

EASA Fuel Rules: A Picture Book

OPSGROUP Team

18 July, 2022



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

Here's my favourite.

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

Back to the EASA riddle.

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

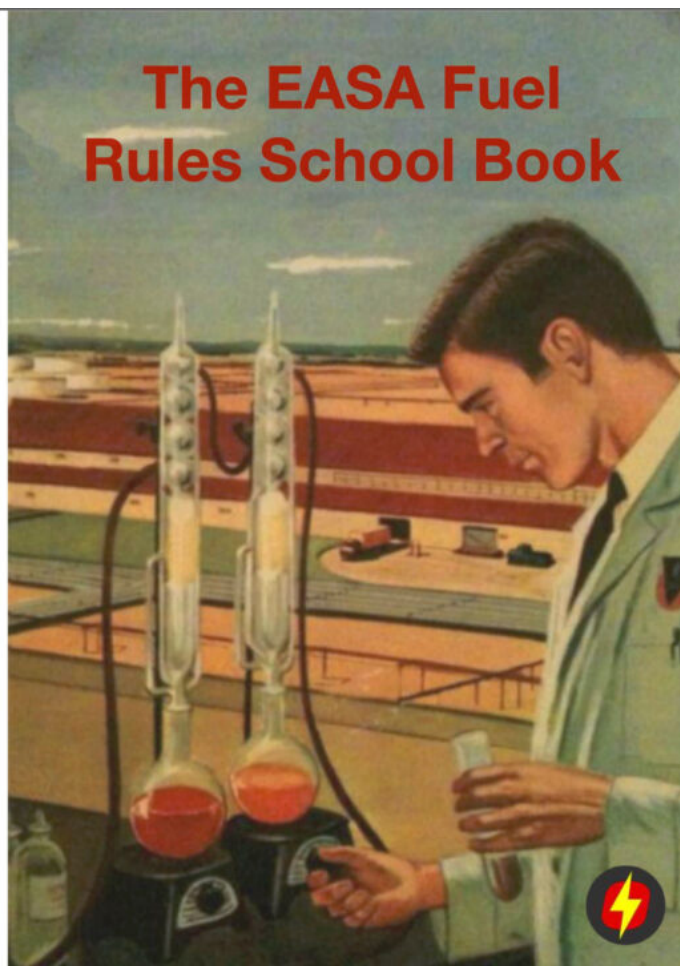
We have taken what (we think) we know, and have made a book. Well, a PDF actually which you can download [here](#).

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

OPSGROUP

An Opsgroup Textbook

By The Opsgroup Team



Probably should say 'By EASA' too really.

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

If you prefer, try this "Book" version ...

What it is.

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

What it isn't.

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

Think you've spotted an error?

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

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

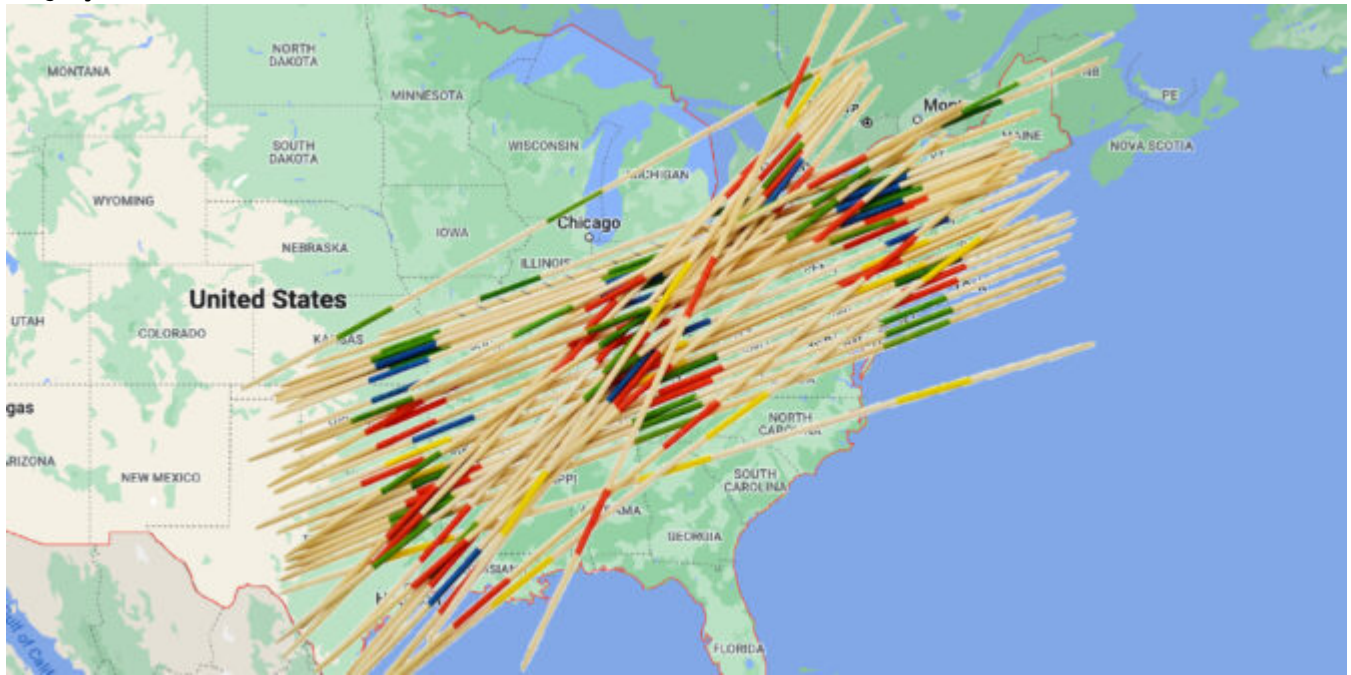
If you want more (official) info, then check out the Webinars EASA has recorded on it all here.

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

The FAA Northeast Corridor Atlantic Coast Routes Project

OPSGROUP Team

18 July, 2022



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

Where are we talking about?

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

The Airports:

- KBWI/Baltimore Washington
- KIAD/Dulles
- KDCA/Ronald Reagan
- KHEF/Manassas
- KADW/Joint Base Andrews

- KPHL/Philadelphia
- KEWR/Newark
- KTEB/Teterboro
- KLGA/La Guardia
- KDOV/Dover Air Force Base
- KWRI/McGuire Air Force Base
- KCHS/Charleston
- KJZI/Charleston Executive
- KATL/Hartsfield-Jackson
- KRDU/Raleigh-Durham

What's changing?

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

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

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

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

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

Tell me the specifics.

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

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

What does it all mean for folk flying there?

It means much more **efficient ATC** as it will help reduce their workload, and also the messiness of the current route structure. This means time and fuel savings for the operators operating in this region, as well as increased safety!

What has happened so far?

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

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

So what do you really need to know?

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

Where can you go for more info?

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

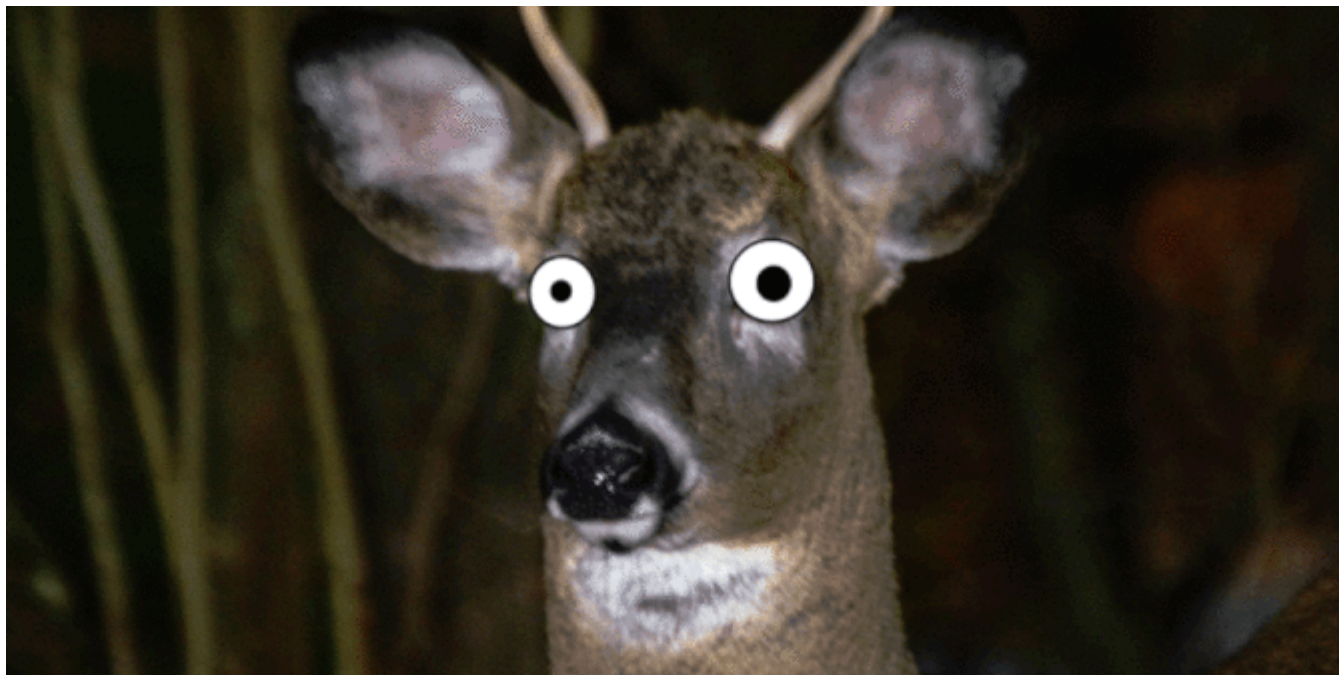
And here is some other stuff on NAS changes like the Northwest Corridor.

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

ARTCC	Name	Phone	Email
Boston Center	Terry Drew	(603) 879-6808	terrence.drew@faa.gov
	Dennis Tennett	(603) 879-6668	dtennett@natca.net
New York Center	John Higgins	(631) 468-1373	john.higgins@faa.gov
Washington Center	Adam Searcy	(386) 235-5220	adam.searcy@natca.net
	Chris Porta	(703) 771-3443	christopher.l.porta@faa.gov
Atlanta Center	Dwayne Copley	(770) 210-7707	billy.d.copley@faa.gov
	Kevin Condon	(770) 210-7960	kevin.w.condon@faa.gov
Jacksonville Center	Andrew Day	(904) 477-7305	zjxoapm@gmail.com
	Ross Gibson	(904) 845-1768	ross.gibson@faa.gov
Miami Center	Dave Petersen	(305) 716-1782	dpetersen13@hotmail.com
	Andre Ferguson	(305) 716-1783	andre.a.ferguson@faa.gov

Go-Arounds Aren't Normal

Chris Shieff
18 July, 2022



Go-arounds are often described as *routine*. And the guiding principle is that we should be ready to execute them safely, accurately, and immediately on every approach, and without hesitation.

It sounds good on paper, but this expectation is among a myriad of niceties we tell ourselves that all competent pilots have covered. And I'm not sure I agree.

For starters go-arounds *aren't routine*. They're just not.

We know this to be true. On average, a long-haul pilot will do one every five to ten years.

Secondly there are the reasons behind them. Weather related go-arounds tend not to be the ones we're struggling with. Why? Here's one suggestion – because when conditions are marginal, we are ready for it – we've briefed it, we believe it may happen. Our brains are *primed* for action.

But what about when we're not expecting it – when we're not primed? When the weather is good, the airplane is on rails and sign-off is within arm's reach. Are we as prepared then?

Incident histories are littered with **go-arounds gone awry**, and they often have a major trend in common – the crew *weren't ready* for them. Because the reason for the go-around was unexpected, it *wasn't routine*.

And when we encounter a non-routine event, we become fallible to limitations that all pilots possess in times of surprise or emergencies. Enter our 'inner ape.' It's hard to tame, so when we have an emergency we fall back on one particular mantra. **Ape repellent, if you will – 'aviate, navigate, communicate.'** The idea is to break down an overwhelming situation into manageable chunks.

So why then are we failing to apply the same idea to unexpected go arounds?

A healthy dose of 'deer in headlights' might be the answer. It's no secret that when we are surprised, **our brains stop** for moment. It is hard wired into us from the days when we were running away from woolly mammoths.

Our instinct is to act now, and think later. And those big ol' TOGA switches are a huge trigger. Once we push them, it's on. We are bombarded with rapid fire mode changes, oodles of thrust, noise, configuration changes, high nose attitudes, and typically we're going up faster than a fart in a bath.

Our brains can switch into overload mode – there is too much information coming at us and too fast to **stay ahead** of the airplane, or even with it.

Here's a couple of scenarios to mull over – how would you manage your airplane?

- You're instructed to go-around above the published missed approach altitude.
- ATC instructs you '*caution traffic 1 o'clock 2 miles. Cancel published missed, maintain 1500', turn left heading 180 degrees, expect visual circuit.*'
- The pilot flying is about to bust through your missed approach altitude, but isn't responding to you or ATC.

Had we not briefed the missed approach as routine, along with the runway lighting, expected taxiway turn-off and our parking bay, we might be more prepared. But the evidence is suggesting that we're not.

Our approach to go-around training, along with other abnormals, needs to focus on the **unexpected**, the *non-routine*. The industry has already discovered that we learn less when we know what is coming in the sim, and that the real world is rarely as forgiving.

Danger Club returns!



We're starting the conversation at sunset. **Almost dark.** A French Bee A350 is landing in Paris Orly, after an 11 hour flight from SFO. Almost home. But 3 miles out, the machine says "**WINDSHEAR**", and the flight goes from routine to *go-around circus* in about 10 seconds.

The F/O checks out. Startled and frozen. The captain is now single pilot, but doesn't know it. The airplane doesn't know it either, so keeps flying- busting the altitude, heading for departing traffic. **But nobody's flying it.**

Here's your challenge: park any judgement on the crew at the door. Step inside DANGER CLUB, and ask, with your curious-raccoon-mind: "How could this happen to me?"

This is where we might start, but we don't know where we're going with this one ...

- > Go-Arounds ain't always easy (even if they tell us they should be)
- > How bad can startle be?
- > How do we get ourselves back in the game?
- > Was this all the Captains doing? (Even if the report focuses on the FO)
- > Do we HAVE to go-around right away?

That's where we start ... this Thursday, July 14, at 1730Z.

Will you join us, curious raccoon?

- > The (very readable) accident report is [here](#).
- > Also, there is an excellent - as always - video from Mentour Pilot about the whole incident. Highly recommend!

EASA All Weather Ops Changes: Part I

OPSGROUP Team

18 July, 2022



EASA are bringing in new "All Weather Ops" stuff and like usual, they've published the up-and-coming changes in an online document that is harder to wade through than a murky swamp, during monsoon season, filled with hungry hippos.

So we've tried to wade through it a bit for you. Full disclaimer, we might have missed a *hippo* or two, which is why this is Part I...

You can read it yourself if you want to.

The full 330 page draft document is on the EASA website, along with a 2 hour webinar involving all stakeholders. So if you really want to, go have a listen.

We don't particularly recommend it though. It's not that their '*Holistic Rules Making Tasks*' aren't super interesting, or that hearing what the aerodromes are doing to implement isn't gripping stuff, but **a lot of it won't apply to you** and you'll have to try and work out what does and there is a lot of blue highlighting fog to find your way through.

So instead, if you read on, we have actually done most of it for you.

But before we get to that...

Before we get into the specifics of what you really need to know, here is a '*quicker than a fly with a jet pack*' summary of what is going on.

EASA are taking a 'Total System Approach' to AWOs. Currently airports have equipment, airplanes have equipment, there are no real standards between the certifications of each. Plus, runway suitability really should be determined by aircraft type because trying to define what is *regular, irregular, suitable, not suitable* doesn't really work unless you're thinking about what the aeroplanes can actually do...

So, a Total System Approach has been taken to create a regulatory framework that fits for everyone. A one-size-fits-all (and hopefully looks good on everyone) pair of lovely AWO unisex pants.

- On March 30 the **aircraft equipment manufacturers** got filled in
- **Aerodromes** will be from August 1
- Then from October 30, **Air Operators and all the flight crew licensing stuff** will have its 'entry into force'. Which sounds very Star Warsy but basically mean you'll probably want to have read about it all by then.

What are we reading at the moment?

We are reading the **New CS-AWO Issue 2**. It is divided into three subparts. Subpart A has all the info on the 'Enabling Equipment' (ALS, HUD, EFVS, SVGS, CVS...) and Subparts B and C basically contain the performance requirements and airworthiness type stuff.

The (very basic) idea

The (very basic) idea is aerodromes won't change – their existing equipment already pretty much works for this. You (the operator) can check out the new AWOs and look at your aircraft equipment, and look at the performance specs and work out what you can do where *allweatheropswise*.

90% of airports basically fit with this already. Of the remaining 10%, if you've been operating safely into them already then you're going to be able to sort out some "grandfather" rights to keep operating into there. All the rest (ie if its a totally new route) you'll need to get talking to your aircraft manufacturer equipment provider folk to get approval.

What does it mean?

It means for smaller operators, and especially ones who don't have CAT II/III approval it should be a lot easier for you to operate into places during nasty weather conditions.

It also means a lot of those gadgety bits and bobs you might use are now going to be included in it making permissions to use it much easier.

OK, so October 30 - What do you need to know?

If you're an operator then we think these are the questions you'll want to be asking (and the new AWO stuff will hopefully be answering for you):

- What equipment do I have?
- What do I want to do with it?
- Does it meet the performance specifications?
- What do I need to do to get the approval?
- What training does my crew need?

If you're a pilot then these are your recommended questions:

- Where am I going?
- What are the new limitations and regulations (in terms of DH, RVR etc)?
- What occurrences do I need to report?

The answers

Sorry! We don't have them for you (yet)! But we reckon if you're heading into this then do so with these questions in mind, and watch this space for our 'answers' once we get that far with it.

If you have answers then email us at team@ops.group and help us out.

Safety used to be SEXY

Mark Zee
18 July, 2022



You know those Safety magazines I'm talking about, right?

The ones that sit in the corner of the crew room.

The ones that literally nobody reads, but might be useful to scribble on, kill a fly, or jam a window open.

These ones.



They all look the same, right?

What you probably **don't know**, is they are all the same because they are all put together in the same place.

This place.

This is Aviation Safety Publishing Ltd. They are in the south-east corner of the Croydon Business Park (between Wendy's and Push Pilates). Their Company Number is 2713662 and their VAT No. is GB444553891.

Each month, the creative team gets together in the "Lindbergh" conference room. There's free (drip) coffee and donuts (the dry supermarket ones). It's a good time.

"Shall we do something different this month?", asks the intern. After a moment of silence and some side-eye, everyone has a good laugh and gets back to selecting the airplane type for the front covers. The meeting is wrapped up by eleven. Back to the desks.

It's been the same since 1990. That's when computers came along and ruined everything. Before that, pilots actually read safety magazines. Instead of "What airplane goes on the cover", the editors asked a different question: **"How can we make this engaging and actually get pilots to read this stuff"**?

That's weird, huh: in the old days, **the safety people cared whether or not pilots read it!**

They had (actual) creative meetings. They had artists, and cartoonists, and designers. They pushed boundaries. They weren't afraid to use humour, swear words, and satire. They weren't even afraid to make it **actually sexy!**



Now, chill. I'm not saying this is a perfect example. Stripes are very 1950's. But let's have a look at some of the artwork and artistry from the pre-1990 era of aviation safety!

That feels different, doesn't it?

Could it be, that if we are brave enough to **think differently** about safety, that we might get more pilots reading the very important messages that we want them to?

Here's the thing. If **safety is SEXY** (my byword for engaging, exciting, attention-grabbing, and attractive), then it cannot feel sterile, corporate, empty, and aloof. And these are the reasons I don't read the 2022 magazines.

But in the past, the whole vibe was different. It's light, it's easy, it's fun. When I read that "olden days" safety magazine, it makes me want to **participate**. I want to read the articles, enjoy the art, and get involved. I'll pass it along to a colleague. I'll leave it on the flight deck for the next person.

These days, the only reason I'd leave a safety magazine for the next person, is for that fly I didn't manage to swat before we landed.

Further reading

- A treasure trove of **old-time safety magazines**: Air Force Safety (but make sure to read the pre-1990 ones!)
- A **trove** (minus the treasure) of present day ones featured in the image:
 - FAA Safety Briefing (June 2022, PDF)
 - Airbus Safety First (2013, PDF)
 - Vector – CAA NZ (Winter 2022, PDF)
 - RAF Air Clues (2021, PDF)
- **Office pictures** are in fact from Steve Algren, view the story [here](#).

Hong Kong: New Runway Opening

Chris Shieff
18 July, 2022



In Honkers, things are about to change. The airport's shiny new **northerly runway (07L/25R)** will become operational on July 8 – earlier than expected. Although there will still be some restrictions on its use.

AIP SUP 6/22 (an 111-page 'über-sup') which literally swallowed a bunch of other smaller sups, was published back in April with everything you might want to know about the new runway.

Now that you stand a pretty good chance of actually using it, let us help you out by hand-picking some of the more vital 'need-to-know' info to keep you out of trouble.

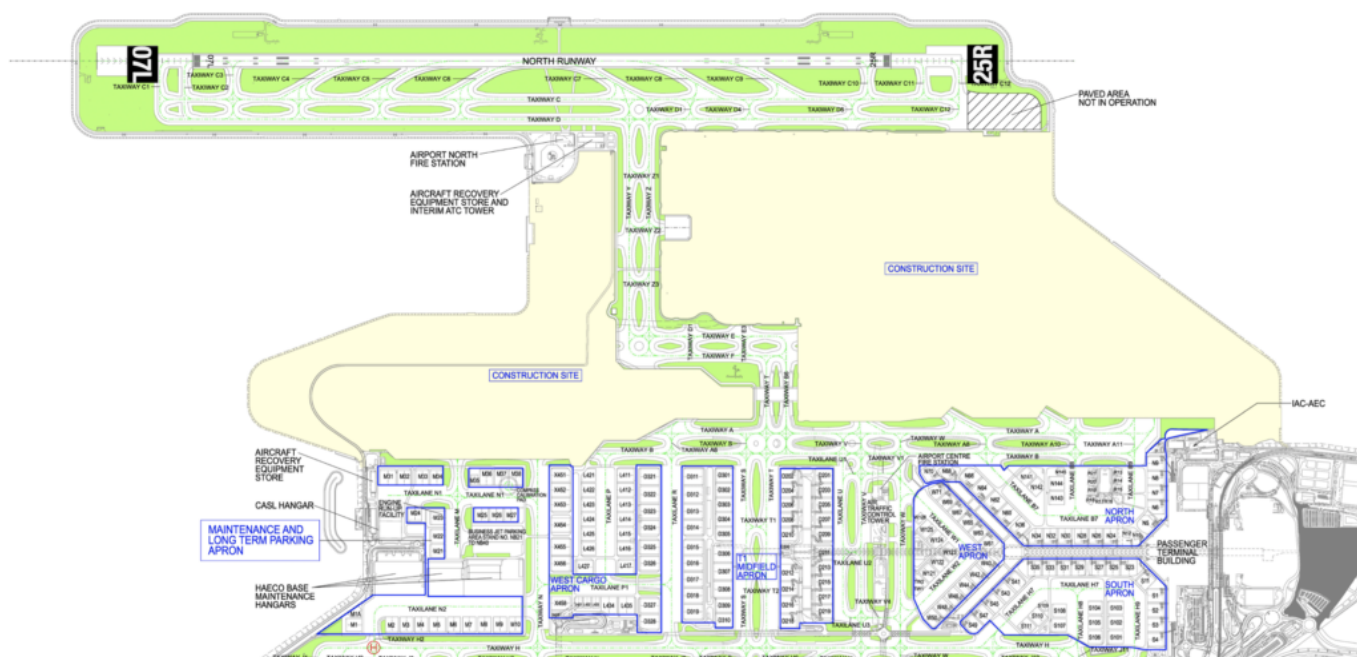
The basics.

The recently constructed 07L/25R is 12,467' (3,800m long) and 197' (60m) wide.

There are ILS/LOC approaches at both ends. There are also RNP (AR) approaches, but as their names suggest, you'll need **prior approval** to shoot those.

Runway 07L is also equipped with **CAT II** goodies (25R is CAT I only). A big head's up though – you need to get permission from HK authorities to conduct low viz ops at VHHH *before* you get there. There's a form to fill out, and of course you'll also need to provide evidence of your state-issued approval (OpSpec C060 for US operators).

As you would expect, along with the runway will be a bunch of new taxiways too. The layout is quite straight forward:



The new 'normal' configuration.

The new runway (07L/25R) will normally be used for arrivals, while the southerly runway (07R/25L) will be used for departures. When winds are light or easterly, expect to land on 07L for noise abatement which is preferred.

Squashed in the middle is 07C/25C. It will be **closed** from July 7 until further notice, but recalled if another runway becomes blocked.

Keep an eye out for routine closures for maintenance, which may reduce the airport to single runway ops at quieter times. The weekly schedule for those closures has been published in this (much more bite-sized) SUP.

Watch those 'fly-overs.'

There are new RNAV SIDs and STARs for 07L/25R. Tracking is straight forward, but the major thing to look out for are **fly-over waypoints**. They can be lost a little in the noise of a chart, but if there is a circle around a waypoint, turn-anticipation is a no-no. Make sure the fly-over is correctly coded in your FMS. There are also speed restrictions to keep your turn radius down. The reason for these is to keep traffic well clear of high terrain just a stone's throw away - spot heights within a mile or two of the airport reach as high as 2000.'

Wind shear.

High terrain north of the airport means that in some conditions, wind shear is a real problem.

The new runway is the closest of all of them to those hills, which means it may be the most susceptible.

Be on alert when the wind is from the Northwest through to the Northeast above 20kts, it's going to be sporty - especially if landing on 25R. Carry **fuel** for a comfortable missed approach, and possible diversion.

Bad signals and false captures.

ILS interference has long been reported at VHHH due to the effects of the terrain around it. It can lead to

nasty stuff like **false captures** and **excessive descent rates**. Boeing aircraft are especially susceptible (although don't ask us why). It is often recommended that the LOC is captured first, *before* arming the glide slope. This has been reported on both existing runways, and so it stands to reason the new one (07L/25R) will be no different. Keep an eye on the chart notes for this one. If it happens to you, its really important to report it – there's a form available [here](#).

IFALPA warning...

IFALPA has issued a safety bulletin for the new runway (07L/25R). Due to terrain, the ILS is broken into two parts – an RNAV transition, and the approach itself which are found on two different charts. The bulletin has useful recommendations to **stay on the correct profile**, and to avoid **nuisance GPWS warnings** – essentially slow down and configure early. It's also important not to arm the glideslope before the point TOPUN, due to the risk of false captures.

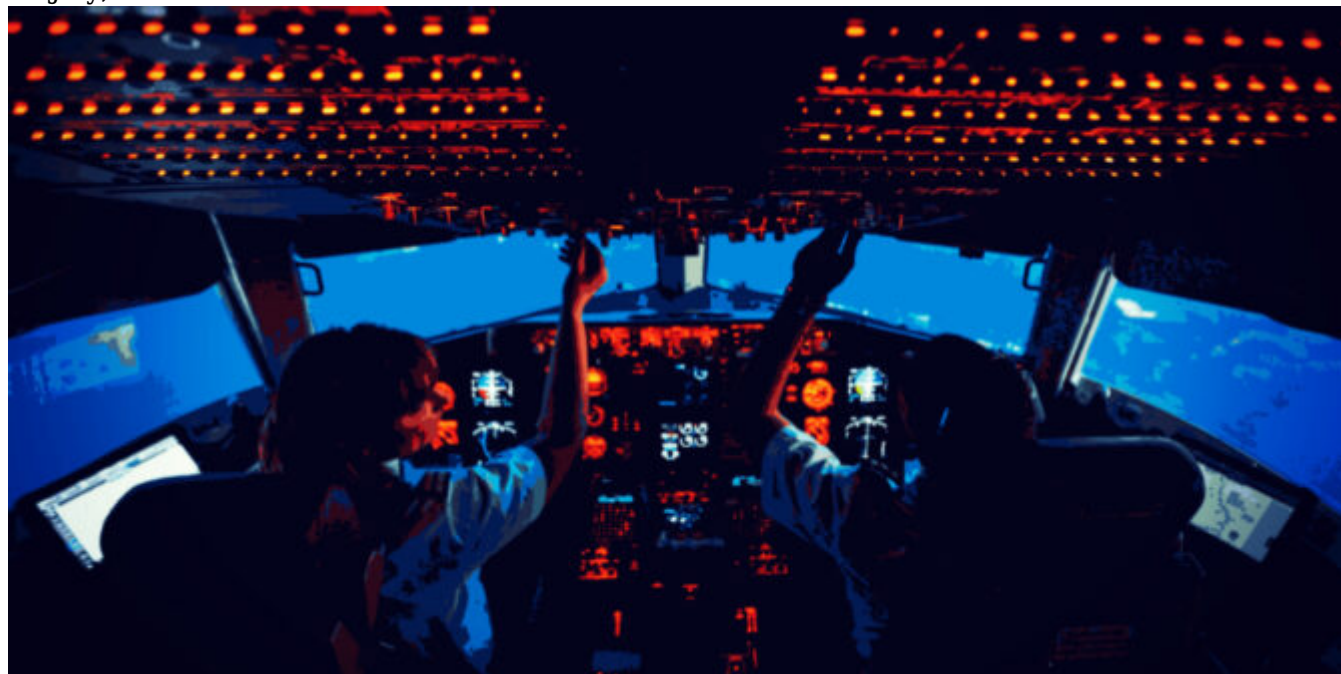
We need your help!

As the new runway configuration gets up and running, we'd love to hear any feedback from operators heading in there. You can reach us on news@ops.group. Or if you'd prefer, you can submit a report to Airport Spy.

The DOs and DON'Ts of Controlled Rest

OPSGROUP Team

18 July, 2022



Fatigue and tiredness are big topics in aviation, and something we definitely need to have more conversations on. *Particularly with some CEOs who are helping add the 'ZZs' into their airlines name...*

But today we are focusing on just one thing: **In-flight rest**. Actually, we're focusing on three things to do with in-flight resting. Basically, the *what to do* in flight when you find yourself in those "*I'm tired, getting tired, think I might get tired, probably should have gone to bed earlier before my flight but now it's too*

late” type situations.

You’re there, in the airplane and are tired, so **what can you do about it?**

It’s not too late.

Actually, it is too late to not get into that position. If we could zoom back in time and somehow sleep better than that would be great, but for obvious reasons (the lack of time machine) we can’t.

Additionally, complaining about being tired, moaning about how your airline pushes FTLs to the limit, preparing a ranting post for PPrune, or lecturing the other pilot (because they’re the tired one) on better sleep management are not going to help.

Why not? **Because they aren’t going to change the fact that right then, sat in that flight deck, you’re tired** and do still have to eventually land the damn thing.

But, good news, it isn’t totally too late to try and fix it. So, here are some things that might help, right then and there:

1. **Take your allocated rest, and make the most of it**
2. **Take some controlled rest (if you’re allowed)**
3. **Some other things which other pilots say also help.**

This isn’t a “treat your body as a temple” post.

If you’re looking for diet tips, exercise info or any of that, move on. That’s not what this post is about. It also isn’t a ‘Let’s learn about sleep science and Circadian Rhythms and Fatigue Risk Management’ post. If you want all that then you can read the ICAO thing on it here.

Allocated rest strategies.

Right, let’s start with these.

These are the **things all operators have to let you do if you fly over a certain length of time.** If you have more than two crew onboard for a flight and one or two of them are referred to as **‘augmenting’ crew**, then you can take some allocated rest.

How you take it depends on the strategies your operator publishes and also what works best for you.

Don’t be *that* captain that hogs the entire cruise for themselves. Not cool. The aim here is to split the rest fairly (doesn’t always mean evenly) between the crew. **The focus is on making sure the operating crew are best rested** because they’re the ones who are going to have to land the airplane. So most recommend they take the last rest period, and **wake up about an hour or so before landing** so they’re fresh and ready for it.

Now, to get these really right, you do need to plan it before you even get on the airplane because you’ll need to manage your sleep, think about those timezones and all that joyous stuff. We’ve posted some pretty generic ones for you.

If you are reading this for the first time and work for an airline or operator that uses different strategies and you like ‘em, then tell us about them! We won’t share your info, just the strategy details to help others.

'How to do it' - generic strategies

- Make sure the **temperature** is set to something normal
- Think about your **liquid consumption** before hand because having to go to the bathroom halfway through will be annoying
- **Don't watch a movie** or play on your phone, this won't help
- **Don't keep checking the time.** Also won't help

To be honest, these are all fairly common sense 'how to sleep better 101' facts so I'm going to stop there, and instead move onto the '*my allocated rest didn't work/ isn't for hours/ I don't get any and I'm really, really tired*' section.

My allocated rest didn't work/isn't for hours/I don't get any and I'm really, really tired.

Also known as '**Controlled Rest**'.

Now, I take controlled rest for granted and am particularly good at it, but I realise a lot of places don't actually allow it? Or authorities haven't approved it? This is frankly ridiculous. **If you're doing long flights at weird hours then you're going to get tired** because no brain can overcome the perfectly natural and necessary requirement to sleep.

Which is why **controlled rest should be allowed** and if it isn't, get onto your operator and make them let you do it. I will add that it does need to be done properly though. There are some times when it isn't appropriate.

Times when controlled rest isn't appropriate:

- When you're about to land
- When the other pilot is also taking it
- When there is something going on that probably needs the attention of both pilots like a huge section of stormy weather up ahead, or anytime you're in Chinese airspace, or if something has broken on the airplane that's quite important...

There are also **ways** to do it.

First of all, don't wait until your head is bouncing off the MCP from repeated micro naps. You want to start it when starting to feel snoozy. Having some caffeine before hand is also a good idea because this starts to kick in around the 30 minute mark which means when you wake up, you hopefully won't feel even more dreadful.

Different operators have different rules and methods, but the ones I know are these:

- **Let the cabin crew know** so they don't bug you during it
- **Set a time with the cabin crew** where if they haven't heard from the other pilot by, they check in. In case the other pilot has fallen asleep as well
- **The other pilot should wear their headset.** You should turn your speaker up, but only **have 121.5 on** it. That way, if other pilot nods off, you'll hopefully wake up to the bellowing voice of ATC trying to get hold of you

Then get a pillow and blanket, slide your chair back, put your eye mask on, sleep...

Or just rest. **Resting is also good.** Maybe not as good as a full out snooze fest, but it will help. You should be woken up around the 45 minute mark, and take another 15 minutes to get back to fully alert.

Just to be clear, there are a few things the other pilot shouldn't do:

- Also sleep
- Watch downloaded Netflix on their iPad (had this happened to me once)
- Call a cabin crew member in and talk incessantly because they're bored
- Not wake you up if something starts going wrong

The basics, in juicy Opsicle format

The other things you can do

You're in flight, you can't take allocated rest or controlled rest and you're fast approaching exhausted. What other things can you do?

I mean, this feels like common sense again but here we go.

- **Drink coffee. Caffeine helps.** But don't drink so much you're constantly having to go to the toilet because that gets annoying for everyone else.
- **Stand up and stretch them limbs out.** A good old stretch and walk around can be invigorating
- **Turn the temperature down.** Not too arctic cold, but fresh keeps you more alert

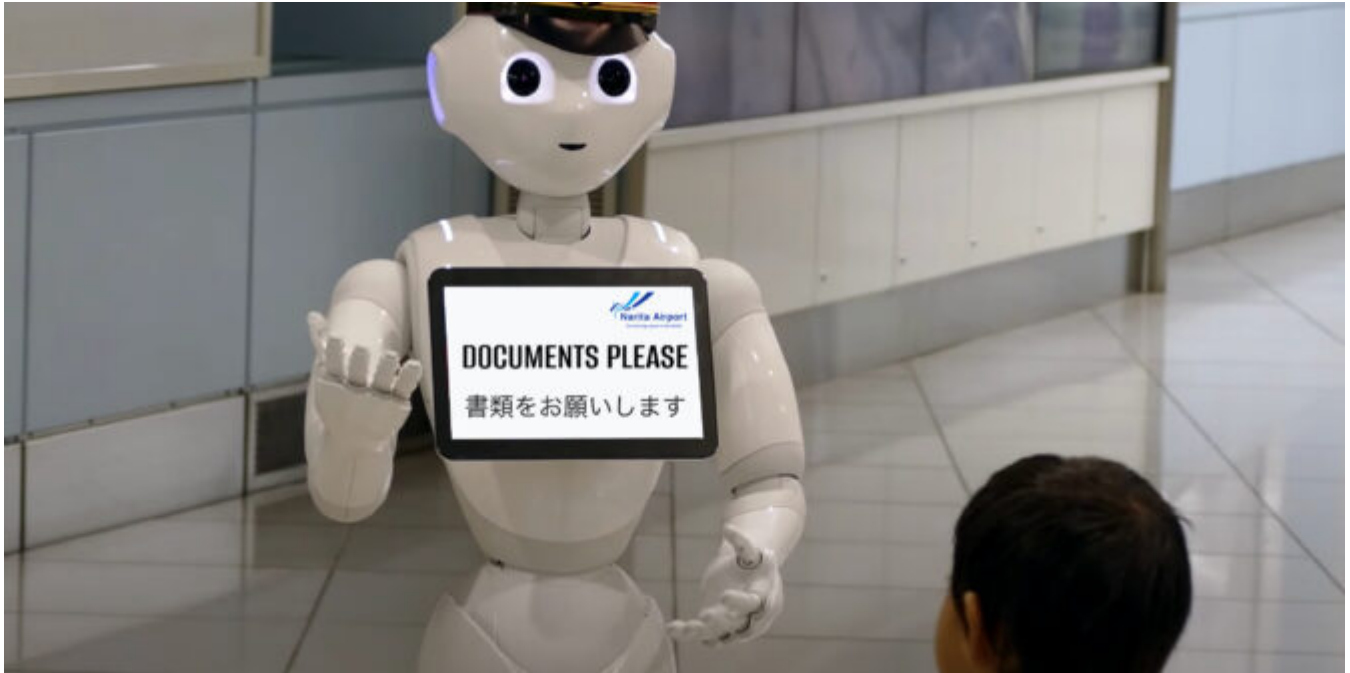
I want controlled rest and my operator says no.

They suck. To help convince them here are some more resources.

- A thing on it from FlightSafety.
- Some more on it from us that we wrote before.
- A pretty shoddy looking presentation, but its by some clever folk at NASA, talking about controlled rest.
- Our email address - so your operator can send in their questions and concerns about it, and we can tell them how foolish they're being.

Declassified: New Crew Rules in Japan

Chris Shieff
18 July, 2022



On June 13, **crew entry rules** were eased – under certain conditions, you **no longer have to isolate** in your hotel room. It's great news for layovers – icy cold Asahi beer and delicious gyoza await.

The problem is where to find that information. The guidance online is all for passengers. So, we reached out to a local agent, who provided us with an 'Administrative Circular' recently issued by Japan's CAA with all the rules just for crew.

But for some reason, **we are not allowed to share it**. Why? We're not sure – it is apparently top secret. Before it becomes mission impossible and self-destructs, here is a rundown of what it contains. But you'll have to take our word for it...

Blue, Yellow and Red

Japan has broken the world's countries down into three categories – yep you guessed it, the colours above.

Countries and Regions of each category

	Asia and Oceania	North America	Latin America	Europe	Middle East and Africa
RED	Pakistan, Fiji			Albania	Sierra Leone
YELLOW	India, North Korea, Kiribati, Cook Islands, Samoa, Sri Lanka, Solomon Islands, Tuvalu, Tonga, Nauru, Niue, Nepal, Vanuatu, Bhutan, Brunei, Viet Nam, Marshall Islands, Macao, Micronesia, Maldives		Antigua and Barbuda, Uruguay, Guyana, Cuba, Grenada, Suriname, Saint Christopher and Nevis, Saint Vincent and the Grenadines, Saint Lucia, Dominica, Trinidad and Tobago, Nicaragua, Haiti, Bahamas, Barbados, Venezuela, Belize, Peru, Honduras	Andorra, Ukraine, Uzbekistan, Kazakhstan, North Macedonia, Cyprus, Kosovo, San Marino, Georgia, Tajikistan, Turkmenistan, Vatican, Belarus, Portugal, Malta, Moldova, Liechtenstein	Angola, Yemen, Egypt, Eswatini, Eritrea, Oman, Cabo Verde, Gabon, Gambia, Guinea, Guinea-Bissau, Kuwait, Comoros, Republic of Congo, Democratic Republic of Congo, Saudi Arabia, Sao Tome and Principe, Syria, Zimbabwe, Sudan, Seychelles, Equatorial Guinea, Senegal, Somalia, Chad, Central African Republic, Tunisia, Togo, Turkey, Namibia, Niger, Western Sahara, Palestine, Burkina Faso, Burundi, Botswana, Mali, Mauritius, Mauritania, Libya, Liberia, Lesotho, Lebanon
BLUE	Indonesia, Australia, Republic of Korea, Cambodia, Singapore, Thailand, Taiwan, China, New Zealand, Papua New Guinea, Palau, Bangladesh, East Timor, Philippines, Hong Kong, Malaysia, Myanmar, Mongolia, Laos	Canada, United States of America	Argentina, Ecuador, El Salvador, Guatemala, Costa Rica, Colombia, Jamaica, Chile, Dominican Republic, Panama, Paraguay, Brazil, Bolivia, Mexico	Iceland, Ireland, Azerbaijan, Armenia, Italy, United Kingdom, Estonia, Austria, Netherlands, Greece, Kyrgyz Republic, Croatia, Switzerland, Sweden, Spain, Slovakia, Slovenia, Serbia, Czech Republic, Denmark, Germany, Norway, Hungary, Finland, France, Bulgaria, Belgium, Poland, Bosnia and Herzegovina, Monaco, Montenegro, Latvia, Lithuania, Romania, Luxembourg, Russia	Afghanistan, United Arab Emirates, Algeria, Israel, Iraq, Iran, Uganda, Ethiopia, Ghana, Qatar, Cameroon, Kenya, Côte d'Ivoire, Zambia, Djibouti, Tanzania, Nigeria, Bahrain, Benin, Madagascar, Malawi, South Africa, South Sudan, Mozambique, Morocco, Jordan, Rwanda

The rules you need to follow depend on where you have been in the past fourteen days – the **most restrictive country** applies.

Blue Countries:

This includes the US, Canada and much of Western Europe. If you haven't been outside the list of blue countries, you will only need to provide a Covid test that is **less than 72 hours old** – more on that in a moment.

There is no need to provide proof of vaccination.

Yellow Countries:

Many South American, Caribbean and Eastern European countries fall into this category.

If you've been in one of these, you will need the same test as above with the additional requirement of being **triple vaccinated** – yep, all three jabs of an approved vaccine.

Red Countries:

There's only a few of these. At the time of writing, just Pakistan, Fiji, Albania and Sierra Leone .

Unfortunately, if you have been in one of them, you will need to **isolate** in the hotel in addition to all the other requirements.

What Covid tests are accepted?

You can view the list in full here, which of course includes the gold standard PCR test.

The biggest gotcha is that **rapid antigen tests** (the super easy ones you can do at home) are not allowed. They are what are known as 'qualitative' antigen tests, and Japan has said no bueno. 'Quantitative' antigen tests are allowed, but they are not the same thing.

Here's a little graphic that might help you get your head around which tests are okay for entry. Some of the details are in Japanese, but effectively the ones on the left in are okay, the ones on the right with crosses are no good.



日本入国時に必要な検査証明書の要件（検体、検査方法、検査時間）

※ 有効な検体、検査方法等が記載された検査証明書のみ有効と取り扱います。

<有効な検査証明書として認められる要件>

<有効な検査証明書として認められない主な例>

検体

- Nasopharyngeal/Nasopharynx/NP (Swab/Smear)
- Rhinopharyngeal/Rhinopharynx (Swab/Smear)
(鼻咽頭ぬぐい液)
- Nasal Swab (鼻腔ぬぐい液)
※Nasal Swab (鼻腔ぬぐい液)は核酸増幅検査のみ有効
(Anterior nasal/nares)
- (Deep throat)Saliva (唾液)
- Nasopharyngeal (※) (and /, /+)
- oropharyngeal(throat) (swabs /smear)/NP&OP
(鼻咽頭ぬぐい液・咽頭ぬぐい液の混合)
(Naso and oropharyngeal/Rhino and oropharyngeal/oro and nasopharyngeal (※))
(※)Nasopharyngeal/Nasopharynx/Rhinopharyngeal/Rhinopharynx)

- × Oral (swab/smear) (口腔ぬぐい)
- × Throat (swab/smear) (咽頭ぬぐい)
- × Gargle Water (うがい液)
- × mixture of sample "A" and "B"
(「鼻咽頭ぬぐい液と咽頭ぬぐい液の混合検体」を除く、
複数箇所から採取した検体の混合検体)
(なお、“A”、“B”は検体を指す)

<Example>

- × Nasal and throat (swab/smear) (鼻腔・咽頭ぬぐい)
- × Pharyngeal and nasal (swab/smear) (咽頭・鼻腔ぬぐい)
- × Nasal and oropharyngeal/oropharynx (swab/smear)
(鼻腔・口腔咽頭ぬぐい)

検査方法

- 核酸増幅検査
Nucleic acid amplification test (NAAT)
 - ・ PCR法 (real-time (RT-)PCR、(RT-) PCR、Q-PCR、Fluorescence-PCR、Multiplex-PCR)
 - ・ LAMP法 (LAMP、RT-LAMP)
 - ・ TMA法
 - ・ TRC法
 - ・ Smart Amp法
 - ・ NEAR法 (例：ID-NOW®)
 - ・ Next generation sequence(次世代シーケンス法)

- 抗原定量検査
Quantitative antigen test (CLEIA/ECLIA)

- × Antigen (test/kit)
(抗原検査)

- × Rapid antigen (test/kit)
(迅速抗原検査)

- × Antibody (test/kit)
(抗体検査)

※日本で無症状者への検査として推奨している検体・検査方法。

※日本で無症状者への検査として推奨されていない検体・検査方法。

検査時間

- 検体採取が
出国前の72時間以内

- × 結果判明が
出国前の72時間以内

※今後、国内外の状況に鑑み、上記取扱いを変更する可能性があります。

参考：新型コロナウイルス感染症（COVID-19）病原体検査の指針第5.1版 (<https://www.mhlw.go.jp/content/000914399.pdf>)

A word about vaccines too.

Any **vaccine certificate** must be issued by the government, or other official source. In either English or Japanese is fine.

You need to have received one of the following:

- Pfizer
- Astra Zeneca
- Moderna
- Janssen
- Bharat Biotech
- Novavax

In some cases, a single dose counts as two. You can also mix vaccine doses. More on that [here](#).

I don't meet some of these requirements - can I still go?

Yep! But you'll have to isolate in a hotel and use private transport to and from the airport.

Can I present a 'Certificate of Recovery' instead of a Covid test?

It's not mentioned in the official guidance, but local agents advise the answer is no. At this stage, you'll have to stick to the guidelines above if you don't want to isolate.

What do operators have to do?

Effectively screen all crew for **symptoms** beforehand – anyone with signs of cold and flu are not allowed to operate to Japan.

In flight, if someone starts feeling unwell, the operator needs to let the authorities know – the crew member will be tested on arrival. It will then be on the operator to get the rest of the crew tested too.

Just a note though – pilots and cabin crew are considered as being in 'segregated' areas. So there is no need to test a pilot if a flight attendant becomes unwell, and vice versa.

So, there you have it.

Crew are free to enjoy their layovers in Japan, as long as they meet these requirements. It also goes without saying that **common precautions** apply when out of your hotel – including hand washing and mask wearing.

Never washed your hands before? We've got you covered. Here is a detailed 'how-to' video along with some **soothing electric keyboard**.

Still have a question?

Reach out to us on news@ops.group, and we'd be happy to help.

Shush! Keep the Sound Down!

OPSGROUP Team
18 July, 2022



Sometimes, folk who live in and around airport areas get cranky because, well, airplanes are quite noisy. So airports have some methods in place to help reduce complaints – noise sensitive areas, decibel monitoring, night flight restrictions, noise level regulations, and the thing we’re going to look at in this post – **noise abatement procedures**.

Where do we use noise abatement procedures?

Contrary to popular belief **these aren’t just for departure**. You get noise abatement routings, and noise abatement approaches.

These are fairly boring though, and by boring I really mean fairly obvious. A noise abatement routing just doesn’t fly you low over sensitive areas. Noise abatement approaches generally say stuff like *“try and do a CDA”* or *“don’t fly level for more than 2 nm”* or *“don’t fly in with all your flaps dangling out from 10,000”*.

EGLL/London Heathrow has a particularly exciting bunch of rules for the arrivals and approaches (probably because English people really like to complain a lot) if you do want to check these out.

The Takeoff ones

For folk who’ve been around a while, you might remember **TKOF Proc A and B**. Well, forget ‘em. They don’t exist anymore.

Actually, just checked and some random airports do still use these, but most use **NADP I or NADP II** so that’s what we’re going to talk about.

NADP I

Also known as **the “close in” procedure**, this keeps folk living directly next to the airport, and birds and

things happy.

You take-off, **reduce your thrust at 800 feet** (that's above ground level!) then climb at a speed somewhere between **V2+10 and V2+20 to 3000 feet**, at which point you accelerate to your en-route climb speed.

Accelerate smoothly is what it actually says, and as you do it, retract them flaps and slats and any other dangling bits you have hanging out.

NADP 2

The “distant” procedure. Although not that distant.

This one has you take-off and **at 800 feet you clean up** all the sticky-outy stuff, and then you **reduce your thrust** and fly at your **Vzf speed**. Which is probably something near to your minimum clean speed. So climb away at something safe and sensible, until you get to 3000 feet, then accelerate.

Right. You knew that already. So why are we talking about them?

Well, you'd be surprised how many people don't entirely 'get' NABTs. There are a few pointers to consider to as well...

- **The amount of noise reduction gained is going to vary a lot depending on aircraft type.** These are a sort of “fits all” procedures. Which means that just because you think your aircraft is particularly quiet, you shouldn't think you don't have to do them. You do – they're a regulation.
- **However, you can change up your procedure to suit your aircraft** so long as it conforms to the general intent of the procedure – which is to reduce noise! In other words, you can do something else so long as it maximises the noise benefits obtainable from your aircraft.
- **You also shouldn't follow these at the risk of safety.** Obviously, that comes first. Which means if it's mega windsheary out, you can take TOGA and blast the eardrums away of anyone under you if you need to (particularly if you need to in order to avoid crashing on them. They'd probably prefer the noise over that.)

Some questions (and answers).

These are based off genuine questions folk have asked on this subject. The answers are what we'd have given if they had sent those questions directly to us.

V2+10 to 20 knots is too slow and my aircraft will buffet and potentially stall.

No, it won't! V2 is literally called your “takeoff safety speed”. If it's gusty and windy out then you have a margin there anyway. If it's windsheary out then you can disregard the procedure. But no, flying at V2+anything is not going to result in your aircraft stalling.

20 degrees + nose up is uncomfortable for my passengers.

Again, *margin*. You don't have to rocket climb, and you can adjust the procedure for your aircraft type. Just use a little common sense. If you're light and empty and tiny and quiet then do something appropriate.

An engine failure at V2+15 with huge nose up attitude would cause a dangerous yawing motion and stall if you're not on top of it.

Presumably V2+15 is above VMCA? Yes, it is. Which means no, it won't cause a *dangerous yawing motion* and make you stall, unless you don't know how to handle an engine failure. Which you should because we

practice them all the time. Also, surprisingly, this is actually something the aircraft manufactures test.

Departures with larger flap deflections are bad for the flaps.

I checked and there is no flap warranty sticker saying “don’t use me for more than x number of flights or I might get all wobbly” attached to the flaps of my aircraft, or stuck anywhere in the FCOM.

These procedures are designed for a 777 taking off at MTOW, not my little Embraer G-whatever.

Actually, they’re designed to ensure noise limits are met. They are regulatory procedures so follow them, or get something approved in your OM-A as an alternative. A lot of Aircraft Operating Instructions do specify that NABT departures are based on a certain climb rate that needs achieving, for example. So you don’t have to blindly apply NABT I if you can meet the requirements without it.

I won’t be able to meet the climb constraints if I follow the NABT procedure.

It’s unlikely you’re going to find a NABT at an airport that has incredibly horrifying terrain right at the end of the runway. But if there is, the best way over that terrain is going to be to climb at the best rate you can. Which probably isn’t going to be altogether that different from what the procedure requires anyway.

If you really do find somewhere where the NABT procedure will genuinely impact your safety margins, then safety is the priority and you might just want to tell ATC about it before taking off to avoid some hefty fines.

So there we go...

The Opsgroup guide to NABTs. If you’re still unsure then here are some handy references to read:

- Skybrary stuff on it.
- ICAO stuff on it.

The Art of the Threat Based Briefing

OPSGROUP Team
18 July, 2022



Have your briefings become a *“one-size fits all solution serving as a repository for redundant verbal crew crosschecks of highly automated, highly reliable systems”*?

If the briefings at your operation sound a bit like that, then read on for some suggestions on ways you might fix 'em up...

First up, a reminder of why we brief?

We brief because we want to **try to identify anything that might mess up our flight up**, and work out how to stop it before it gets the chance to. That includes identifying anything silly the other person might be planning on doing, so it's good to include them on it too.

The word 'brief' actually means a bunch of things – *of short duration, a set of instructions, underwear* – which all seem fairly appropriate to what we are using it for (underwear being the inner line of support, defence and protection when things get really scary...)

So, what do we want our brief to contain?

We want our briefing to cover **any threats and possible errors** we spot out in the big wide world, and we also want it to involve some ideas on how to mitigate against these.

If you're not sure then we find this list handy. If you say yes to any of these, talk about it:

- Does something feel **scary**?
- Does something look **hard**?
- Does anything seem **weird**?
- Is there a chance you'll do something **stupid**?

And what don't we want it to contain?

- Too much waffle.
- Too much explaining 'how to fly' to the person next to you (they probably know already).
- Stating the obvious or listing SOPs that you both know anyway.
- A plan for absolutely everything possible, including what to do if a Pterodactyl attacks. It just isn't necessary.

Any of these will definitely result in your co-pilot shutting off and not listening even to the bits you do need them to hear.

So how do we do this?

Well, we can play a sort of 'I-Spy' game.

“I spy with my little eye, something beginning with M.”

“Merr.. Muu...Maaa...Mountain?”

“Yes, one point to the co-pilot!”

Or we can be a little more structured about it and **follow a method** which helps remind us of the big stuff

to look out for. We have one to share, which is summed up in the nice tidy acronym: **C-TWO-F-U**. You might like it, you might not. But here it is.

C is for Charts

We probably want to take a fairly close look at these since they are what we need to follow, and they often lay out some of the big threats for us.

Taxi charts, arrival, departure, approach charts... A quick **confirmation of the date** to make sure it is the valid one is important, but after that really you are looking to do two things here:

1. **Look for anything unusual, threatish or dangerous on the charts.** A lot of them include some really useful little notes actually.
2. **It is no good briefing a chart to death if it isn't what you then fly.** A confirmation that what you're talking about is what you've programmed into the box (tracks, altitudes, speed constraints etc) is also important. Think of it as briefing your airplane too.

T is for Terrain

Why does terrain get its own section? Well, because it's big and if you get it wrong it's nasty. **C-FITs (Controlled Flight Into Terrain) are one of the biggest common accident types.** From 2001-2020, CFIT accidents were the second largest category (21%) behind LOC-I (33%).

So, take a look at the terrain and more importantly what it might do to you.

- Turbulence.
- Weird turns required.
- Mega RODs (after you're over it).
- Constraints on the way out. Or the way in for that matter.
- High elevation.
- Climb performance problems.
- Missed approach gradient problems.

But remember - don't just scare the pilot next to you with a list of horrifying 'death threats' - try to explain how you reckon you should deal with it all as well.

W is for Weather

Another big one. **Review it for that specific flight.** No point talking about wind shear if it's a lovely calm day - what would be the point?

It isn't a lovely calm day? Well, whatcha gonna do about it? Which heading do you want to avoid that mega storm? Do you maybe want to run the performance again since the runway is covered in ice?

O is for Operational

You might have covered some of this earlier so don't go re-listing it all again. Here are some ideas though:

- **Aircraft:** Talk about any MELs, CDLs, random or specific procedures you might have to consider for *that flight*.
- **Airport:** Are there any NOTAMs, specific procedures (Noise Abatement Procedures perhaps?), altimeter setting procedures (metric, or low transition alts)?
- **Crew:** Talk about yourselves, any threats there? I like to mention things like how irritable I might be because I didn't have lunch.
- **How you'll fly it all:** Share your autopilot usage plans and stuff like that.
- **Performance:** A good time to check this and make sure you've done it, and you've set it up in the box properly in terms of speeds, flex, all that stuff.

F is for Fuel

Check you have what you wanted and check it's still what you need.

U is for yoU?

I added this in because I thought 'FU' sounded funny. Really this is just a last "any questions?" Or a "anything I've missed that yoU can think of?" moment.

How do we brief?

If we do the briefing out loud then it definitely helps – few of us are mind readers. If you make it **interactive** – well then now you've got two pilots both thinking about it and working it out together. Bonus.

I said it before, a quick reminder again – a good threat based briefing is about **identifying threats specific for that day, for that flight, and then coming up with strategies for preventing them.**

What?: *A steeper than normal approach gradient? Ok, great, spotted it.*

Why?: *That could be a threat to our stabilisation and speed control. So what to do about it?*

How?: *Configure early, get the PM to keep an eye on that speed, be prepared to go-around if it becomes unstabilized.*

Any other methods?

Airbus have recently changed their recommended briefing method and it is now super simple. All SOPs, standard stuff, checks etc are out, and the briefing now follows this format:

PM: Begins the briefing with the general **plan** – runway, SID, stop altitude and any extra fuel

PF: Talks through the general **strategy** – how to get to the runway (including any taxi hotspots), how to fly the SID (use of automation), any Notams or operational stuff to affect it all, and any other relevant stuff specific for that flight on that day.

PM: Raises any **threats** they spot

PF: Talks through how to **mitigate** those threat.

Watch it in action here (and you don't have to be Airbus to use this!)

Brief done!

That's the why, the what and the how...

A decent threat based briefing any time you head in or out of any airport is important. If you've just been there earlier that day, maybe don't repeat the whole thing all over again though.

And what about when you are heading to an airport you are not familiar with? At Opsgroup we like to put together **Airport Lowdowns**. These are briefing aids that you might find handy because they include information from other members (other people who have been there before!) to try and give you a heads up on what to expect.

They are just trying to capture some of those Big Threats that you might want to think about and talk about in your briefings. You can find them in the Documents Library on your Dashboard, but if you want email us and we'll see if we can put together one for you.

Further Reading

- Here's the article on how arrival and departure briefings might not be up to scratch, which sparked the lightbulb for us with our article.

ACARS Oceanic Clearances on the NAT

OPSGROUP Team
18 July, 2022



There is a revised NAT OPS Bulletin that was issued June 14. Bulletin 2020_001 is all about **ACARS Data Link Oceanic Clearances**.

It puts all the procedures for **CZQX/Gander**, **BIRD/Reykjavik**, **ENOB/Bodø**, **EGGX/Shanwick** and **LPPO/Santa Maria** into one spot, instead of having them spread between all the different individual ANSP

NAT OPS Bulletins.

When we compared the old version of the Bulletin with this new one there aren't really any big differences at all. Essentially none, in fact. But since we recently confused ourselves a lot over all things ACARS related, here is a refresher summary of what it says...

Have a read of the intro first

Point 2.2 of the introduction says this:

“The ACARS Data link oceanic clearance service is provided by means of VHF and satellite to ACARS equipped aircraft via communications service providers ARINC and SITA. It should not be confused with FANS 1/A CPDLC.”

(I totally confused these earlier, despite having used both.)

“Operators intending to participate in the ACARS data link process are required to contact their communications service provider and indicate they would like to receive the service.”

So that means the likes of ARINC and SITA.

The Procedures (in short)

1. Put the **ACARS logon** in, along with your flight number and the OCA facility.
2. Make sure you request your clearance at the **right time** (not too early, not too late). Here is the current table of timings:

(This is the only change we spotted from the old one – Gander used to say 90-30 minutes, now it says **90-60 minutes.**)

3. Make sure your RCL has **all the right stuff** in it:

- The OEP (*this means Oceanic Entry Point, not to be confused with OAPs which mean old person*)
- Your ETA for the OEP
- The requested flight level
- The highest acceptable flight level you could reach by the OEP. *This goes in the free text section by putting MAX F123*

4. If you don't get some sort of **“RCL Received” message within 5 minutes** of sending it then you're going to have to use voice instead.

5. Once you get your clearance, **check it well**. That means checking the LATs and LONGs in your FMC. If the clearance doesn't match your flight plan, then both pilots should independently confirm the coordinates and points. If you don't like your clearance then negotiate by voice, otherwise send your CLA (clearance acknowledgement). If you don't have that function, do it with your mouth.

11. FLIGHT CREW CHECKLIST

1	Complete ACARS logon
2	Send the RCL
3	Ensure confirmation message is received
4	If error message received, revert to voice
5	Receive ACARS data link oceanic clearance
6	Confirm call sign in clearance matches the call sign in the flight plan
7	Confirm that route coordinates match the full Lat/Long coordinates in the FMS and on the NAT Track Message (if on the OTS)
8	Send CLA
9	Ensure confirmation message is received
10	If error message received, revert to voice

Some peculiarities with each of the OCAs

Gander

- If you're departing somewhere **less than 45 minutes** from your Gander OEP, then get your clearance 10 minutes before you depart.
- Sometimes you might get an ACARS oceanic clearance before you've even sent the RCL.
- If you fly an aircraft that is **not able to send an RCL**, then you can set yourself up for Gander's special service but need to do it in advance:
 - Get in touch with your comms service provider and NavCanada
 - Put AGCS in item 18 of your flight plan
 - Expect to receive your clearance automatically once you logon

Shanwick

- **You must not enter Shanwick without a clearance.**
- If you're flying between and **Irish and a Scottish airport**, its not very far, so might want to get your clearance before departure.
- You get **2 chances** with Shanwick. If at first you don't succeed (you don't get the RCL received confirmation) then try again.
- If you've left it too late and are **within 15 minutes of your OEP**, you ain't going to get your clearance via ACARS.

Reykjavik

- They don't give clearances via ACARS if you're **departing from an airport in Iceland, Greenland or the Faroe Islands**. Get it from whoever you're talking to on the ground before you go.

Santa Maria

- You don't need an RCL if you're **departing from the Azores**, you'll get it through the (VHF) radio or possibly get a CPDLC route confirmation before you head out into the great blue yonder.

Other helpful stuff in the bulletin

Inmarsat datalink probably won't work above **N82°**. Iridium and HF datalink should.

The flight level in the clearance is not a clearance to climb. ATC need to clear you, and need to make sure you reach it before the OEP. But... if you lose comms then this is the cleared oceanic flight level.

Contacts:

Gander: Robert Fleming robert.fleming@navcanada.ca

Reykjavik: Bjarni K. Stefansson bjarni.stefansson@isavia.is

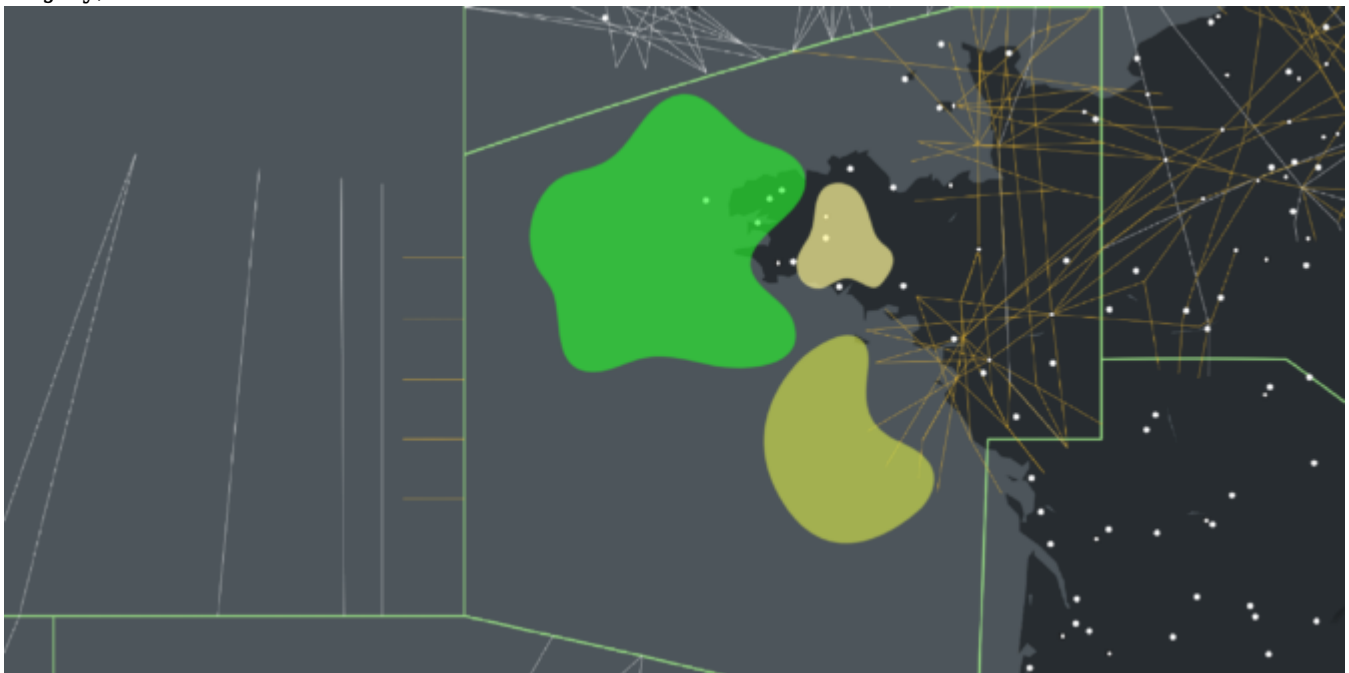
Bodo: Kenneth Berg Kenneth.volden.berg@avinor.no

Shanwick: Iain Brown iain.brown@nats.co.uk

Santa Maria: Jose Cabral jose.cabral@nav.pt

There's a blob of airspace causing issues in the NAT

OPSGROUP Team
18 July, 2022



Why is there a huge blob of restricted airspace (and several smaller blobs too) **right over the spot where folk like to leave the NAT HLA?**

Thanks, France. Their big chunk of military airspace bordering the NAT, that they regularly activate, definitely does cause a lot of planning issues, so we figured we would take a look at it...

What (where) is the problem?

The problem is in the **LFFF/Brest FIR**, which as you can see below borders the NAT HLA BOTA bit. In fact, every exit/entry from the NAT into French airspace is via the Brest FIR/UIR border, so as you can imagine, a **whopping great military danger zone** just the other side of it is going to be a little in the way.

Which is exactly what the problem is.

That big danger zone means when folk submit their flight plans which have them routing over the Atlantic and into France another neighbouring places, they are getting rejected.

Sometimes, an alternative routing option is offered, but the NAT exits are way up on EGTT/London airspace which means **significantly longer routings**, which nobody wants.

There is also a bit of an issue with **the automated Eurocontrol flight planning system**. It doesn't always immediately reject your flight plan – sometimes it waits until midnight so you get a nice message in the morning, not too long before your flight which you now have to replan...

So the military are to blame?

That might not be entirely fair, but it is down to some **active military zones** that most of these route plans seem to not be successful.

The main one we've seen causing trouble is in AIP SUP 045/22, which is valid from **24 March 2022 to 22 March 2023**. Activation of the area is possible H24, and they activate it a lot.

You can find all the **temporary activated areas and timings** here on the French AIP SUP page.

We also saw one from June 15-23. "*Ocean HIT 2022*" uses the same sort of area and **irritatingly coincides with a different exercise (HYDRA) on June 20**. This means poor old EGGX/Shanwick is going to be dealing with most of the crossing traffic that day and there is likely to be a **medium impact for flights**.

What can you do about it?

Not a huge amount really. If the areas are active you aren't going to be able to operate through them. We asked around, and folk said they've been doing **a lot of LIZAD and NAKID routings**. Some folk have reported simply planning higher levels and that's apparently worked.

You can attempt to get inflight re-routings. You can also try these chaps who provide the actual time slots of activation to give you a better picture:

CCMAR ATLANTIQUE Phone : +33(0)2 98 31 82 69 / +33(0)2 98 84 49 57 (backup).

Anything else to know about?

The French and German Navy have been using some airspace in **EGGX/Shanwick** which occasionally gets in the way of some of the Tango routes.

All of the upcoming military exercises in Europe are notified through the Eurocontrol Network Operations Portal.

US: 5G Rollout Near Airports Delayed Until 2023

Chris Shieff
18 July, 2022



Six months have passed since the FAA hurriedly reached an agreement with Telecoms AT&T and Verizon to **delay switching on powerful new 5G antennas near major airports**.

That agreement was set to expire on July 5. And the original concerns haven't gone away - **5G can still interfere with radio altimeters**, and the industry is still scrambling for a fix. If safety buffer zones were to stop buffering at larger airports, where low visibility landings are more common, the impact would have become even worse.

However, on Friday the FAA released its first update since February - and the news is good...

A new agreement

AT&T and Verizon have agreed to **extend the delay until July 2023** to allow the FAA and operators more time to get their ducks in a row.

There is compromise happening on both sides of the deal. While the FAA hasn't gone into the specifics, they have said there is now a **phased rollout plan** to make sure that both sides are kept happy.

The FAA will begin work to identify which airports are safe enough for the Telecoms to start *enhancing* their services there right away, without turning everything on.

On the flip side, there will be **more time for operators of aircraft fitted with radio altimeters vulnerable to interference to replace them, or install special filters**. Regional aircraft are particularly affected by this.

Considering that the first customers are only just now receiving these filters from the radio altimeter manufacturers, the original goalposts were always fairly ambitious.

A new FAA deadline for operators to complete work on their fleets is set for the end of the year, and this time it looks to be firm. The Telecoms are expecting to be let loose at the end of the new deal.

In the meantime

The status quo - existing restrictions will remain in place. Back in January over a thousand Notams (1,478 to be precise) were issued when 5G hit the proverbial fan. Many of them restrict the use of Autoland, HUD to Touchdown, and Synthetic Vision Systems at specific airports. The FAA has also published a guide that explains the different types of Notams and what those limitations mean for operators at various airports.

The FAA has also since provided a number of **exemptions** for more common passenger jets to continue with **low visibility landings**. You can view those through the FAA's handy map [here](#).

Unfortunately, the support for **business jets** has not been as forthcoming. If your aircraft doesn't have an exemption, you'll have to stick to the Notams, which means paying extra special attention to the weather

and alternate planning when it's looking murky out there.

Buffers will also remain in place at several major airports to make sure that low visibility landings can continue without causing major headaches for operators. You can view that list [here](#).

Other things to look at

If you'd like to know more about the problem with 5G networks and aviation in more detail, we wrote a blog article earlier this year that would be a great place to start.

There's also the FAA's official 5G website, where updates like the one above are published.

Get in touch

If you have other questions, we'd be happy to help. You can reach us on news@ops.group.

Big Summer Slots (a Storybook)

Mark Zee

18 July, 2022



This summer is going to be **worst ever in Europe for delays** (so we're told), which means if you're going there you're going to get a **nasty CTOT** sooner rather than later.

So rather than writing a long and helpful blog post to help you navigate the slot rules, instead we've put together a vacuous and infantile story book.

But, it **might still help a little to figure out how NMOC** (the artists formerly known as CFMU) **at Eurocontrol works**, how to deal with a bad slot, requesting improvement, how and when to file, and when you should or should not contact NMOC for help.

Once you've enjoyed (or not) storytime, be sure to scroll down for some more "adult" links to the in-depth

material 



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

If you prefer, try this “Book” version ...

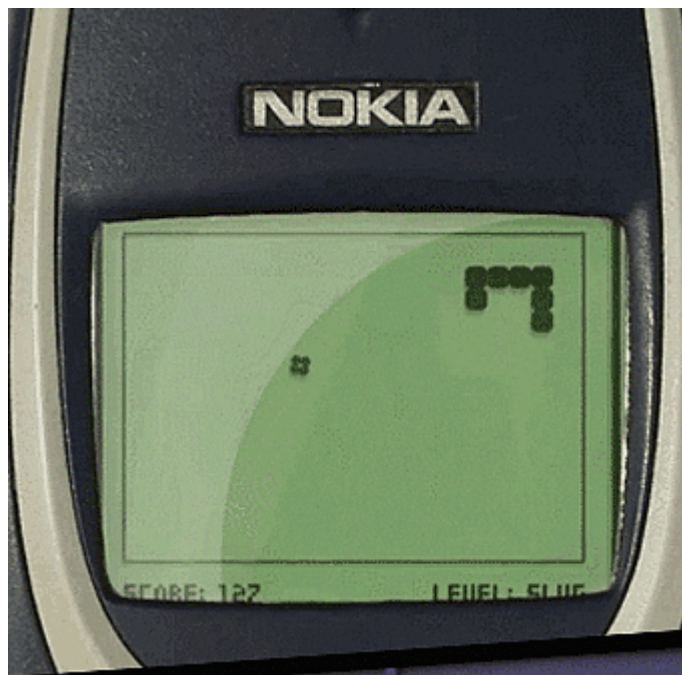
So, onto the adult version... Eurocontrol NMOC have published a **really useful guide to slots** this month, for the Summer of 2022. Download that here as a PDF (31 pages)

For the full bible, you want the IFPS users manual, and the ATCFM operations manual.

Do you have any other useful links or documents about European slots? Tell us! ops.team@ops.group.

Kathmandu got RNP-AR (and so should you)

OPSGROUP Team
18 July, 2022



RNP AR approaches are not your standard stuff. They need special authorisation and training for you to fly them. But it is worth it because these complex looking approaches are generally used in some of the most challenging places, to make your life easier (and safer).

So here is a quick look at them, some insights into why you might want to fly them, and how to sort that out.

What does this acronym mean then?

RNP means Required Navigation Performance. Which is something under the whole 'PBN' thing which basically lets aircraft fly along a nice, precise path with a lot of accuracy.

It's the newer, better version of RNAV that has **performance monitoring and alerting** involved.

You've probably come across it in a bunch of different places and with different numbers after it. RNP 4 over the oceanic and remote spots, RNP 1 on approaches... the number is the **accuracy requirement**. So 4 means accurate to 4nm 95% of the time. Or your system tells you (that's the alerting bit).

AR means authorisation required.

RNP-AR you allowed?

You can **get that authorisation with an LOA** and a bunch of training. In the US this is covered under section 9 of your En-Route / General Rules and Procedures / Holding, Approach and Departure Procedures which you can find here.

The FAA issues RNP AR authorization via operations specification (OpSpec), management specification (Mspec), or letter of authorization (**LOA C384**). There are no exceptions. Operators can find a lot of info on RNP AR aircraft eligibility, operating procedures, and training requirements in **AC 90-101**.

Which (because we're generous with our links) can be read here.

Like anything, it comes down to the equipment you have in your aircraft as well. It requires certain GNSS and an on-board inertial system (IRU/IRS) setup, an FMS navigation with multi-sensor capability (so there is something as a backup to maintain RNP if the GNSS is lost)...

Surprisingly few Bizjets seem to have what is needed. Good news though, companies do offer retrofit options.

So, what does an RNP AR look like?

Well, it should look **accurate to 0.3** (that's about 40m with SBAS), and sometimes even 0.1.

If you're in the US then your RNP AR APCH is probably going to be called an **RNAV (RNP)**. It should have **AUTHORISATION REQUIRED** scribbled somewhere on the chart too because, *you know, you need it...*

You do also get ones for departures too.

Why do we like them?

"An RNP AR APCH (approach) is a procedure that allows for narrow, linear obstacle clearance corridors in the procedure design..."

In other words they **help you get into tough places by giving more guidance** in a more sort of 3D way.

This means they can have some real funky stuff going on in them like swirly turns, RF (radius-to-fixes) and all that sort of stuff. But if you know how to fly them and are allowed to then this is going to save you a whole bunch of woe in some challenging spots.

Like VNKT/Kathmandu...

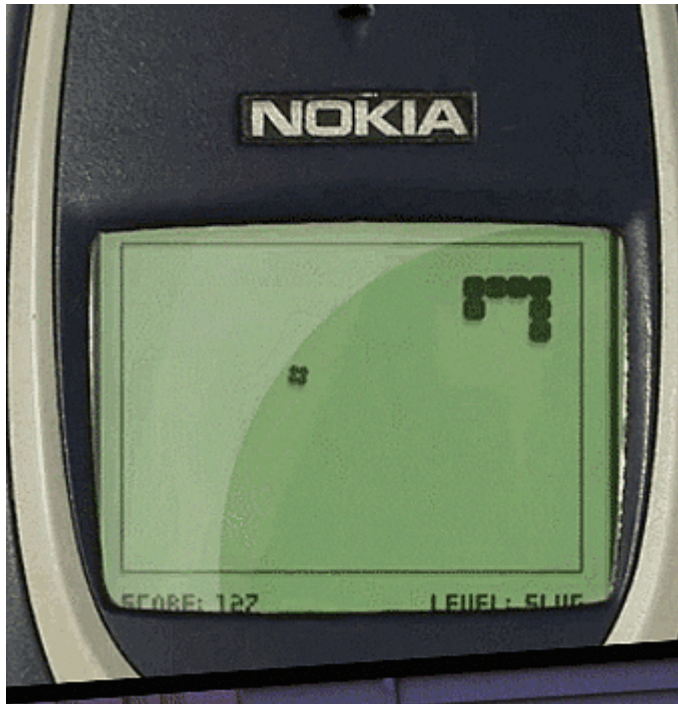
Kathmandu?

Yep, Nepal's main international airport. (They only just built their second international airport in April 2022 over at Bhairahawa).

At VNKT/Kathmandu, they just installed some **RNP AR approaches** which came into effect **May 19**. And about time too, because this is a mean airport with all that terrain, and before these new approaches you just had some VORs.

You can find the full AIP [here](#).

If they remind you of that old snake game then that's because there is **a lot of vicious terrain in Kathmandu**. Which is why RNP AR approaches which let you zigzag between all the mountainy bits are helpful.



Where else are these handy?

Anywhere there is nasty terrain. Alaska, New Zealand, Peru, Chile, Ecuador, Indonesia... There is one for Cape Town that massively reduces track miles, another in Guatemala for departure that will help with your payload restrictions...

KPSP/Palm Springs makes excellent use of them, and you will even **find them at some major airports** which don't have terrain, because they can ensure **traffic remains clear** of other airports in particularly congested airspace (KMDW/Midway and KORD/O'Hare for example).

Want more info?

This is a good article from AvBuyer which goes into more depth for those of you looking to retrofit your aircraft.

Here is a presentation from ICAO on it, because who doesn't love a good powerpoint.

Aloha, RIMPAC: Major Military Exercise in Hawaii

Chris Shieff
18 July, 2022



From **June 29 - August 4**, the world's largest military exercise will be happening near Hawaii. It's called the Rim of the Pacific Exercise, or RIMPAC for short.

It's a big deal - this year over twenty-six major nations (including the US, Canada, the UK, and Australia) are taking part in **extensive naval and aerial activity** happening every day through a lengthy period.

If you're operating into (or near) Hawaii during the exercise, it'd be a good idea to brief on what to expect. The FAA's Impact Statement is the official guidance, but it's a solid read. If you're after something a little more bite-sized, we've got you covered.

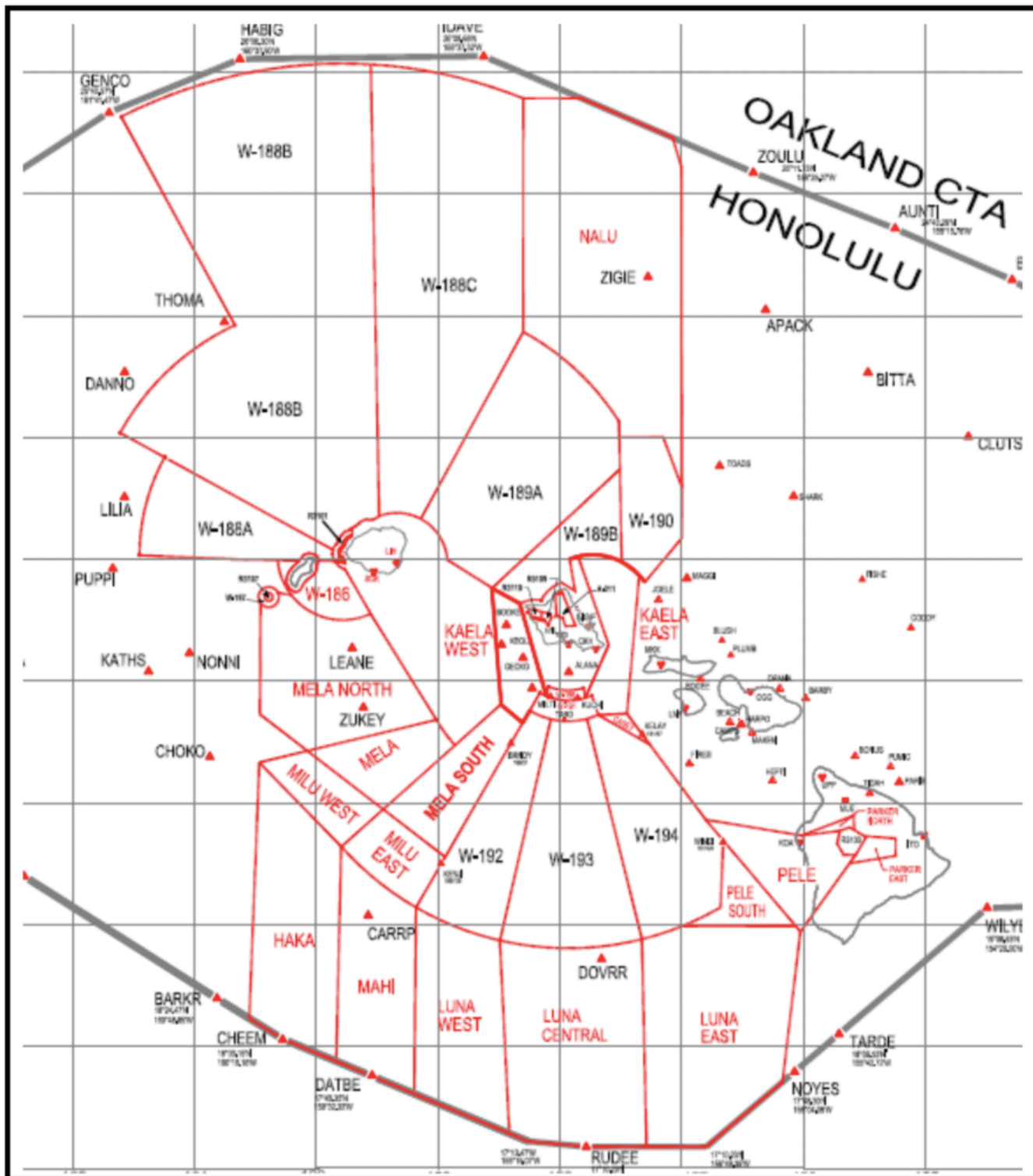
Here's a breakdown on the biggest need-to-know info...

Let's Talk About Airspace

The vast majority of RIMPAC will be contained within Special Use Airspace. The usual suspects will be included - all permanent warning and restricted areas on your charts, along with other types of special use airspace with scary looking abbreviations like 'ATCAA,' 'ALTRV,' and fancy names like 'Nalu,' 'Haka' and 'Luna.'

Big picture - don't go into the red boxes when they're active (more on that in a sec).

Before you tackle the official FAA Impact Statement, for the love of Pete **have a map open next to it**. Once you can see where all this airspace actually is, as I learned, things suddenly get a lot easier - luckily the FAA has put one together:



Righto, timings.

Even though RIMPAC starts earlier, most of the actual flying won't kick off until **July 11**.

As a general rule, any restricted airspace that goes high (Surface to FL600) will be active each day between **07:00 - 22:00 HST (17-08z)**. Outside of these times, any restrictions will generally be low level (less than 12,000').

But, there are some **exceptions** to look out for. Got that map ready? Bueno...

The big one is that MILU East, MILU South, W-192/3/4 (all south of Oahu) **will remain in effect 24/7**, and at all levels.

There are also some subtle differences to timings for W189B and W190 which also extend up high. These are only active from mid-afternoon.

What will be the impact?

Just remember: **15 minutes**. It seems to be the magic number.

You can still file as per normal, but if you're operating on an affected route (including some PACOTS), you'll have to accept delays for re-routes of up to 15 minutes. Which means more contingency fuel.

Here are the routes that the FAA's guidance specifically mentions:

To/from Asia:

PACOT tracks 11/12 and A/B between Hawaii and the Far East.

To/from the US:

If you're routing between the **Pacific Northwest** and Hawaii, try and plan above FL290. If you're unable to, 'Nalu' will get in the way. ATC will be able to vector you onto another airway (A331), but it will mean a reroute. If you can stay above, there will be no impact.

If you're headed to or from the **Pacific Southwest**, 'Mahi' and 'Haka' will affect flights at all levels, with the same delays.

To/from the South Pacific:

Flights between Hawaii and **Tahiti, Fiji** and **Samoa** will be impacted by Luna West, Central and East can also expect reroutes.

The FAA advise in all cases, the delays will not be worse than fifteen minutes (and that's a worst case scenario).

What about Hono?

Retractable barriers are present on three of **PHNL/Honolulu's** four runways, which are used to simulate carrier landings – pretty neat huh?

The only downside is that when a capture is needed, that runway will be **unavailable for forty-five minutes**. The FAA advise that this could cause delays of up to fifteen minutes while ATC juggles things around.

Then there's the two nearby military airports – **PHIK/Hickam** and **PHNG/Kaneohe Bay**. As they will be used to house a number of military aircraft transiting to and from the exercise (the rest will be on a carrier), ATC may need to implement **flow control** at PHNL/Honolulu to keep things within capacity. Again, nothing worse than 15 minutes...see, the magic number.

I need to speak to someone.

The FAA has listed two contacts over at the Honolulu Control Facility:

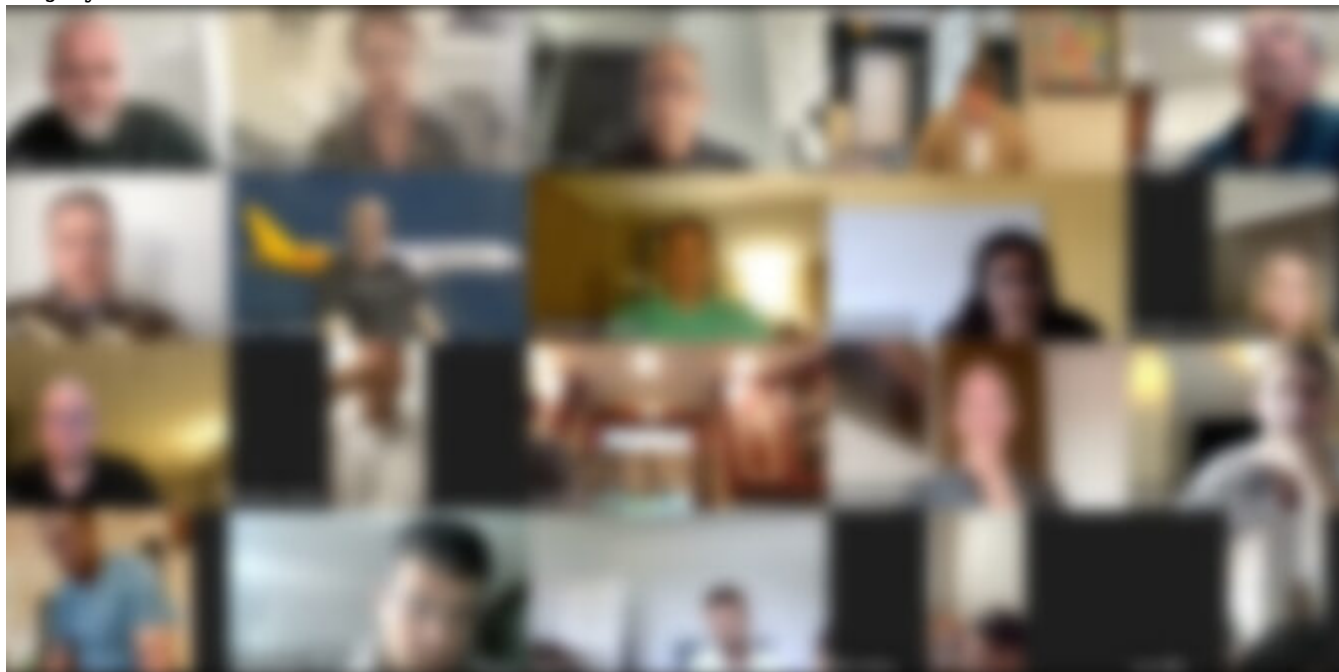
John Wennes – john.h.wennes@faa.gov, 808-840-6161

Antonio Carrilho – Antonio.a.carrilho@faa.gov, 808-840-6203

Or give the OPSGROUP team a shout on team@ops.group, and we'll do our best to help.

June 14 OPSCHAT Summary

OPSGROUP Team
18 July, 2022

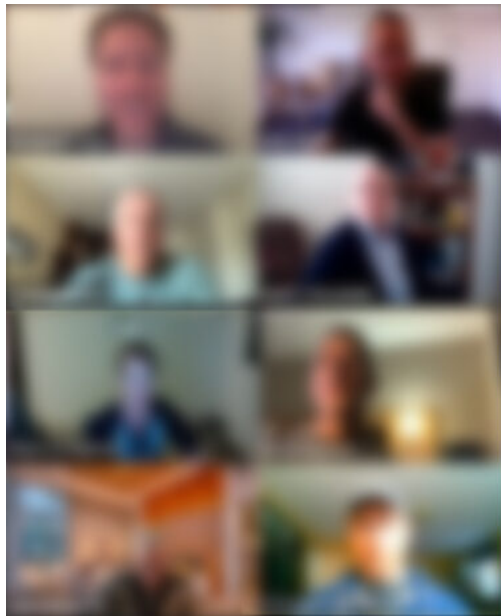


Hi Members,

And non-members reading this and thinking *“what did I miss out on by not joining in this OPSCHAT?”*

You can watch the full replay on your Member’s Dashboard.

Here’s went down this week in the world of international operations things...



OPS CHAT

TUESDAY 14 JUNE 1300Z

**SLOTS IN EUROPE
EASA FUEL RULES
NAT OCEANIC CLEARANCE
EU-LISA UPDATE**

The Big Things

The USA - revised LOA approval process. Basically, if you're a Part 91 new aircraft you can now get the top 10 things rolled into 1 LOA. No news yet on the process being made easier for older aircraft, but watch this space...

China - Now require proof of ownership of your aircraft if you go there. Because of Russia flying "re-registered" (stolen) aircraft. We've not seen any reports yet on what this involves but we think a few extra days for permits to be approved.

Europe - Strikes remain in vogue... LFPG/Charles de Gaulle are going mad with the strikes. Fire services, airport workers strikes. EBBR/Brussels as well as Tunisia are getting in on the action as well with various airports workers and an ATC strike.

Also in Europe - EU-LISA have been having secret meetings, and our little spies have reported back saying that *if you make a profit or if there is any business stuff that takes place because of the flight* then you need to register. So it's got a little more annoying again because we thought private flights were exempt but apparently not...

Hawaii - RIMPAC military exercise at the end of June which goes on for 35 days, mainly during the day. There is a big PDF document on it but it's not particularly useful for seeing what's really going on. Basically, some delays depending on which way you're routing, and look out for all the extra military aircraft.

Slots in Europe

It is a mess, and it's probably going to get worse, because there are loads of staff missing at airports. And there are some ATC problems as well. Which means slots. A lot of slots. NMOC, who run them, have some tips on how to handle all this, and how not to - like yoyo-ing (*bad*), slot swapping (*good*), late filing (*bad*), early filing (*won't help, but good*).

Send us your slot questions at news@ops.group if you have any.

EASA Fuel Rules

We think there are two big things to look out for and read up on:

- **Which policy applies to you:** They each have different monitoring and recording, safety measuring requirements etc. The main thing they seem affect is the contingency fuel.
- **New planning requirements:** Particularly for destination alternates seem to have changed – the planning minimas mainly, as have some things like what to include in your arrival routing planning etc (they say what is ‘reasonably expected’)

EGGX/Shanwick

Something which we’re looking into, but here is what we know so far:

Shanwick want you to register with then if you want to get your clearance via ACARS. But there isn’t a CPDLC or ADS-C list as far as we know. We are working on an article on this, and on CPDLC logon things to watch out for, so watch this space.

Danger Club

We’ve been inspired to start talking about Fatigue. So we want to run a Danger Club on this and get folk talking, and help solve it from the bottom up (because some of those at the top aren’t helping...)

If you have any interesting incidents or accidents to share to talk on let us know, or come join us at the next Danger Club meetup!

OPS CHAT - every Tuesday!

OPSGROUP Team

18 July, 2022



Join the weekly international ops call!

OPS CHAT is a conversation about this week’s changes and dangers affecting International Flight Ops,

open to everyone!

It's on **every Tuesday at 1300 UTC.**



It's for Pilots, Dispatchers, ATC, and anyone else involved in international ops – and here are the key things we look at every week:

- **New risks and changes** this week affecting airspace, ATC, airports, and international ops
- The top 5 **Ops Alerts** published for OpsGroup members this week
- Conversation and chat
- **Unsolved mysteries** – unanswered questions from the Ops Group/Flight Ops slack channels.
- New member intros and group updates
- A **general Q&A** – bring a good Q and we'll match it with an A.

When is it on? Tuesday at 1300 GMT/UTC/Z. That means: 6am LA (sorry!), 9am New York, 2pm London, 3pm Amsterdam. Bring a timezone appropriate drink (If you're in a Brooklyn a coffee, if you're in Berlin a coffee martini?) and join us for a group chat about all things ops.

If you're stuck on something in particular (a pesky overflight permit for Peru, perhaps ...) – ask your question and we'll find someone that knows. For the weeks highlights, we'll pop up a few maps and things to help show what's happening, but mostly this is really just a chat and pretty casual. As you might have gathered.

How long is it on for? Ah, 30 minutes maybe? Or longer if things get interesting.

How do I join? You will need:

- 1x computer device (example here)
- Electrical power
- A face (because we like seeing you)
- A watch (set an alarm for Tuesday 12.59Z)
- Aaaaand a Zoom registration: [here](#).

So in short – register and then show up. Turn on your video, and take part. Easy!

Any other questions? Email the team!



Always Listening: Black Boxes in the Cloud

Chris Shieff
18 July, 2022



The problem with black boxes is that they are attached to the airplane.

Although their contents are invaluable for figuring out the cause of an accident, *if we can't find the airframe, we don't get the answers.*

It took two years to find Air France 447, while Malaysian 370 remains lost to this day. The industry seems to be becoming more aware that there is *something wrong* with the way we have been tracking, searching for, and finding accident aircraft.

And as part of this, there is an emerging push for black box data to be **streamed** live during a flight using internet-based technology.

From a safety perspective, it makes sense. But from a practical standpoint, **it's not all smooth sailing.** Here's a brief look at how these new technologies might work, and why organisations such as IFALPA, along with some pilots, are still pushing back.

The 'Cloud'.

Storing data in the cloud is becoming a reality with both flight data and voice. All you really need is an internet connection to let the magic happen.

With that in mind, the idea is that black box data could be **streamed to the cloud constantly.** Meaning it is immediately available to safety investigators if or when an accident or incident happens.

ICAO.

As a result of accidents like the ones mentioned above, **ICAO is implementing a mandate** for new aircraft with MTOWs over 27,000kg (60,000lbs) due to come into effect from 2023.

It's an extension of their Global Aeronautical Distress and Safety System, or simply 'GADSS' – their

initiative to make tracking and finding aircraft in emergencies much more efficient.

A big part of it is that onboard equipment will need to recognise abnormal or emergency conditions from parameters such as speed or unusual attitudes *automatically*, and then begin broadcasting very accurate position reports as often as **once a minute** – as opposed to the 15 minutes when ops are normal.

Big Tech.

Technologies are being developed to allow manufacturers to comply with these GADSS requirements, and in some cases they are taking things one step further – to include flight data streaming.

Take Satellite Communication heavy hitter **Inmarsat** for example. Their ‘Black Box in a Cloud’ solution allows data to be live streamed via the internet, to the ground as soon as there is sign of trouble.

Honeywell and Curtiss-Wright have also joined forces to develop new recorders capable of continuous transmission to their own facilities on the ground.

IFALPA says nay...for now anyway.

So on the face of it, black box streaming seems like a no-brainer.

But there are still concerns. On May 9, IFALPA published a position paper on just this issue – and it seems they’re not on board yet, due to **security concerns**.

Streaming flight data on the internet may open the door to those wanting to leak, or corrupt it. It is important that the media and public domain don’t get a hold of it before investigations have taken place, and there may even be those with more malicious intent who want to alter it in some way.

And there are no existing technologies that are 100% secure. IFALPA argue that as the technology develops, so too must our ability to protect it. And until then, IFALPA will remain opposed to it.

Other problems.

It’s not just security either. **Here are some other roadblocks** that live flight data streaming faces:

Privacy - across the board there may be push back from crew who, understandably, don’t want their voices recorded and broadcast to the internet. It may be for similar reasons why the industry has resisted the use of cockpit video recordings for the past two decades, despite the desires of the ATSB.

Cost - The suggestion of retrofitting this type of technology to existing airframes would be timely and **very costly**. And in the current industry environment, there is likely to be significant push-back on introducing additional expenses.

Speed - Have you ever tried to stream a movie on that hideously long red-eye? It can be notoriously **slow** and **unreliable** – especially in more remote parts of the world. Flight data recorders also save an immense amount of data, which means satellite time and storage could become uber-expensive.

For live flight data streaming to be effective and reliable, the logistics behind it also need to be rock solid. And there are concerns we’re not there yet.

Live flight data streaming will eventually become the new normal. But how long that takes depends on the aviation’s ability to overcome these hurdles.

Free Route Airspace Around The World

OPSGROUP Team

18 July, 2022



The amount of Free Route Airspace (FRA) you have available to you on your worldwide flights is growing. Here is a look at some of the new regions opening up, some that have been there for a while and some of the ones which probably never will be...

A quick overview of what it is.

Free Route Airspace is where you are allowed to fly direct rather than point to point.

*"Free route airspace (FRA) is a specified airspace within which users may **freely plan a route** between a defined entry point and a defined exit point, with the possibility to route via intermediate (published or unpublished) significant points, **without reference to the ATS route network**, subject to airspace availability."*

Now, there are usually some limits to this:

- Your direct segment can only be 200nm long otherwise you're going to have to file an intermediate point
- You'll also need an intermediate point anytime there is a level change or change in flight rules
- You can take DCTs that cross FIR boundaries, but will need to coordinate in advance for this.

Then there are the aircraft requirements (otherwise you'll be sticking to the published routes). These are general and not all FRA airspace will have the same requirements:

- Mode S transponder

- ADS-C
- CPDLC (not everywhere, but most)

The New One: Africa.

(Well, parts of it).

This actually came in during Covid because ASECNA (the air traffic folk for the region) wanted to help with fuel savings and efficiency for all the struggling airlines. Nice of them. Even nicer is they have now **extended it until at least October 2022**.

If you are flying through the FMMM/Antananarivo, FCCC/Brazzaville, DRRR/Niamey, FTTT/N'Djamena, GOOO/Dakar oceanic or terrestrial FIRs **above FL290** then you can basically take directs.

Of course, **there are some limits** – free routing through **restricted airspace** will generally not be possible when that airspace is active, and bits of the normal airspace might occasionally not be available either. So you will have to **keep an eye out for notams** on these.

All the info on Africa's FRA is published in AIC 27-22 which you can find right here.

The United Kingdom

We wrote a big old post on this back in December 2021 because it was the *"biggest airspace change ever implemented in the United Kingdom"* (their words not ours).

The major-ness of this is that it covers areas in the **North Atlantic, Scotland, England and Northern Ireland**. There is even a portion in the London UIR which is now FRA.

This FRA is H24 and from FL255-FL660

Europe

We should have started with Europe because they've been **trailblazing FRA since 2008**, when they became the first in the world to implement it. They have a whole implementation plan which you can read up on here.

Once the whole airspace is implemented they reckon it will amount to **1 billion nautical miles saved**.

As of the end of 2022, this is what will be available:

The Cross-Border FRA is the key stuff because it means you can file those 200nm segments across border. Currently, Belgium, Luxembourg, the Netherlands, Germany, Denmark and Sweden all have cross-border FRA operations. These are increasing through to 2030 (when the whole region should be FRA and cross-border).

2022 is the year it's (nearly) all happening.

The European Commission has a **deadline of 2022 for implementing FRA Europe-wide above FL305**.

The legal stuff for the implementation is all in here if you want a read.

They also have a jumbo document with all the planning requirements if you need it.

Maastricht. (Yes, we know this is part of Europe).

Maastricht of course have free route airspace. The Maastricht Upper Control Area (MUAC) has had it from FL245-FL660 since a long time. Here's their page on it.

Some fairly standard stuff applies:

- You can't file within 2.5nm of the lateral boundary
- Directs do need to connect to SIDs, STARs (if required)
- There are published enter and exit point for the MUAC region

They have something new too though.

Now, this isn't FRA stuff, but is "making routing through airspace more efficient" stuff so we figured a good thing to add in here too.

The big change is the **"dualisation" of the N125 route**. *What is this?* Well, its a busy route that used to be bi-directional and have aircraft climbing and descending which was a mess. So now it is two parallel routes.

Here is a picture of it:

Might not look like much, but it impacts a bunch of German airports, some in the Netherlands and also some overflights so if you fly through this area often, it's worth knowing about.

One last thing in Maastricht...

Maastricht also publishes their own **AIRAC brief** which basically coincides with the new AIRAC cycle. This doesn't supersede the AIP, but provides some handy "complementary" information to help with flight planning.

NOPAC FRA

A study was published on this earlier in 2022 and the results showed, unsurprisingly, that there is much better efficiency for flights able to utilise free routing – especially because winds can be utilised better. This isn't quite the same as Free Route Airspace, its more *"free to plan your route for minimum time or fuel burn"*.

They saw around 243kg saved on eastbound flights and 469kg on westbounders.

However, they also saw a potential increase in loss of separation events, so a balance in separation and efficiency comes up. To be honest, we aren't sure what the situation is with this. It seemed to be a trial to see if viable, but no news on whether it will go any further.

The North Atlantic

The next step for the NAT is more likely to be **Nil Tracks** than full free route airspace. And there is no sign of nil tracks becoming a permanent thing anytime soon.

Mongolia

They are implementing FRA but it is dependant on China (where entry points are dictated by city to city pairs) and Russia (which is currently not talking to many of their neighbours on aviation related topics).

Russia

Russia has some FRA, but is looking to add more entry and exit points. See above for progress on this though.

The US

The FAA are implementing some **High Altitude Redesign plans** which you can read all about this Circular.

They don't call it Free Route Airspace, but if you've flown in the US you might have noticed you do tend to get a lot of directs. If you want to plan for these a little more 'officially' then you need to look out for the (little-known by some) waypoints all around the US known as '**NRS (National Route System) waypoints**.'

Coming to an airspace near you...

Free Route Airspace is predominantly a 'Europe Thing', and a very good one, but a work in progress. If you work in the planning side of things, keep an eye out for changes to European airspace as more FRAs and cross-border routes become available.

New York ATC is grumpy for a reason

OPSGROUP Team
18 July, 2022



This started off as (and still really is) a very specific post just aimed at folk who operate into KTEB/Teterboro – because **the runway 06/24 rehab project has begun!**

So we copied all the information from the Teterboro User's Group site and threw it into here. But then we realised the 'problem' with KTEB is that it's very, very close to a lot of other bigger airports...

So if you operate into **KEWR/Newark, KLGA/La Guardia or KJFK/New York Kennedy** then we reckon it's worth a read too. Because you might not realise what is going on underneath you and having an idea of the lay of the land (so to speak) is useful for that old SA we all harp on about...

So Teterboro is back in rehab?

They have a whole 11 months of works (to April 2023) planned for **runway 06/24**. Mostly it means closures, and these are pretty much all planned over night and on weekends.

Overnight closure timings:

- Sunday, Tuesday, Wednesday, Thursday 22:30 – 06:30
- Monday 22:30 – 08:30

Weekend Runway closure times and dates:

- Friday 22:00 – Sunday 12:00 (until August 31)
- Sunday 12:01 – Sunday 23:59 (until November 30)

Weekend Airport closure times and dates:

- Friday 22:00 – Sunday 12:00 (July 1 until August 31)
- Sunday 12:01 – Sunday 23:59 (October 1 to November 30)

But it is more than just the closures that you need to think about if you operate in here.

Arrival Stuff

Northerly Flow:

Depending on wind and weather, and what's happening at KEWR/Newark you can usually expect an ILS 6 with a Circle to Rwy 1 or the RNAV (GPS) X Rwy 6

They are trying to bring in lateral and vertical guidance for Rwy 1. Watch this space. The circle to Rwy 1 is a nasty little thing so check out their guidance on it.

Departure Stuff

Southerly Flow

If its a southerly flow you can expect the Teterboro 4 SID which means delays.

Why?

Because they try to keep a **10nm gap between KEWR/Newark 22L arrivals and KTEB 19 departures**. Which is why there is also the **Dalton 2 visual departure** (which only needs a 5nm gap).

Expect an infinite delay...

Well, that sounds bad. It doesn't actually necessarily mean a lengthy delay though, particularly if you can accept the Dalton 2. The Dalton 2 keeps you down at 1,300' and 180 knots in VFR until clear of all the

KEWR traffic then you can expect a transition to an IFR clearance.

There is a meeting!

Yep, there is, on June 15 at 10:00 am EST. Organised through the Teterboro Users Group (TUG) which we strongly recommend you getting yourself in on if you do operate here and aren't already in on it.

What else is going on down there though?

Well, like we mentioned, you've got **several major international airports** to consider as well, and some smaller executive airports and a military base. We counted and found more than 10 just in the immediate proximity to Teterboro.

KJFK, KEWR and KLGA have the dubious titles of **ranking first, third, and fourth for worst delays in the nation**. They are looking at ways to improve this, but most of them involve building more runways which won't necessarily help poor old KTEB stuck underneath the every growing traffic flow.

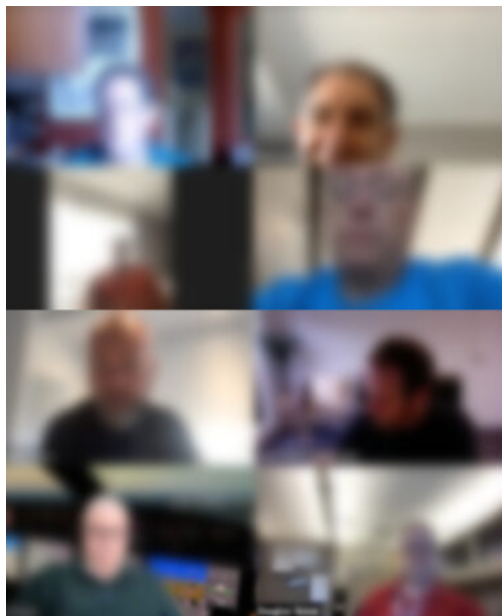
Then there is the weather.

The east coast of the US gets hit with some pretty heavy storms. In April, a single day of bad weather saw over 4500 flights into the east coast delayed and the knock on effect across the busy airspace is considerable.

OPSCHAT Summary June 7

OPSGROUP Team
18 July, 2022





OPSCHAT

TUESDAY 7 JUNE 2000Z

**CARIBBEAN OPS UPDATE
SPECIAL PROCEDURES IN LA
FUEL SHORTAGES IN EUROPE
ITALY ATC STRIKE**

Hi Members,

We had another busy OPSCHAT call this week with Chris in the hosting seat, along with returning Quiz Master Dave and Rebecca.

You can watch the full replay on your Member's Dashboard.

Here's a roundup of what we talked about:

The Big Stuff

- **Bahamas** - The Click2Clear (fast track customs clearance) roll out for everyone is no more... indefinitely. Because it was confusing. We're waiting for clarification on the rules and a new roll out date.
- **Antigua** - TMA overflights are being denied (all the bits below FL245). 'Cross border' permits are needed. Look out for the Notam on it.
- **America** - A big political summit is happening, four TFRs across LA basin affecting access to airports here especially KBUR/Burbank and KVNy/Van Nuys ,so look out for the special procedures.
- **Europe (in general)** - World Fuel Service releases. Something is going on with them. Possibly a fuel shortage or a staff shortage? We ain't sure. But there are a few airports impacted and we think it extends beyond WFS. LFPB/Le Bourget, LIML/Milan Linate... not accepting various cards including WFS, but other airports across France and Italy have reported problems.
- **Italy** - Strike season. ATC strike June 8 for Milan ATC and then a general airport worker strike on June 16.
- **North Korea** - eight unannounced launches in one go! Keep an eye on things, and don't overfly. safeairspace.net is where we report the changes.

Unsolved mysteries

Canada FTL Regulations in Italy - Yes, you might get ramped checked. Yes, they might check your duty

hours. But the general consensus seems to be that if it is state approved, and in accordance with your company's ops manuals, then you're probably A-OK. They're generally just checking everything is order, not digging deep into the specifics.

A question about the chunk of restricted airspace over the Atlantic and why - maybe because of military exercises? We're looking into it.

OPSQUIZ

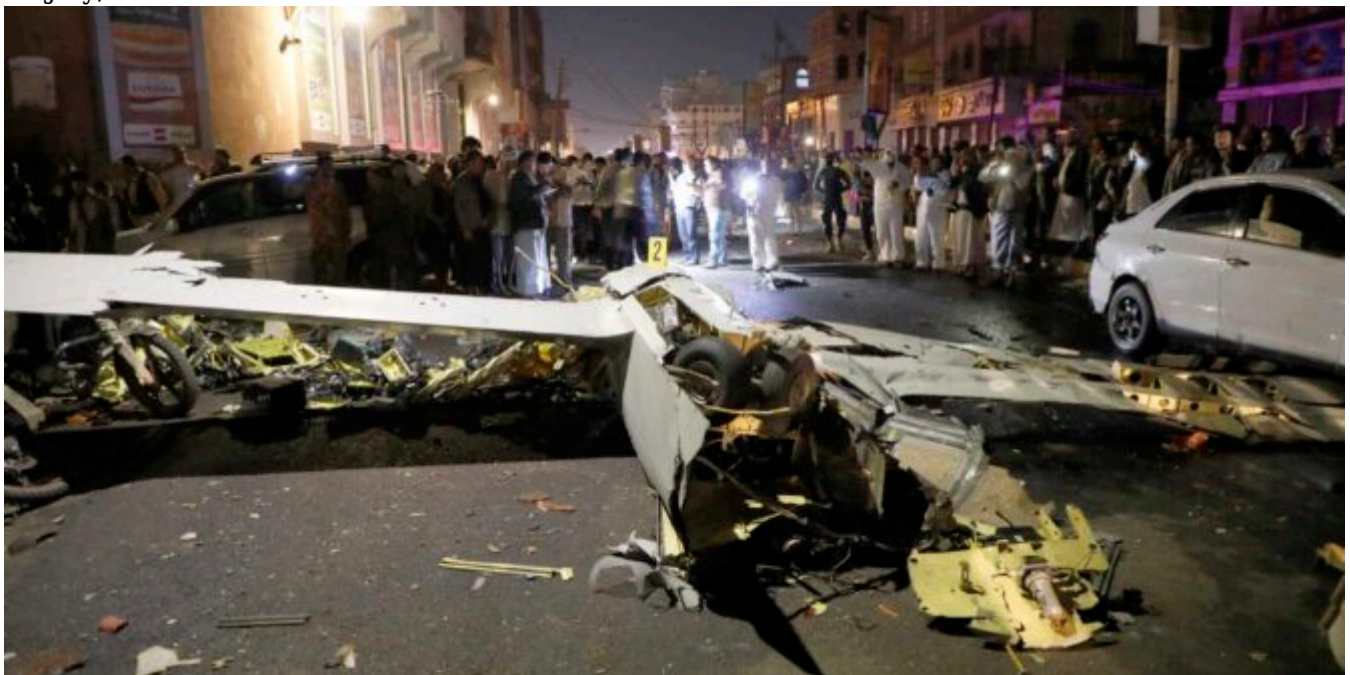
Dave was back to host this week's OPSQUIZ. Congrats to this week's winner, PHIL! A prize will wings its way to you. Here's a sample question for this week: *What are the new standard symbols on US airport charts to show hotspots?*

As always, we're here to help with any operational support, info or questions. You can reach us on news@ops.group, or via the slack channels [#flightsops](#) and [#questions](#).

To watch the replay of the OPSCHAT in full: head over to the dashboard. We hold a new one every week on Tuesdays at 2000z, [click here to register](#) and join us live. See you next week!

Saudi-Yemen Airspace Update

David Mumford
18 July, 2022

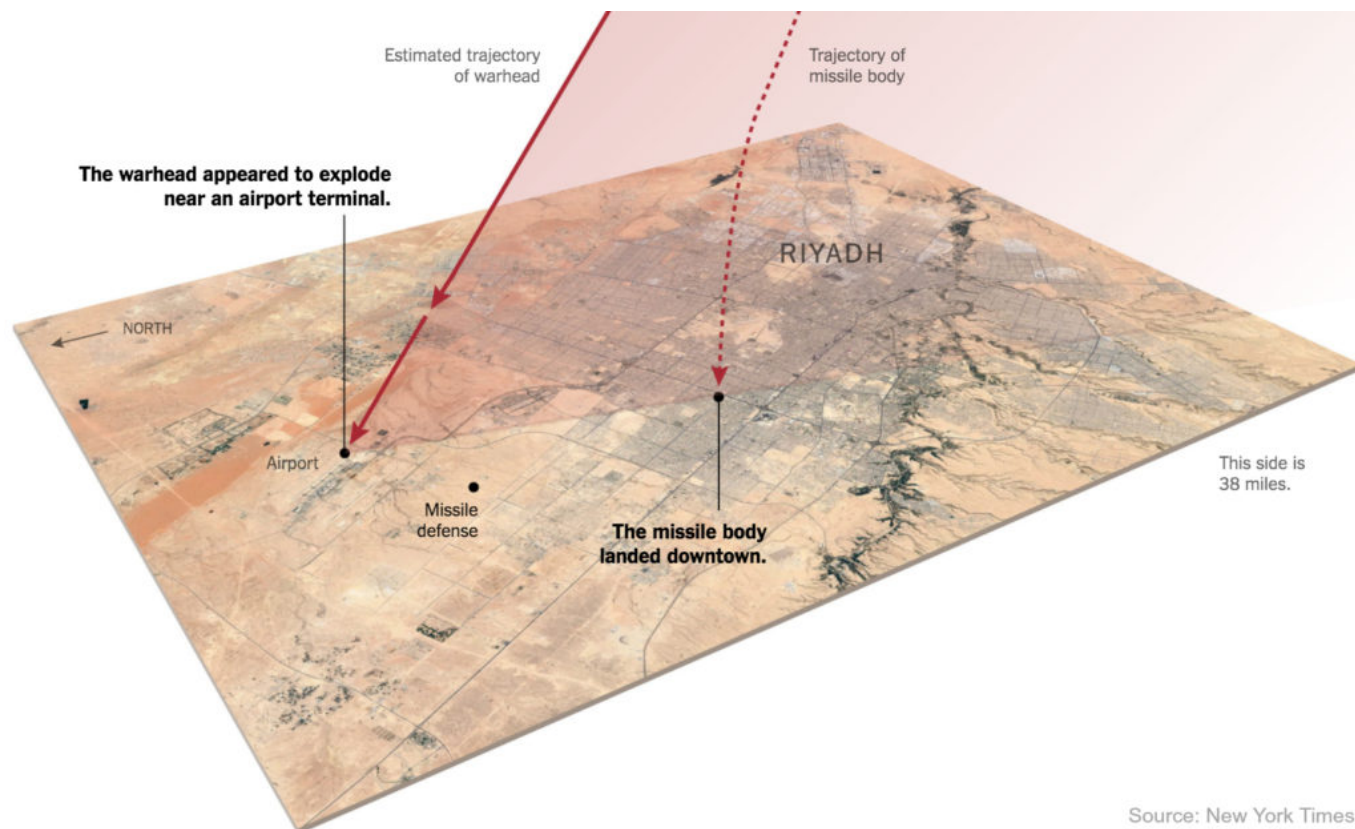


There's an **improving airspace risk picture** in Saudi Arabia since a ceasefire was agreed in April - which has now been extended to Aug 2. All groups have agreed to **halt the conflict** inside and outside Yemeni borders. The first month of the ceasefire saw **no reported drone strikes in Saudi Arabia**.

However, long-standing airspace warnings remain in place. If the conflict resumes, Houthi drone and missile attacks on targets in Saudi Arabia pose a potential threat to ops at Saudi airports, and for overflights of the OEJD/Jeddah FIR. The most significant risk is in the south of the country along the border with Yemen, but OERK/Riyadh and OEJN/Jeddah airports have also been targeted in the past.

Back in March 2021, **OEJN/Jeddah Airport** closed temporarily following multiple attempted drone attacks. Saudi media reported dozens of drones were intercepted in their airspace, and the US Embassy also issued a statement. **OERK/Riyadh Airport** was targeted in June 2020 and again in October.

Much of the information comes from state media and cannot always be independently verified. In 2017, a New York Times investigation suggested that at least one of the most high-profile attacks from that year may not have been “shot-down” or intercepted by Saudi defense systems at all.



Saudi Arabia Airspace Risk

With the ceasefire now in place, we're waiting to see if any of the countries who have issued airspace warnings for Saudi Arabia will amend their guidance.

Germany and **Canada** warn of a risk to landing anywhere in the country, but particularly along the border with Yemen in the southwest part of the OEJD/Jeddah FIR. **France** has issued similar advice, with the specific warning not to operate to OEAB/Abha, OEGN/Jazan, OENG/Nejran, OESH/Sharurah, OEWD/Wadi Al Dawasir and OEBH/Bisha airports:

A note on Yemen

The first month of the ceasefire saw notably reduced hostilities in Yemen, and commercial flights resumed at OYSN/Sanaa Airport for the first in six years.

However, Yemen remains an active conflict zone, and the vast majority of Yemeni airspace (OYSC/Sanaa FIR) should be avoided. Several countries have **prohibited flights** here due to the ongoing conflict on the ground. The oceanic portion of the OYSC/Sanaa FIR is excluded from most warnings, by nature of being offshore. The guidance issued by the US FAA currently looks like this:

Essentially, US operators are banned from flying north of a line KAPET-NODMA-ORBAT-PAKER-PARIM-

RIBOK. The US FAA specifically mentions UT702 and M999 as being ok to use.

Watch out for ESCAT

You might know this as SCATANA. ESCAT is the new name, but the process is the same – if you're overflying the OEJD/Jeddah FIR and hear **"ESCAT RULES ARE NOW ACTIVE"** (or something to that effect) you need to be aware that these apply to you!

You will likely be given a **change of route directly out of the airspace**, or will be **directed to land at the nearest suitable aerodrome**. The purpose is to clear the affected airspace of all civilian aircraft at which point they close down all nav aids and airports until the threat has been dealt with.

ESCAT procedures are published in GEN 1.6 of Saudi Arabia's AIP. If you don't have a login, you can see the relevant section here. There are some special routes that you have to fly in the southern part of the OEJN/Jeddah FIR, as advised by Notam, and you can find these in AIP SUP 02/21.

SafeAirspace.net continues to provide up-to-date information for both Saudi and Yemen airspace.



Busy Week in LA: Special Flight Procedures

Chris Shieff
18 July, 2022



It's a busy few days in the skies of **Los Angeles** this week.

A major political event – The Summit of The Americas – is happening there from June 6-10. A number of **TFRs** will become active affecting access to numerous airports throughout the LA Basin.

The FAA has now published the details, so let's take a closer look.

Update on Restricted Airspace

It looks as if some newer TFRs were issued after we posted this post. First up, **check the list** because we can't predict changes and they do happen.

But right now, we can see a few more like **2/5019, 2/5016, 2/5015** which might get in your way if you're not a scheduled commercial service. These don't supersede the other, they are for shorter time periods. But they are **a lot more prohibitive** (particularly if you're a GA or private flight wanting to get into KLAX).

Restricted Airspace

There will be four TFRs becoming active in the LA area. Three of them are further west near Santa Monica and Central LA, while the fourth is out east near Pomona. The upper limit of all of them is **2,999'**.

They will be active each day of the event at various times which you can access here.

If you're operating on a valid flight plan in or out of **KLAX/Los Angeles, KSMO/Santa Monica** or **KEMT/San Gabriel Valley** then you won't be affected.

Otherwise only **essential traffic** will be allowed through – SAR, medical, fire-fighting, or if you're experiencing an emergency.

If you are allowed into one, make sure you're squawking a discrete code. The FAA are reminding us that the timings and positions of the TFRs are subject to last minute changes, so keep an eye on the Notams too. The current one is FDC 2/4276 – and it's a solid read. So, here's a picture, because we like pictures more.

Impact

The majority of **VIP movements** will be via KLAX/Los Angeles. Although they are possible at other airports too.

Traffic may be given priority to enter the queue which means potential holding, slow-downs or delaying vectors. The impact will likely be minor, but a little common sense may prevail here – consider topping the tanks off with some **extra contingency fuel** just in case.

The largest impacts will be felt at **KVNY/Van Nuys** and **KBUR/Burbank** – flights in and out of these are not exempt from the TFR restrictions, so if you're heading in or out of one, here is what to expect:

Head-to-Head

Or in other words, **opposite direction operations** at both airports (weather permitting). It is not a normal configuration, and may take a little extra briefing – especially when it comes to traffic and runway awareness.

STARs (and not the Hollywood Type)

Over at KBUR/Burbank arrivals from the east can expect and plan for the JANNY 5 when the TFRs are active. This will temporarily replace the usual THRNE 3.

Overflights

SOCAL Terminal Area Control traffic which usually routes via V186, V201 and V459 can expect to fly via the Palmdale (PMD) VOR instead.

Other tower en-route control (TEC) routes may be unavailable during the next few days too.

I still have questions...

Detailed information on the TFR can be found on the FAA's official website, [here](#). Or if you still have a conundrum to solve, you can contact Flight Service 800-992-7433.

Otherwise get in touch with us on team@ops.group and we'll do our best to help!

Oshkosh 22': Special IFR Flight Procedures

Chris Shieff
18 July, 2022



It's that time of year again – Oshkosh 22' is just around the corner. The world-famous air show is happening this year from **July 25 - 31**.

And as you'd expect, it's going to be big. In fact, it will have the highest concentration of airplanes in the world. Over 10,000 of them to be precise, along with more than 700,000 fans.

To help with the influx of traffic, special air procedures have been published. They're effective from **July 21 - 31** and apply to several airports in the region, not just **KOSH/Oshkosh** itself.

You may not be headed in for the show, but if you are chartered to take people there (or anywhere near it), it's time to start planning.

At over thirty pages, the official doc is a solid read. To get you started, here's a bite-sized summary of the major points for **regular turbine IFR operators**.

Special Procedures - Managing the flow

There are thirteen airports in the Oshkosh area that the generic procedures apply to. In a nutshell, if you're headed to one, you will need to take part in the IFR Reservation Program. Or in other words, if you're non-scheduled, you'll need a slot.

Big things to know for arrivals:

- They will become available at 17z on July 18, here.
- They won't be issued more than 72 hours in advance.
- You have to confirm your slot within 12-24 hours of your flight (or you'll lose it).
- You must include your final confirmation number in your flight plan.

Ops tip: When working out your ETA, they suggest adding 30 minutes for delays (along with fuel).

The good news is that things are a little easier for departures – only **KOSH/Oshkosh** itself requires a slot through the same process.

Filing your flight plan

A little common sense prevails here – file early. You can file an IFR plan up to 22 hours in advance. At seven of the Oshkosh area airports, only approved IFR routes in and out are allowed. For arrivals [click here](#), for departures [click here](#).

Picking up your IFR clearance

If you're departing any airport within 600nm of KOSH (even if you're not headed near the show), it's a good idea to get your clearance on the ground to save on airborne delays.

Within 150nm, **airborne clearances will be no-bueno**, so don't try it. ATC won't issue them.

Another ops tip: Avoid plans with multiple stops. ATC advise it is better to file separate plans for each leg.

Airport Specific Procedures

Three airports have their own specific procedures (in addition to the above). Let's take a look.

KOSH/Oshkosh

If you're headed into Oshkosh itself and the weather is good (ceiling 4,500'+, visibility > 5'), turbine aircraft are asked to cancel IFR at 60nm and transition to the arrival below.

Make sure you grow eyes in the back of your head for other traffic, it's going to be busy.

When you land, you'll need a nice big sign to show where you'll be parking to show marshals outside of the left window. Unless you're staying for the show, it will likely be '**FBO**' for the Basler Ramp (assuming you have arranged this beforehand).

Chances are though, most non-scheduled charters won't be operating into KOSH/Oshkosh. Here are the next two closest options.

KFLD/Fond du Lac

- Distance from Oshkosh: 14nm
- Longest runway: 5941' (1800m)
- Parking: Fond du Lac Skyport (920-922-6000)

The FBO is only open between the hours of 06:30 and 21:00LT.

The biggest gotcha is there will be a **temporary control tower** in place from July 23 – 31, operating between 07:00 and 20:30LT (closing a bit earlier on the last day).

You'll need to contact them at 10nm inbound. They're expecting things to be really busy to – so take fuel for holding. They also recommend you arrive before sunset for safety.

If the weather is good, expect to cancel IFR and fly a visual approach.

KATW/Appleton

- Distance from Oshkosh: 17nm
- Longest runway: 8003' (2439m).
- Parking: Appleton Flight Center (920-738-3034)

The airport is controlled between 05:30 and 23:00 LT every day.

The Main Event Itself

KOSH/Oshkosh will **closed to all non-air show traffic** during the actual displays.

The action will happen in a TFR within a 5nm radius of the airport up to 16,000.' It will be active each afternoon during the event dates, and on two evenings – July 27 and 30. The exact timings will be published here, during which time the airport will be closed.

Need more help?

The official notice is the place to start – it's lengthy, but it's written in plain language which we like.

If you're having difficulty reserving an IFR slot, contact the Airport Reservation Office at (540) 422-4246.

If your question is about something else, you can reach us on news@ops.group and we'll do our best to help, or find the right person who can.