlines cargo flight for flying across Indonesian airspace without permission. The aircraft was initially supposed to operate from HAAB/Addis Ababa to VHHH/Hong Kong, but was modified at the last minute to route via WSSS/Singapore instead. **The aircraft was intercepted forced to land at WIDD/Batam Island.**

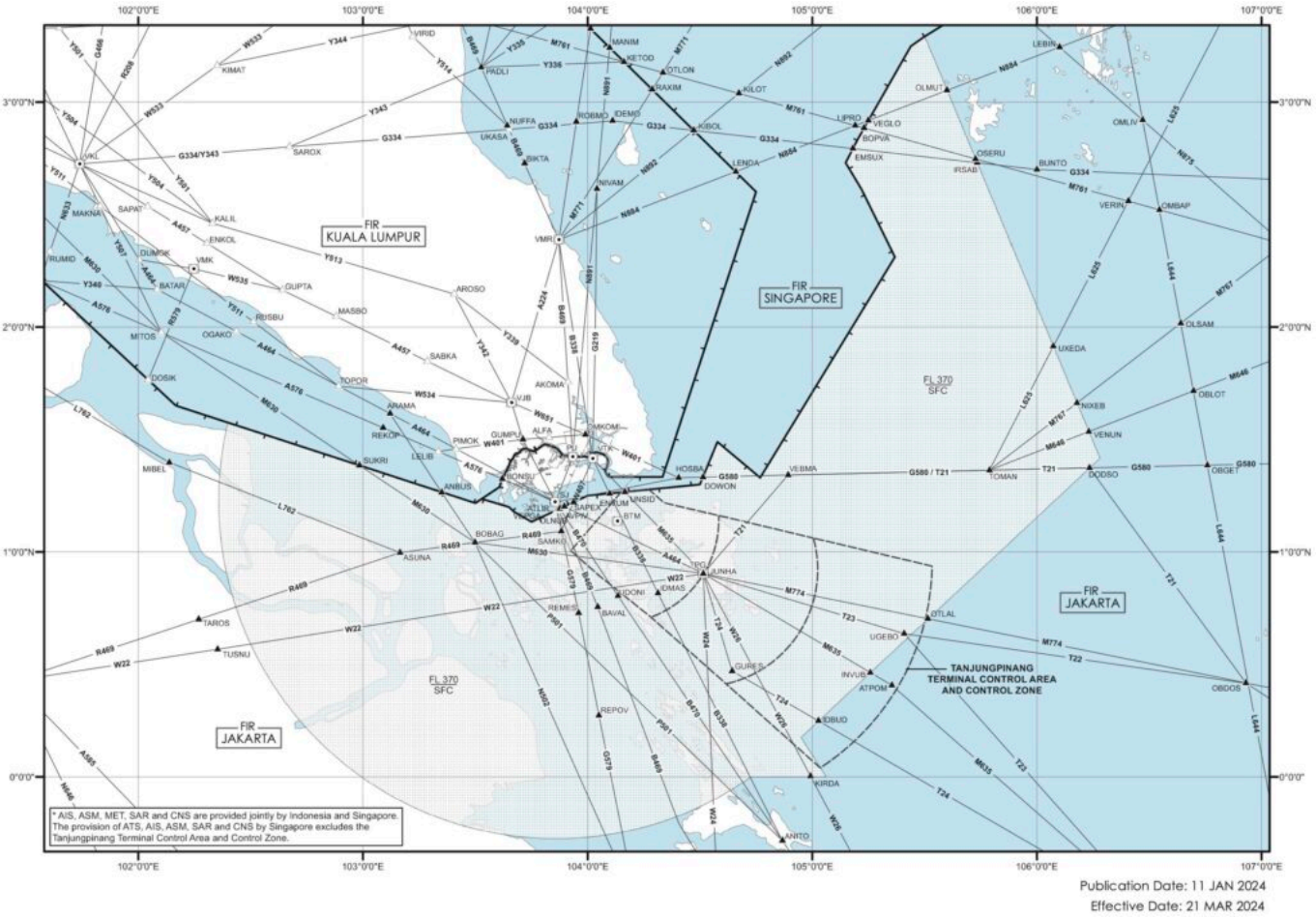


There have been several other incidents both before and since then, including some where Indonesia blamed US and Indian military planes of violating their airspace without permission.

But when the FIRs realign on 21 Mar 2024, there should hopefully be **no more confusion about permit requirements** for this chunk of airspace! You can find all the details in **SUP 18/2024**, but here's how it's going to look:



And this one is maybe useful too – this shows the **airspace which will continue to be controlled by Singapore ATC:**



Japan Boosts ATC Procedures and Lessons from Haneda

Chris Shieff
17 April, 2024

Japan has announced changes (in Japanese) to **ATC protocols** at airports throughout the country. This follows the tragic collision of an Airbus A350 and Dash 8 on an active runway at **RJTT/Haneda** on Jan 2.

While we wait for more answers, authorities have been quick to implement new procedures. Here's what you need to know (translated), if you're headed to Japan tomorrow.

Visually Clear

Authorities are urging operators to mandate a check by aircrew that the runway is **visually clear** before landing or entering. In other words – don't rely on a clearance alone.

You may need to take this one with a grain of salt. For a myriad of reasons, it may not be practical or possible for pilots to make an accurate assessment that a runway is vacant. Take the example below – how would you fare?

But from an airmanship perspective, the intention is that our eyeballs may become the last line of defense.

Forget your place in the queue

Early indications from the accident transcript indicate that the crew of the Dash 8 may have misinterpreted the use of the phrase **'number 1'** when cleared to the runway's holding point.

To a **fluent English speaker**, the implication may appear quite simple – you are number one in the queue to depart.

But to the crew of the Dash, it may have meant you are *number one for the runway*.

So, from now on ATC will no longer advise aircraft of their place in the sequence for departure.

Their official note says there are now only four phrases that will be used to imply an aircraft can enter a runway. These are:

- **Cleared for take-off.**
- **Line up and wait.**
- **Cross runway.**
- **Taxi via runway.**

If you hear anything else, it is non-standard. **Stop and make sure you clarify the clearance.**

Behind the Scenes

There are changes happening in the tower too. While they have no operational impact for pilots, it may be reassuring to know about them.

Essentially the bulletin reinforces there will be more staff on hand to constantly monitor ground radar for **early detection of potential runway incursions.**

And work is underway to improve the visibility of paint and signage at runway holding points, especially where no stop-bars are installed or working.

As a collective, the industry needs to do more

Can I address an elephant in the room?

Having read the above bulletin, I find myself flipping the page over to see what's on the other side. I can't help but ask myself… *is that it?*

Japan's bulletin is, for all intents and purposes **a reminder of what should be happening anyway.**

In my opinion, it seems to offer little more than a gesture of reassurance that authorities have been seen to act in the face of another tragedy.

The reality is that this wasn't just a Japan problem. All the warning signs were there *before* Haneda, around the world.

Have you seen this report? Back in November it was assembled by a team of specialists who cast doubt over the future safety of the US NAS.

In a six-week period, there had been no less than **five near-miss incidents involving runway incursions and passenger jets at major US airports**. Five, in six weeks – the highest rate in over half a decade.

In the report they identified **risk factors** (such as staff shortages, aging infrastructure and inconsistent funding) as issues endemic to these near-misses. No amount of bulletin-writing can fix these problems.

With the news that traffic levels will soon surpass those seen before the pandemic, I feel unsettled that the bullish outlook for global aviation is quickly outgrowing the safety infrastructure that protects us.

Perhaps it's time for us to collectively tap the brakes and **put safety ahead of profit**, lest Haneda be the first of a number of lessons.

As a parting shot, it's important to note that **technologies already exist to solidly improve runway safety** far beyond bulletins like the one above. Take for instance, the final approach runway occupancy signal (FAROS).

This independent and fully automatic safety addition to runway status lights **warn pilots on final approach in real time that a runway is occupied.** Consider the impact this may have had that evening in the darkness of Haneda's Runway 34R.

What's needed is the time, money and willingness of industry stakeholders to implement them. **We need to do more to prevent accidents like Haneda, rather than react to them.** At the very least, Haneda is a wake-up call that the time to act on truly preventing runway incursions at busy airports is now, and not next time.

NAT Conundrums Volume IV: Contingency Procedures

David Mumford
17 April, 2024

Welcome to our 4th Volume of North Atlantic Conundrums!

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:

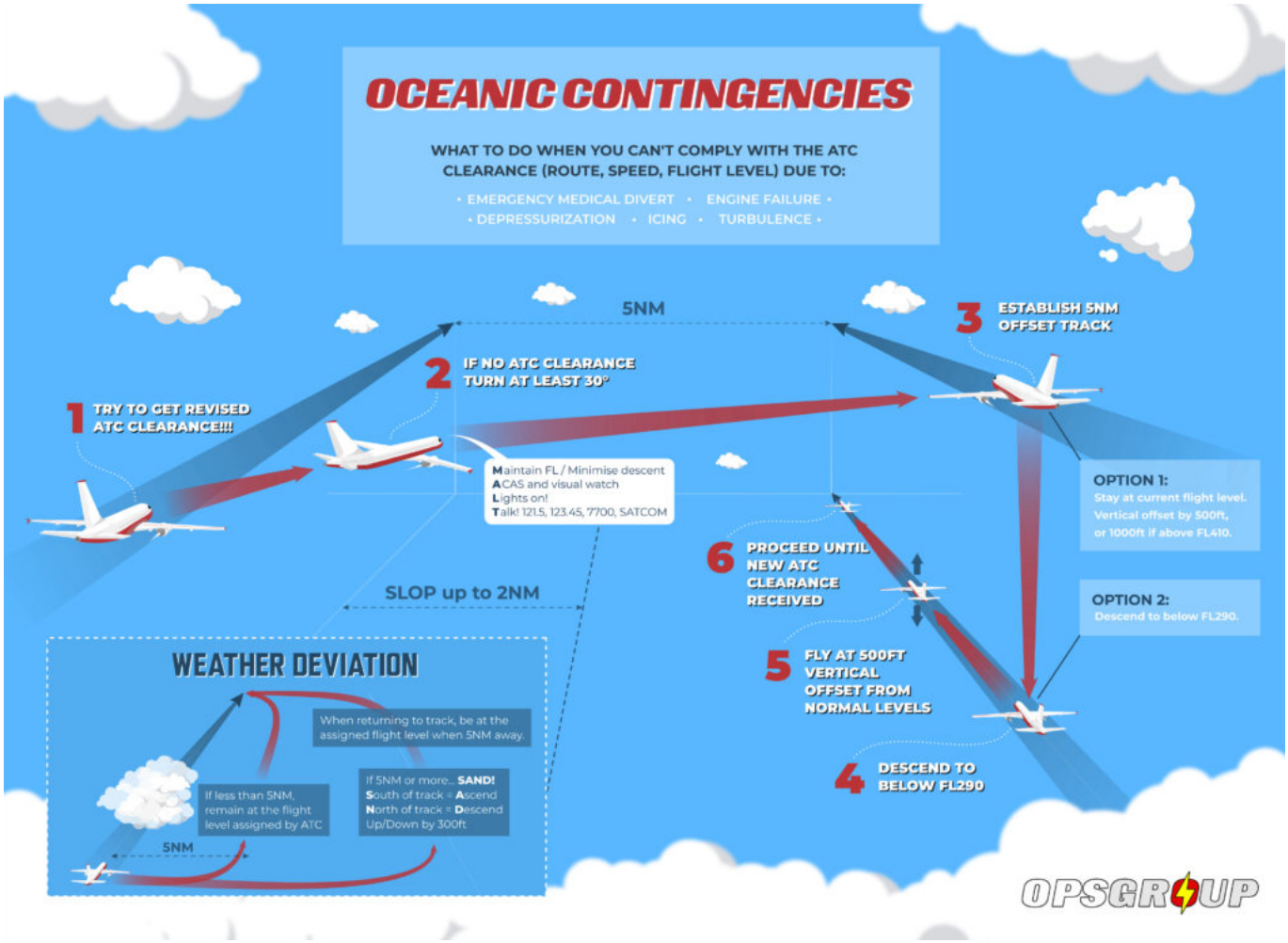
4. Do you need to plot on Blue Spruce Routes?
5. Do we still fly Weather Contingency Procedures on Blue Spruce routes?

6. When can we disregard an ATC clearance and follow the contingency procedure instead?

Volume III looked at:

7. GOTA airspace.

And this post, Volume IV, looks at NAT Contingency Procedures – not those related to weather issues (which are well-known and described in the regs without the risk of misinterpretation), but those related to times when you need to deviate from your ATC clearance (due to comms issues, turbulence, depressurization, engine failure, immediate diversion, and other emergency situations).



What are in-flight contingency procedures on the NAT, and which regulation governs them?

These are established to address situations where aircraft may encounter difficulties or emergencies while operating in the NAT airspace. They are primarily governed by the ICAO Document 4444, which outlines regulations for air traffic management practices and procedures. In this article, **we will focus specifically on non-weather related contingency procedures.**

I've heard of the NAT Doc 007. Is it the main reference for NAT contingency procedures?

Yes and no. While the NAT Doc 007 is a valuable resource for operators in the North Atlantic region, it's important to note that it explicitly states, "*this document is for guidance only*." The primary regulatory framework for contingency procedures in the NAT remains **ICAO DOC 4444.**

Do I need a clearance to continue my flight?

Yes, you typically need a clearance to continue your flight. If an aircraft is unable to continue the flight in accordance with its ATC clearance, a revised clearance shall be obtained, whenever possible, prior to initiating any action.

Are there situations where I may not have a clearance?

There may be exceptional circumstances (such as emergencies or comms difficulties) where obtaining a clearance becomes challenging. In such cases, pilots should prioritize safety and follow established contingency procedures to ensure safe flight operations while seeking to obtain a revised clearance as soon as possible.

If I have already reported a contingency situation and subsequently receive a clearance, should I always follow the new clearance?

Yes, if you have been issued a clearance, you should adhere to it as long as it is safe to do so. If the new clearance is not safe, request an alternative clearance from ATC. Safety should always be the top priority.

If I have not yet been able to obtain a clearance, what should I do?

The procedure changed on the NAT in 2019, and then became the global standard in 2020 – so there is now **one standard set of Contingency Procedures for all oceanic airspace worldwide** (well, almost all airspace – there are still a few places which have slight differences, although these will eventually get aligned):

Leave your cleared track or ATS route by initiating a turn of at least 30 degrees to the right or left, in order to establish and maintain a parallel, same-direction track or ATS route offset of 5 NM.

Once established on a parallel, same-direction track or ATS route offset by 5.0 NM, you have two options:

1. Establish a 500 ft vertical offset (or 1000 ft if above FL 410) from the usual flight levels, and proceed as required by the operational situation, or if an ATC clearance has been obtained, in accordance with the clearance.
2. Descend below FL 290, and establish a 500 ft vertical offset from those flight levels normally used, and proceed as required by the operational situation or if an ATC clearance has been obtained, in accordance with the clearance.

The first rule is straightforward, involving manoeuvring to navigate between significant traffic operating in the North Atlantic High-Level Airspace (NAT HLA) by adjusting altitude with a 500 or 1000 feet offset before making a turn. **However, the second rule, when maintaining altitude is not feasible, can sometimes be misinterpreted.**

Why is the rule of descending below FL290 sometimes misunderstood?

The current wording of **ICAO Doc 4444** can sometimes lead to confusion, as it may imply that aircraft must first descend to establish a 500 ft vertical offset before making any lateral deviation. **This is not the intended interpretation.**

This misinterpretation was perpetuated by the **2023 version of the NAT Doc 007** (version 2023-1), which said: *"descend below FL 290, and establish a 150 m (500 ft) vertical offset from those flight levels*

*normally used, **then proceed**…".* This wording inadvertently supported the misconception by introducing the word "then" implying a strict sequence in the procedure.

The new 2024 version of the NAT Doc 007 (version 2024-1), which becomes applicable in March 2024, has been corrected, replacing the word "then" with "and", in line with ICAO Doc 4444.

How should it be understood?

The purpose of updating the contingency procedures in Doc 4444 was notably to provide a clear and effective way for aircraft to safely navigate and disengage from OTS (Organized Track System) with adjacent and nearby PBCS tracks without the risk of collisions. This is achieved by offering two primary options:

1. Using vertical offsets; or
2. In cases where maintaining altitude becomes impractical and to mitigate the risk of conflicts with the majority of traffic, which is located within the NAT HLA, descending below FL 290 before diverging.

As a result, depending on the situation, **lateral divergence can be initiated as soon as FL 290 is crossed during descent**, without the prior obligation to establish first at a potentially low FL offset before proceeding with the divergence.

In cases of **depressurization** requiring a descent to lower levels, or an **engine failure** necessitating a descent to lower levels depending on ETOPS speed, it may be preferable to initiate the turn as soon as the aircraft passes FL 290 when the alternate airport is located behind. **This helps save valuable time**, approximately 10 minutes, in returning to the same point as when crossing FL 290, especially in emergency situations.

In other circumstances (like when the alternate airport is located ahead), **a pilot may elect to establish the vertical offset first.**

The Doc 4444 regulations **allow for both of these courses of action.** Moreover, it's worth noting that the fuel planning for critical ETOPS scenarios typically does not account for continuing for a long time in the wrong direction before initiating divergence.

How do I know that this is the correct interpretation?

Because we asked ICAO.

They told us that after reviewing all the working papers, it's clear that **the intent is focused on getting below FL290 before doing anything (if possible).**

We also received confirmation that the SASP secretary, the ATM ops panel secretary, and the Flight Ops panel secretary had all discussed the issue and had agreed that the interpretation provided was correct. This does not reflect a specific panel viewpoint but rather a consolidated ICAO Secretariat view of the interpretation.

While it is preferable, given favorable conditions, to be at the offset level before initiating a turn (as this minimizes the potential for conflicts with other aircraft operating on adjacent tracks, providing some vertical 'separation' before turning across parallel tracks), **the primary emphasis remains on descending below FL290.** This priority is clarified in Doc 4444 Note 2 to 15.2.3.2(a) :

"Note 2.— Descent below FL 290 is considered particularly applicable to operations where there is a

predominant traffic flow (e.g. east-west) or parallel track system where the aircraft's diversion path will likely cross adjacent tracks or ATS routes. A descent below FL 290 can decrease the likelihood of conflict with other aircraft, ACAS RA events and delays in obtaining a revised ATC clearance."

Ultimately, in emergency situations where it becomes absolutely necessary to deviate from the rules, it's down to the pilot-in-command to assess the validity of an immediate diversion in consideration of the risk of conflict with nearby aircraft in the high-level oceanic airspace. As ICAO Annex 2 says:

"The pilot-in-command of an aircraft shall have final authority as to the disposition of the aircraft while in command… the pilot-in-command may depart from these rules in circumstances that render such departure absolutely necessary in the interests of safety."

Key takeaways

In non-weather contingency scenarios, once you're established on a parallel, same direction track or ATS route, offset by 5 NM, there are two cases to consider:

- If you can maintain altitude, adjust your altitude by 500 or 1000 feet and then make a lateral turn to insert yourself between the traffic in the NAT-HLA.
- If maintaining altitude is not possible, descend below FL290 while continuing your descent toward a 500 feet offset, allowing you to diverge beneath the traffic in the NAT HLA.

In cases where maintaining altitude is not feasible, there is **no obligation to first establish an offset level before initiating divergence once FL 290 has been crossed during descent.**

With any luck, future versions of Doc 4444 will make all of this more explicit, in order to avoid various misinterpretations!

Mexico Permit Chaos: New Rules Explained

David Mumford
17 April, 2024

Key Points

- **From 1 Jan 2024, Single Entry Permits and Multiple Entry Permits for private flights have been replaced by the Single Entry Authorization (AIU).**
- **This AIU is valid for 180 days. With it, you can fly to Mexico as much as you like during this timeframe, and can do as many internal domestic flights as you want.**
- **You should apply for the AIU at least 2 days prior to the flight.**
- **Before the AIU can be issued, they Mexican airport you're flying to must obtain the authorization number from AFAC Headquarters in Mexico City. Timeframe for this is varying between 5 minutes to 2 days.**
- **These changes only impact private flights. Rules for charter flights work the same as before (i.e. you get a blanket charter permit).**

All these recent changes to permit procedures have been causing **stress and delays for ops to Mexico.** Before we get stuck into all the painful details, let's begin with a story…

A Cautionary Tale

*I just completed my first trip to **MMSL/Cabo San Lucas** since the new procedures came into effect, and thus needed the new permit. I use the local FBO for all of my permit applications, etc. **All paperwork was submitted and accepted days in advance.** This FBO is unquestionably one of the best that I ever use.*

*When I landed, they said **"we now wait for Mexico City to issue your Special Use Permit which they will only do after landing".** I suggested that my passengers (family and friends) go on to the hotel in case it took a little while. Good decision.*

*While sitting in the FBO waiting, I started to chat with other waiting crews. **One crew had been waiting for 3 hours already**, another crew was down for 2 hours.*

*The FBO manager indicated that **the new Mexican permit process has been total chaos** since it went into effect with huge delays. In the end, I waited 3 hours, and then was told to come back the next day.*

*As I left, one crew was still waiting. They had done a part 135 drop-off and had planned to head back to the US. They had been **delayed so long that customs at their US destination airport was closed**, and they couldn't reliably file a return eAPIS into the US because they didn't know their departure time (and you have to give the US at least one hours notification).*

*Hopefully, the new permit process settles down in the weeks ahead, but in the meantime, crews should be ready for a **many-hour or overnight delay.** Another pilot who flies regularly into Mexico told me that his delay (at a different airport) was less than 30 minutes. So, your mileage may vary, but in the meantime we all have to anticipate some delays.*

The Full Story

Thanks to Rick Gardner of CST Flight Services for the report that follows. CST Flight Services provides a wide range of international trip support services in Mexico, Central and South America, The Bahamas and the Caribbean. You can contact them for more info at: customersvc@cstflightservices.com

Ancient History

To understand the impact that the recent change to Mexico's entry procedures has had on private aircraft arrivals, one has to understand the history of how foreign private aircraft have been allowed to enter Mexico in the past.

For well over 20 years, Article 29 of Mexico's Civil Aviation law decreed that foreign (non-Mexican) aircraft could enter Mexico by landing at an official international Airport Of Entry (AOE) in Mexico and obtaining a **Single Entry Authorization** (subsequently called the single entry permit) or a **Multiple Entry Authorization** (subsequently called the multiple entry permit).

In 2014, a Mandatory Circular (CO SA 02/14 R1) was generated that updated the procedures and documents required for authorizing the issuance of a single, or multiple, Entry Authorization. This circular was a heavy-handed intent to address **illegal charters and illegal cabotage in Mexico** which caused great confusion because it inserted confusing procedures for recording, and updating, the list of passengers authorized to fly on board a private aircraft and it eliminated an essential federal document that was relied upon by not only Mexican Civil Aviation officials but also by Mexican Immigration and by Mexican Customs.

The fallout of this new procedure resulted in **several Mexican AOE's being unable to receive international flights for many month**s while the issues were resolved but eventually work-arounds were found and things settled down despite the confusing procedure.

Although tweaked periodically, Article 29 of Mexico's Civil Aviation Law remained unchanged until May 05, 2023 when the entire Civil Aviation Law received a major update in many areas. Amongst the many changes made in the new version of the Law, **the concept of "single entry" and "multiple entry" authorizations were eliminated** and the ambiguous phrase "corresponding authorization" was inserted.

December 2023 changes

On December 27, 2023, 4 days before the end of the year, an internal AFAC document (Oficio 4.1.2.4197) was published to all of the Civil Aviation offices at Mexico's AOEs informing them that a **new procedure was being issued for the authorization of private aircraft entering Mexico.** This internal document specified the following:

- This internal document had a validity of 180 days.
- The changes to how entry authorizations were to be handled would go into effect January 1, 2024.

- It clarified that the reference to a Single Entry Permit and a Multiple Entry Permit were not correct and contrary to law and that the concept of a “Single Entry Authorization” (Autorización de Internación Única – AIU) was being adopted.
- That the AIU would be valid for 180 days from the date of issuance.
- That during the 180 day period, aircraft could freely travel in Mexican territory in a manner similar to the prior Multiple Entry Permit.
- That to issue an AIU the foreign operator needed to present their request for an AIU at least 2 days before their planned arrival in Mexico.
- That the Civil Aviation officials at the AOE could no longer unilaterally process an entry authorization but rather needed to request an AIU authorization number from Civil Aviation headquarters in Mexico City before the AIU could be issued. The request for the AIU number must be sent via email to a central email address and accompanied by:
    - Make of aircraft
    - Model of aircraft
    - Registration (Tail) number
    - Number of crew
    - Number of passengers
    - Name of Civil Aviation Inspector in charge of the AIU request
    - Name of Civil Aviation Comandante (or acting representative) who approved the AIU request
    - The request needed to be emailed to a central email address in Mexico City
- As a measure of added security and due to different legal “issues”, a Layout Of Passenger Accommodations (LOPA) needed to be presented.
- That for additional guidance on how the authorizations should be issued, AFAC officials needed to refer to the confusing 2014 Mandatory Circular (which was created for Entry Permits, which are now prohibited) until a new Circular could be published.

Confused? You are not alone.

January 2024 onwards

Almost immediately, there was an outcry about what was indicated, and not indicated, in the new procedure such as:

- Had the AFAC headquarters in Mexico City calculated how many aircraft arrive in Mexico per day and ensured that they had the email systems and staffing required to receive and process requests and issue the AIU authorization number for all AOE’s in Mexico?
- How long would it take to get the authorization number?
- Many aircraft don’t have the luxury to provide the 2-day required notification. (This was unofficially quickly watered down to a 2-day recommendation.)
- The Authorization is NOT VALID without the authorization number provided by the central

AFAC headquarters.

- What if an aircraft needed to make a quick turn and depart Mexico before the AIU was issued?
- What if an aircraft needed to continue on to another airport in Mexico before the AIU was issued?

Almost immediately, we saw a **divergence in how each of these scenarios was being addressed** and how the new procedures were being implemented across the many Mexican AOE's across the country. Amongst the most notable issues we have seen are:

- It has been clarified that aircraft that were already in Mexico under the old Single Entry Permit that was issued in 2023 could remain in Mexico but needed to depart before those permits expired.
- The time to obtain an AIU authorization number was taking from **several minutes to multiple days** with no evident criteria for what made one request take longer than another.
- If the AIU authorization number is not received, some airports were **allowing the aircraft to depart but without a valid AIU.** This means that if they make a subsequent international flight to another Mexican airport, they will be treated as a new arrival and be obligated to **process yet another AIU** and pay the fee again because the AIU they had requested on their previous trip was never received.
- At some airports, flights wanting to fly on to another Mexican airport were approved on a discretionary basis by the local AFAC comandante with the requirement that they return to the original AOE where they entered the country.
- Aircraft that had been issued an AIU and reentered Mexico with **different crew and/or passengers** are being required to process a new AIU.
- Some airports are requiring a **picture of the inside of aircraft, in addition to a LOPA**, in order to approve an AIU. Without it, approvals are delayed.
- Some airports require a **picture of the exterior of the aircraft** in order to approve an AIU.
- Some pilots who had completed the forms to request an AIU left Mexico **believing they had received an AIU** when all they had was the request form (they are all in Spanish).

One always has to look for a bright side to things, and the one bright side of this new procedure is that it resolves an issue that had plagued the old Multiple Entry Permit which expired on December 31, 2023.

Aircraft operators who entered Mexico with a Multiple Entry Permit who had an AOG at the end of December or who wanted to spend New Years in Mexico could face severe fines if they did not remove their aircraft from Mexico before their permit expired. **With the new AIU, you always have a 180 day window for its use with multiple entries during that time.**

What now?

At the present, there is a lot of **confusion, frustration and miscommunication** at all levels within the AFAC as well as at airports and FBO's in Mexico. The implementation of the AIU approval procedures will remain in flux while AFAC headquarters, regional comandantes and airport comandantes address the issues and come up with a better way to handle this.

In the meantime, **expect some turbulence ahead** – have pictures and LOPA's, expect to have to pay multiple times for AIUs if you travel to different airports in Mexico and expect possible delays. **The good news** is that the beaches are still nice, the food is still delicious, the people are still friendly and the beer is still cold.

Santa Maria HF – Unauthorised Transmissions

Chris Shieff
17 April, 2024

An OPSGROUP member recently reported they experienced **extended interference** on Santa Maria Radio (HF frequency 11309). They were unable to use it for nearly ten minutes due to a continuous broadcast in a foreign language.

This was reported directly to Nav Portugal, and the member was kind enough to share their response with the group. Here is what they had to say.

Unknown Broadcasts

The Radio Supervisor did report **significant voice interference** on the same day for a period of nearly twenty minutes. It didn't coincide with the time the member's aircraft was inside the Santa Maria FIR, but they were quick to point out this may mean it hadn't been reported yet.

In other words, this is likely not an isolated issue.

Nav Portugal advised that in the past twenty-four months, they've observed **increasing levels of interference** on the HF frequencies assigned by Santa Maria. These are often caused by voice transmissions, but have also included radar signals – essentially 'pinging.'

These have been confirmed to originate from Eastern Europe, and the Middle East.

There is no evidence the broadcasts are malicious

While they seem to emanate from regions of high political tension, there are no indications the broadcasts are an attempt to impede the communication of air traffic.

They are simply an inconvenience. Nevertheless, they are occurring in one of the largest FIRs on the planet serving hundreds of flights per day, a number of NAT tracks, and traffic in and out of the Azores.

So, it is important to know what to do if you encounter this on your next crossing.

I don't care, I have CPDLC

It's true that CPDLC services are available to all FANS 1/A equipped aircraft in the Santa Maria FIR (logon LPPO).

But look out for this chestnut, from Santa Maria themselves…

…attention is called to flight crew that the use of data link services do not exempt the requirement of establishing voice communications with Santa Maria Radio at or before the FIR Boundary, whether on HF or VHF, even if a CPDLC connection is established…

So HF interference begins to matter for everyone, when outside of VHF coverage.

Try the other line

Your next option is the ol' sat phone.

Santa Maria's contact information is listed in NAT Doc 003, but to save you some time, their Inmarsat short code is **426305**, and the direct dial for the supervisor is **+351 296 820 401**.

There are also alternative HF frequencies listed in the attached document. As a general rule, **lower frequencies work better at night, and higher during the day.**

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Appendix B-5 - SANTA MARIA Radio Station Information

Station Name:	Santa Maria Radio
Country: Portugal	**State:** Santa Maria - Azores
City: Vila do Porto	**Geographic Location:** 36°58´21N025°09´54W
Transmitter site(s) location(s): Cabrestantes (36°59´44N025°10´14W)	**Receiver site(s) location(s):** Faneca (36°59´44N025°07´48W)

Frequencies

Family	Frequency bands								
	3 MHz	3.5 MHz	4.7 MHz	5.6 MHz	6.6 MHz	9 MHz	11.3 MHz	13.3 MHz	18 MHz
A	3016			5598		8906		13306	17946
E	2962				6628	8825	11309	13354	
H		3491			6667				

Contacts

AFTN Address: LPAZYSYX	**Aircraft in Flight Address:** LPAZZZZX
SATCOM short code number: 426305	
Station Manager	**On Duty Supervisor**
Post Address: **Name:** NAV PORTUGAL APARTADO 47 AEROPORTO SANTA MARIA 9580-909 VILA DO PORTO **Phone:** + 351 296 820 509 **Fax:** **Email:** **AFTN/SITA** **Address:** LPAZYFYA	**Post Address:** NAV PORTUGAL APARTADO 47 AEROPORTO SANTA MARIA 9580-909 VILA DO PORTO **Phone:** + 351 296 820 401 **Fax:** + 351 296 886 045 **Email:** smaradio@nav.pt **AFTN/SITA Address:** LPAZYSYX
Remarks: Santa Maria radio is collocated and is a department within Santa Maria OACC. Backup receiver site is also located in the vicinity of Santa Maria OACC.	

NAT Doc 003 - HF Guidance (EN) - Edition 3, Amd 0.docx

If ionospheric propagation floats your boat, we're not here to judge. You can read more about it here.

Phone a Friend

If you're not satvoice equipped, and you can't reach Santa Maria Radio directly – what then?

In the first instance, attempt to **raise a nearby aircraft on 121.5 or 123.45** who can relay your position report for you.

Or you can try and contact adjacent ATC oceanic sectors – namely Shanwick, Gander, New York Oceanic or Piarco. Nearby radar units may also be able to assist too – Lisboa, Canarias, Sal or Madrid Controls.

Failing that, you're into the **lost comms procedure.** You can find that here.

Here's a quick sheet the team previously put together…

Keep Reporting

If you encounter HF frequency interference, it is important that you **report it.** The more detail the better – including the UTC time, position, altitude, duration and any other identifying details. It's likely you're not the only one who will encounter the problem.

We'd also love to hear from you too – you can reach us on team@ops.group

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Secret Overflight Requirements in Antigua

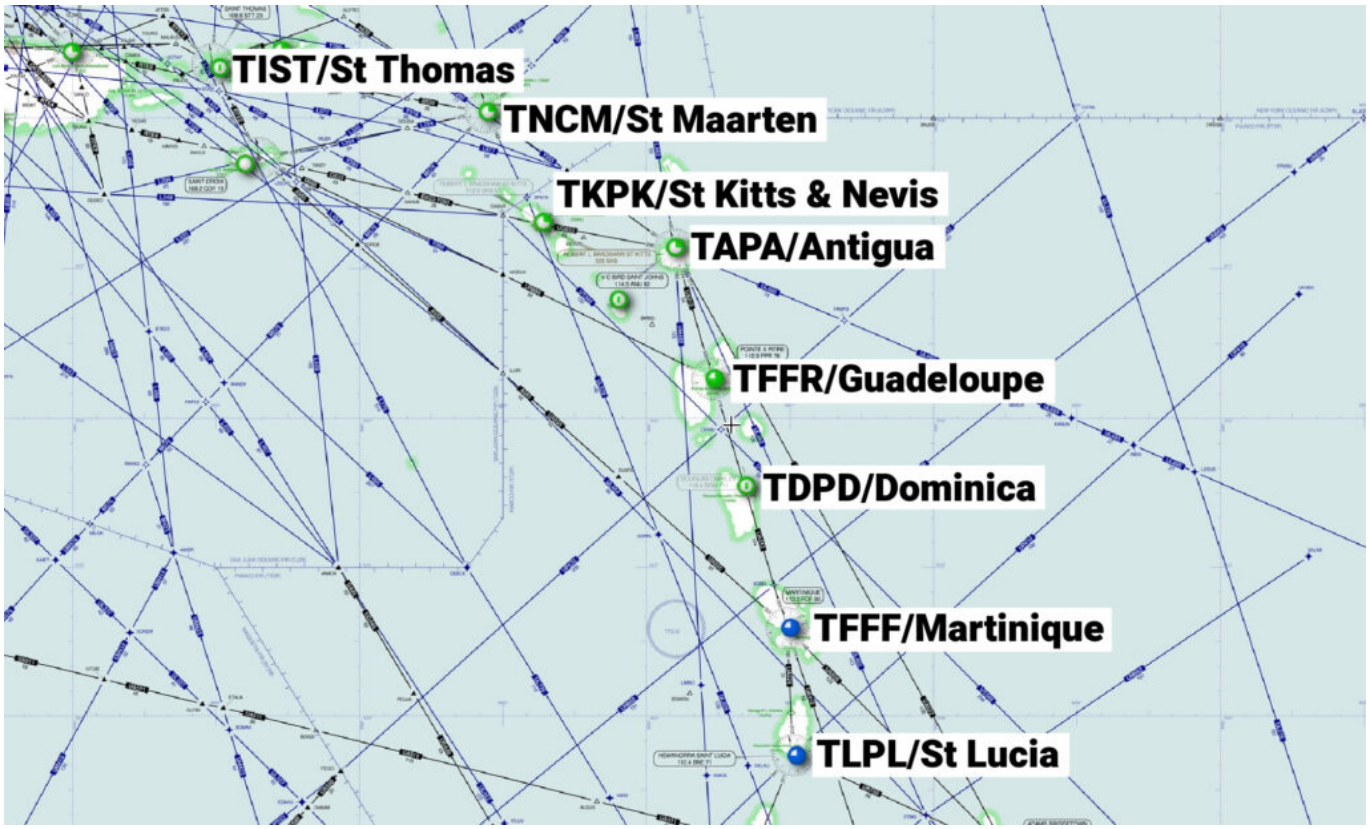
David Mumford
17 April, 2024

There's a secret Antigua overflight requirement that's been going on for a while but is still catching some people out.

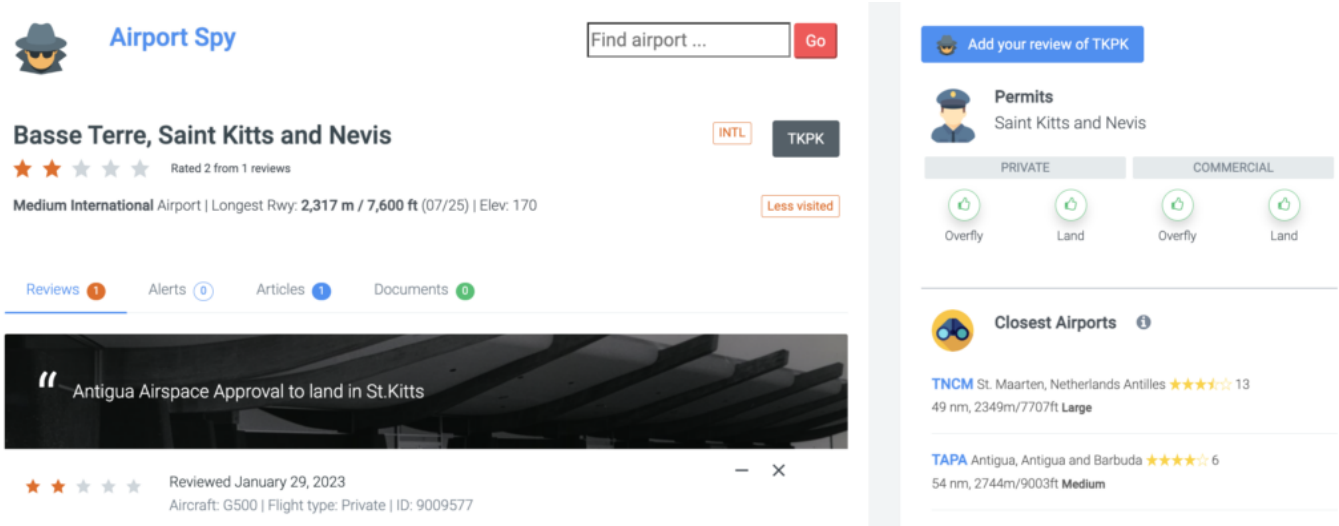
If you enter the Antigua TMA/TCA (the airspace around Antigua up to FL245), you'll need to apply for a "cross-border permit". Without it, they won't let you enter the airspace!

If you're headed to TAPA/Antigua airport itself, you don't have to do this – you just get billed when you land. **You only need it for any flight through this airspace below FL245.**

So this is going to **mainly affect flights to TKPK/St Kitts & Nevis airport, as well as low-level flights between islands in the region** – the likes of St Maarten and the Virgin Islands in the northwest, down through Guadeloupe, Dominica, Martinique, and St Lucia in the southeast.



As one OPSGROUP member reported – *"Inbound to TKPK we were asked for the Antigua airspace permit. Apparently this is new so we did not have it and got a reroute of about a 100NM, it almost caused low fuel situation. Be aware!"*



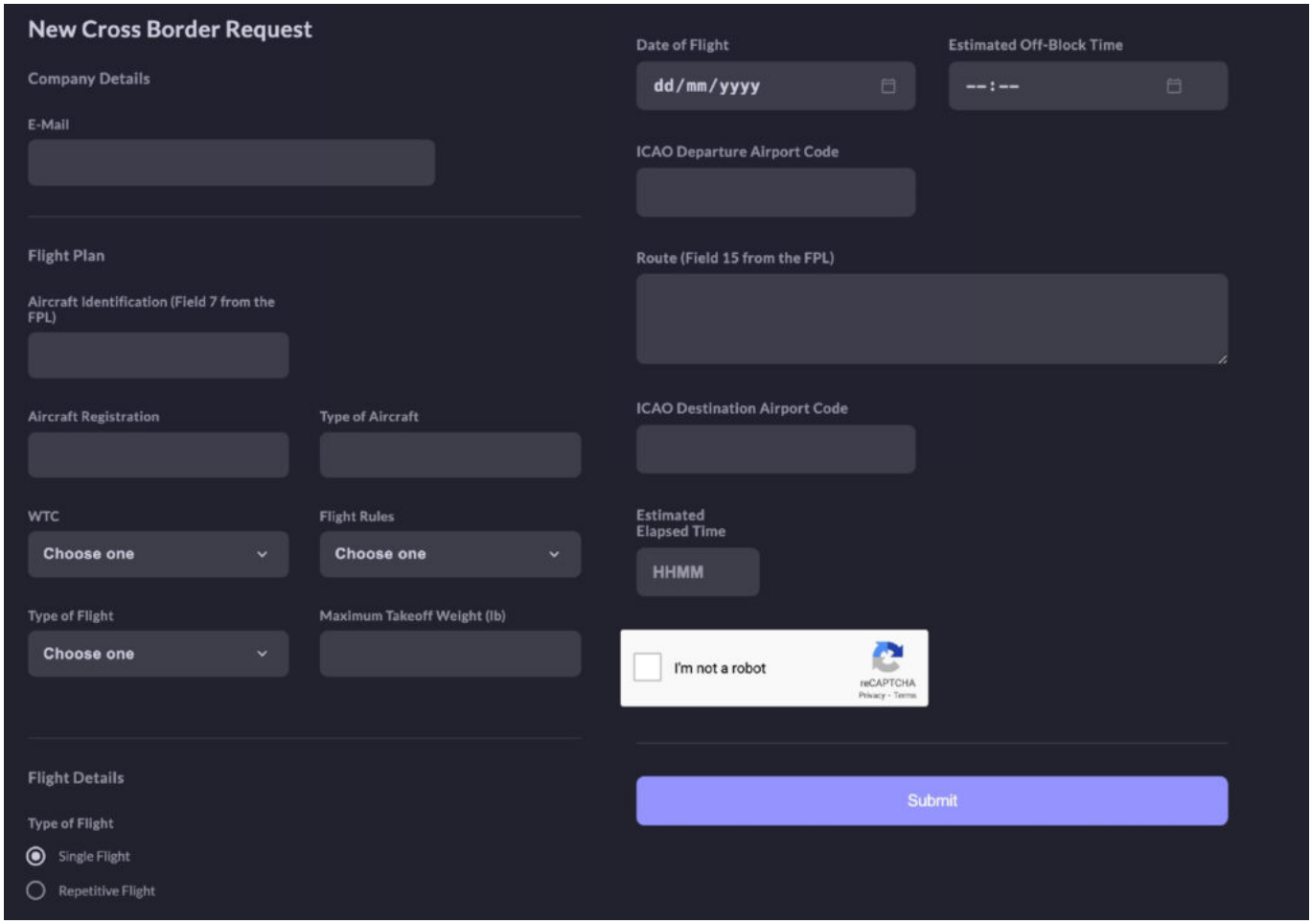
You have to apply online at the vcbirdats.com site **at least 6 hours prior to the flight.**

Fees depend on aircraft MTOW, as a long-since deleted TAPA Notam explains:

```
Up to 5,000 pounds - 25 USD
5,001 to 10,000 pounds - 35 USD
10,001 to 15,000 pounds - 45 USD
15,001 to 25,000 pounds -55 USD
```

```
25,001 to 50,000 pounds - 65 USD
50,001 to 100,000 pounds - 80 USD
100,001 to 200,000 pounds - 95 USD
200,001 to 300,000 pounds - 110 USD
300,001 and over - 125 USD
```

On the vcbirdats.com site, you will need to register an account. If you're not an airline, you won't have an IATA code, so just use "00" as the code making the account. You will then you'll be presented with a screen that looks like this:



One intrepid Opsgroup member who tried this out said that after they submitted all the info for the cross-border permit it was **issued instantly via email.** Just make sure that on the permit it says the callsign or tail number so ATC joins the two when approaching the airspace.

It's worth noting that this cross-border permit is **not actually an overflight permit** – it's basically just the fees you have to pay in advance for Nav and ATC. In this neck of the woods, *real* overflight permits are not required. For landings, only scheduled and charter flights require landing permits. For these, contact paula.fredrick-hunteab.gov.ag for Antigua, and foreigna@sisterisles.kn for St Kitts & Nevis. (Unless you know some better email addresses than these – in which case, let us know!)

And if you've been to the region recently, **please file an Airport Spy report** so we can share the info with everyone else in the group!

Airspace Risk Update – Important Changes You May Have Missed

Chris Shieff
17 April, 2024

While operational news has been quiet for the start of 2024, some important changes to airspace risk have been gracing the OPSGROUP news feed in recent days. Here's a brief summary of what you may have missed...

Syria

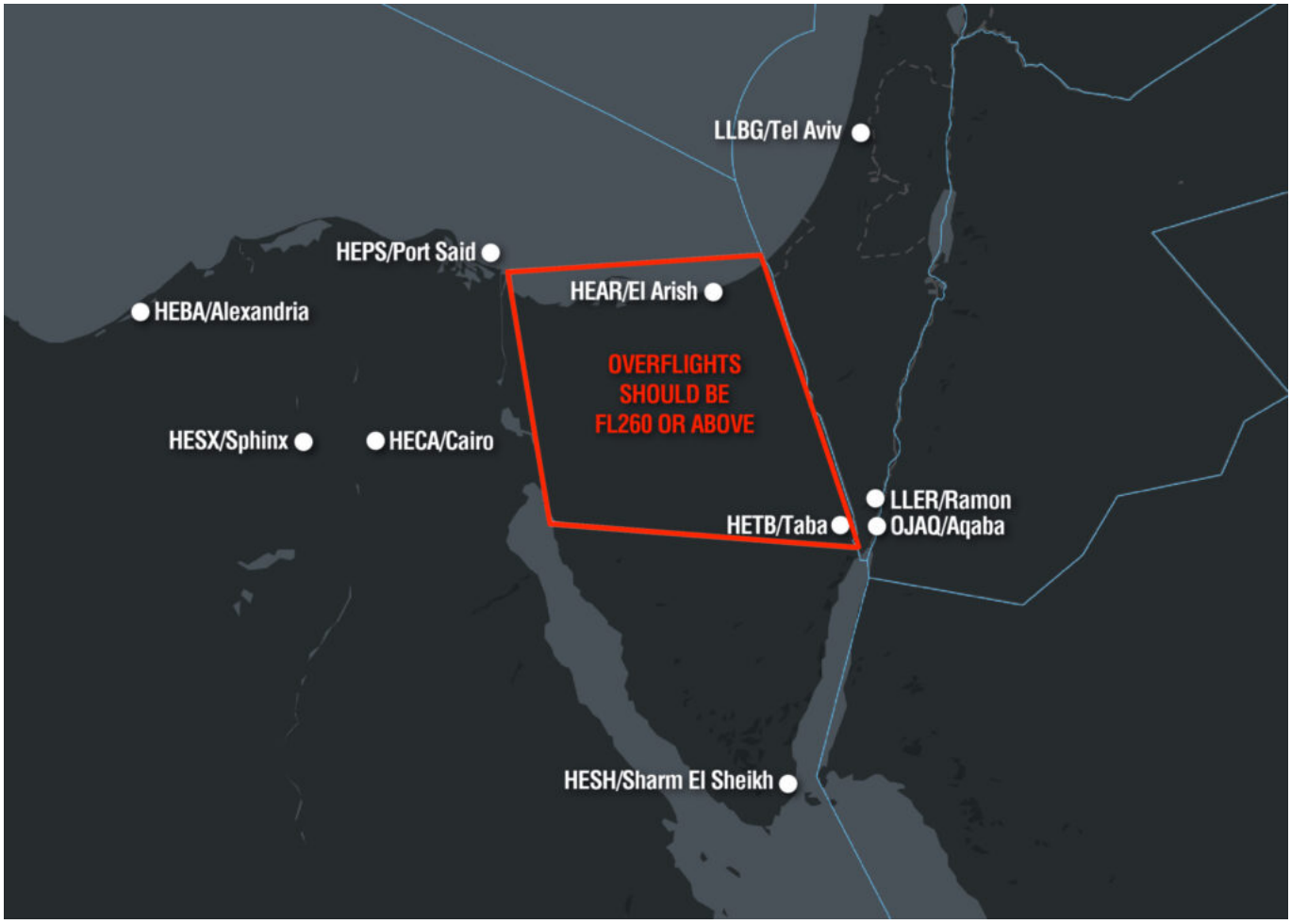
The FAA has **extended its ban** on US operators entering Syrian airspace (the **OSTT/Damascus FIR)** by a full five years. The new SFAR expires in 2028.

And with good reason – it is an **active conflict zone.** There are multiple risks to civil aviation there at all levels, including the very real threat of coming under fire from Syrian air defenses.

In addition to the US flight ban, several other states maintain active airspace warnings for the region. Almost no traffic overflies Syria – give it a wide berth. The updated SFAR 114 provides some updated background info on the airspace. Safeairspace.net also has a useful briefing.

Egypt

EASA has **withdrawn** its Conflict Zone Information Bulletin (CZIB) for Egypt – and we're not really sure why. These CZIBs are largely based on what airspace warnings other countries have issued, and the UK and Germany still have active airspace warnings for Egypt – both countries **advise against overflights below FL260** in the northern part of the Sinai region.



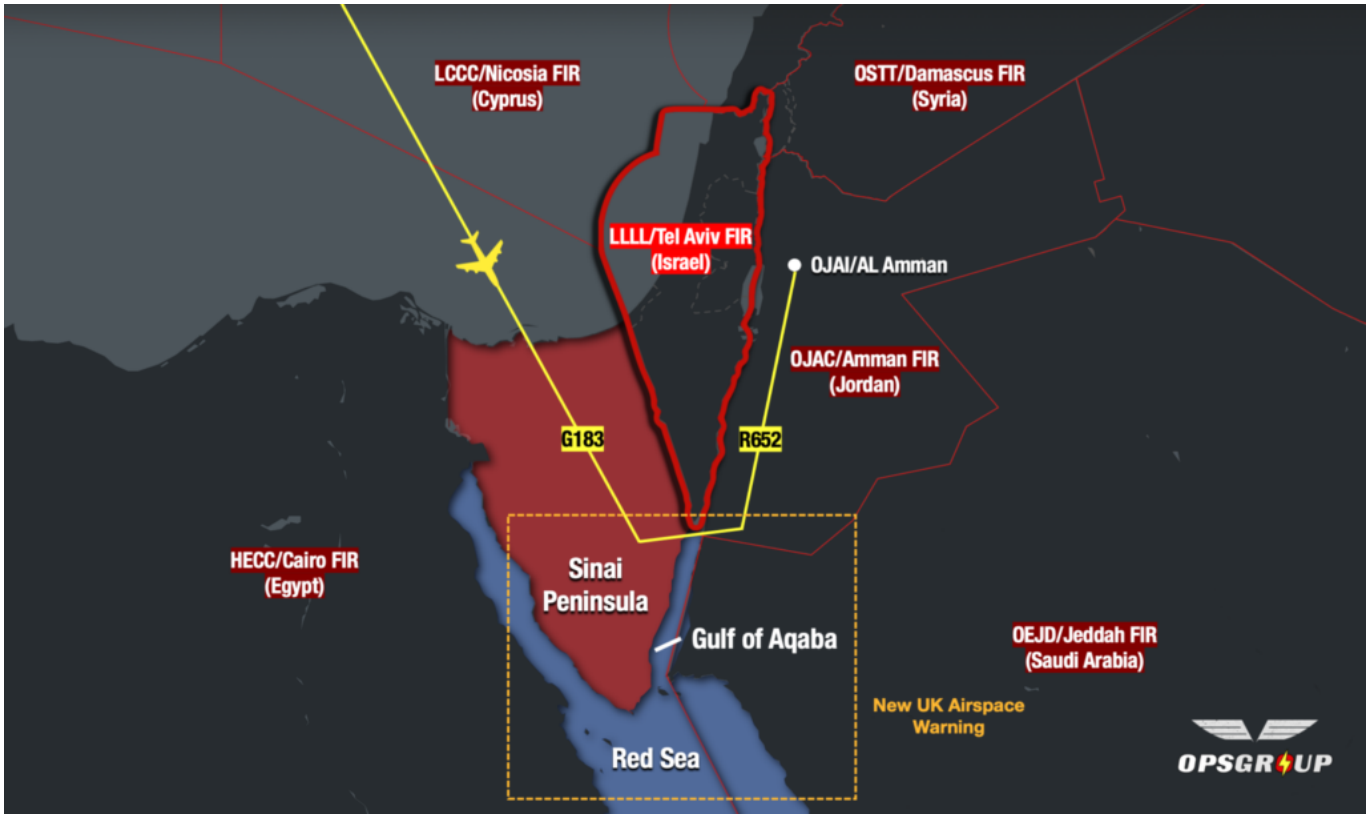
HEAR/Al Arish airport in particular near the Egypt/Gaza border has been identified as a **potential terrorist target** due to its use in humanitarian efforts. And since November 2023, the UK has been warning of risks to aircraft operating over the Red Sea due to military activity (more on that below).

Bottom line, we're not seeing a reduction in risk. **If anything, the threat to aircraft has likely escalated**.

The Red Sea

Sporadic drones and missiles continue to be intercepted in the **Southern Red Sea** by foreign militaries. On January 9, the largest single attack yet happened with over twenty-four shot down by US forces in the area. This represents a **significant increase in risk** for civil aviation. The culprits are Houthi rebels in Yemen who are typically targeting western vessels, or Israel itself.

Back in November, the UK issued a new airspace warning due to these types of events. The threat is typically low level (below FL160) but the frequency of these occurrences is a major concern. Some OPSGROUP members have already reported **flying longer, alternative routes to avoid the area.**



The primary risks to overflights are from misidentification or mis-targeting. The military air defence equipment present is advanced, and capable of reaching all levels.

The Middle East

Iran has published a whole bunch of Notams under the **OIIX/Tehran FIR** code warning of 'gun firing and military exercises' between Jan 8-12 in the Strait of Hormuz. This is the sea **just north of Dubai**.

The areas where this will be happening are very close to overwater airways in the adjoining **OMAE/Emirates FIR** which get heavily used by **flights heading from Europe to Dubai airports.**

The US has a longstanding warning to **avoid these airways nearest to the OIIX/Tehran FIR whenever possible**, to reduce the risk of miscalculation or misidentification by air defence systems – good advice, especially for this period of time.

Taiwan

There was some panic on January 9 when a presidential **missile warning** was issued by authorities for Taiwanese airspace. It was the first time this has happened.

It was later clarified that this was due to the launch of a Chinese satellite (not a missile) and posed a minor debris risk. Taiwan is on the eve of a **major presidential election** – and tensions with China are high.

There appears to be a renewed level of military posturing from both sides which can increase the risk of mistaken identity – especially in the Taiwanese air defence identification zone (ADIZ) if proper procedures are not followed.

These are known risks but are worth reviewing. Some sources are suggesting an **escalation is possible this year**, which carries the risk of a new and dangerous conflict. In this case, regional overflights would be heavily affected. We'll continue to monitor the situation closely.

GPS Spoofing in the Black Sea

We're continuing to receive frequent pilot reports of significant GPS spoofing events in the busy southwestern corner of the Black Sea.

In some cases, this has carried the threat of an **unintentional deviation into Russian or Turkish airspace without a clearance.**

Reports have been received from various aircraft types on different airways, and have included a **complete loss of all navigation capability**, transponder functions or nuisance EGPWS warnings.

So far manufacturers and aviation authorities have been slow to react to this emerging threat. Although some type-specific guidance has been issued, the universal mitigator remains **disabling GPS before entering an area of known spoofing.**

An important reminder – IRS systems are not immune to GPS interference. **By the time you identify spoofing, it may be too late to rely on them alone.** We've written about this topic extensively – read all about it here.

Updates

We continue to monitor for signs of changing airspace risk. We report these changes on safeairspace.net and via alerts issued to OPSGROUP members.

If you know or hear something, please share it with us. You can reach us at team@ops.group. We'd love to hear from you.