SSR Code Change in the NAT!

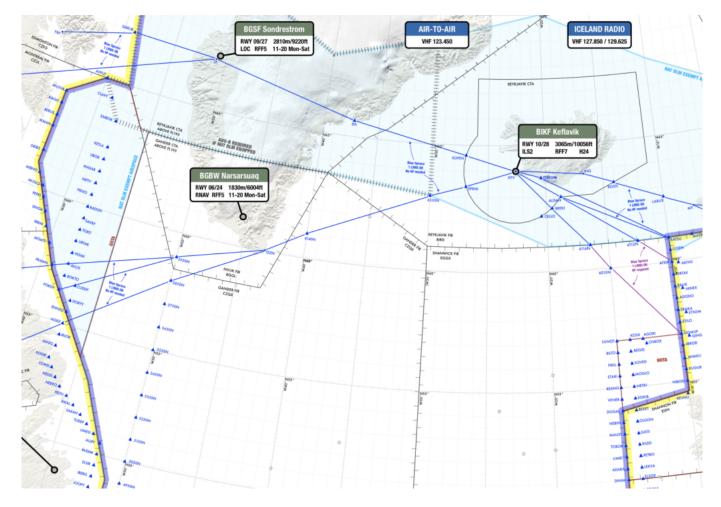
Alexandre Gries



The NAT Region is changing the "last assigned code" SSR transponder procedures. Since the dawn of time, everywhere on the NAT, this domestic code had to be retained for 30 minutes after entering NAT airspace. But now the UK has changed it to 10 minutes for the entire EGGX/Shanwick FIR, and we expect all the other NAT FIRs will soon be updating their rules to say the same. This new 10-minute rule will then become the standard across the NAT Region, and will be published in the next version of the NAT Doc 007 due out in October 2023.

For several decades, unless directed otherwise by ATC, pilots flying in the MNPS airspace, now known as the NAT, were required to maintain the transponder in Mode A/C with continuous Code 2000 operation, except for the **last assigned code, which had to be retained for a period of 30 minutes** after entering the NAT airspace or leaving a radar surveillance service area.

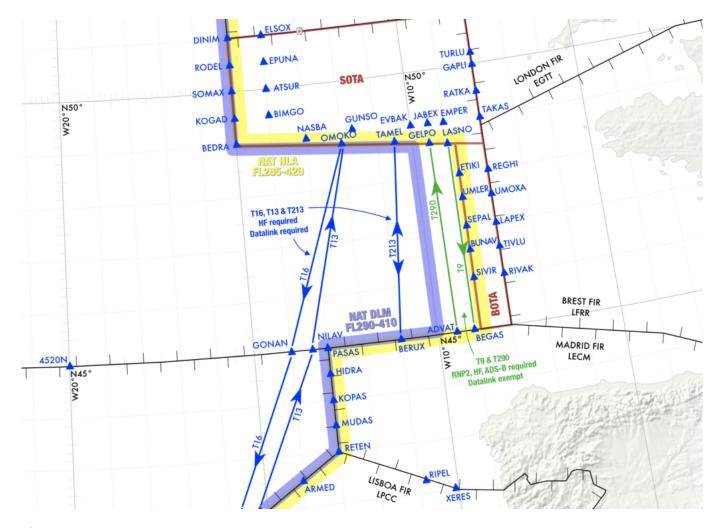
The rationale for changing from the last assigned code to Code 2000 after 30 minutes was based on the recognition of the **original domestic code** by subsequent national radar services upon exit from the oceanic airspace.



NAT Plotting & Planning Chart. Click for PDF.

It was crucial to make this change before exiting, in line with the terms of ICAO Doc 4444: "Except for aircraft in a state of emergency, or during communication failure or unlawful interference situations, and unless otherwise agreed by regional air navigation agreement or between a transferring and an accepting ATC unit, the transferring unit shall assign Code A2000 to a controlled flight prior to transfer of communications."

Thus, due to the limited time spent in the NAT HLA, when flying on **Tango 9, Tango 290, or Tango 213,** the change from the last assigned domestic code to Code 2000 should occur within a maximum of **10 minutes** after passing BEGAS, ADVAT, or BERUX when Northbound, and LASNO, GELPO, or TAMEL when Southbound



The Tango Routes

For the same reason, aircraft with a routing sequence **Reykjavik-Shanwick-Scottish** (**BIRD-EGGX-EGPX**) shall change the last assigned code to Mode A 2000 **on transfer from Reykjavik** and no later than **10 minutes** after entering Shanwick airspace.

It should also be noted that Reykjavik ACC provides radar control service in the southeastern part of its area, and therefore, transponder codes issued by Reykjavik ACC must be retained throughout the Reykjavik OCA until advised otherwise by ATC.

Furthermore, although outside the NAT HLA, it is also necessary to retain the last assigned code in **New York West ATS airspace**. Similarly, aircraft transiting **Bermuda RADAR airspace** should remain on the last assigned code until clear of that airspace, then squawk 2000.

In all other cases, Code 2000 would be displayed **30 minutes** after entry into the NAT airspace.

So what has changed?

In its AIRAC 2023-06-15 edition, the UK AIP ended the 30-minute code retention rule in order to standardize a change to Code 2000 after **10 minutes** of entering the NAT airspace.

The UK AIP now states:

"Unless otherwise directed by ATC, aircraft equipped with SSR transponders in the NAT region shall operate transponders continuously on Mode A Code 2000 regardless of the direction of flight, except that the last assigned code shall normally be retained for a maximum period of 10 minutes after entry into NAT airspace."

This change eliminates the exceptions for Tango routes.

Why didn't I hear about this?

The change was buried deep within the UK AIP without any publicity or modification of specific NAT documents – notably the famed NAT Doc 007.

The North Atlantic Document 007 is regularly updated through the ongoing efforts of the **North Atlantic Special Planning Group (NAT SPG).** While it does not establish regulations (which fall under the Regional Supplementary Procedures DOC 7030 and FIR-specific AIPs), it is widely regarded as the primary resource for operational guidance in the North Atlantic. So it was surprising to learn that it had not been updated following the recent change in the Shanwick FIR, despite the ongoing work of the NAT SPG.



Sometimes even big changes can be tricky to find...

One could have expected that a change to a long-established practice (even if understandable for the purpose of standardizing a rule and eliminating exceptions) would have been anticipated and coordinated to avoid introducing a new exception distinguishing one FIR from the others.

But after verifying with NAT specialists at Shanwick, it appears that they have been talking about it with all the other FIRs – and **everyone has agreed to change the rule to 10 minutes.** This change will be published in the next version of the NAT Doc 007 (expected Oct 2023), and all other FIRs will be updating their AIPs in due course. It's apparently part of a push to **harmonize NAT Region procedures** where possible.

The delayed implementation of Oceanic Clearance Removal (OCR) resulted in a delay in the publication of

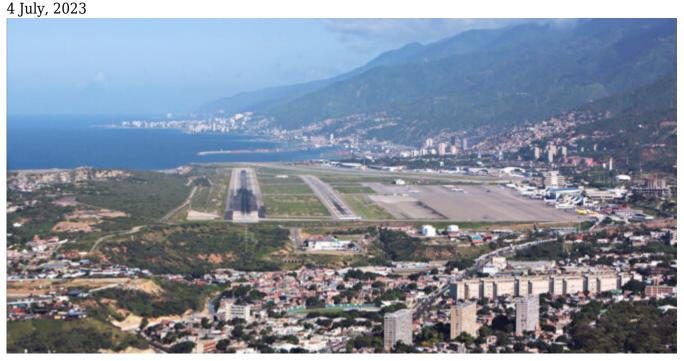
the NAT Doc 007, as it required **significant changes to support OCR.** While the 10-minute change has been universally accepted by all Air Navigation Service Providers (ANSPs), the lag between documentation and ANSPs is solely due to the delayed updates of Doc 007 being published.

So tell me again, what has changed?

- In the **entire NAT airspace under Shanwick's jurisdiction**, unless instructed otherwise by ATC, the last assigned transponder code must be retained for **10 minutes**, followed by displaying Code 2000.
- When arriving eastbound from BIRD/Reykjavik to EGGX/Shanwick enroute to EGPX/Scottish, Code 2000 should be displayed upon transfer from Reykjavik to Shanwick and no later than 10 minutes after entering Shanwick airspace.
- In the **other NAT FIRs** (CZQX/Gander, KZWY/New York, LPPO/Santa Maria, BIRD/Reykjavik, ENOB/Bodo), the **30-minute** rule still applies... until it changes!

Venezuela: FAA Restriction Lifted

Alexandre Gries



The US FAA has **cancelled** a long standing Notam which prevented US operators from overflying Venezuelan airspace **below FL260**.

KICZ Notam A0013/19 expired in June, and hasn't been renewed. This effectively means that there are no longer any restrictions on the enroute use of the **SVZM/Maiquetia FIR.**

...ALL FLIGHT OPERATIONS IN THE TERRITORY AND AIRSPACE OF VENEZUELA AT ALTITUDES BELOW FL260 BY THE PERSONS DESCRIBED IN PARAGRAPH A BELOW ARE PROHIBITED UNTIL FURTHER ADVISED DUE TO INCREASING POLITICAL INSTABILITY AND TENSIONS IN VENEZUELA AND THE ASSOCIATED INADVERTENT RISK TO FLIGHT OPERATIONS....

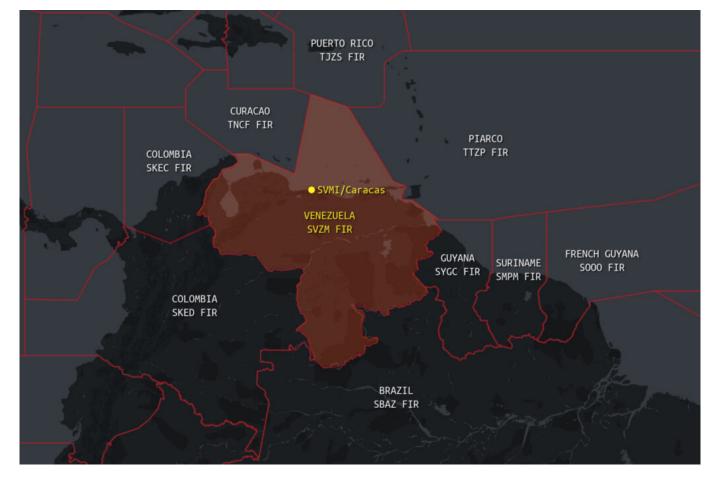
In fact, there are no active airspace warnings issued by any other states either. Here's a closer look at the airspace, why there was a restriction in the first place and what you should know now if you want to use it.

The Maiquetia FIR

Venezuela controls its own skies – the SVZM/Maiquetia FIR. It's a large chunk of Class C airspace that sits squarely on top of South America.

From a geographical perspective it provides a **handy gateway** between the US, Caribbean and destinations further south down the continent – especially Brazil.

It is also home to the country's largest airport, **SVMI/Caracas.** Here's what that all looks like on a map:



If you'd like to know more about Venezuela's airspace, here is a link to the online AIP.

Why was there a US restriction in the first place?

Back in 2019, the US FAA issued the above Notam which banned US operators from overflying Venezuelan airspace below FL260, citing **political instability.**

The (extremely) short story was that after years of steady decline, a political power struggle led to an attempted uprising. Widespread civil unrest followed while people suffered from economic collapse, inflation and shortages of food and medicine. This has continued to the current day. Here is what we had to say at the time.

The FAA had **multiple concerns** for the traffic above.

There were two major worries. The first was that the military may fracture and begin fighting against each other. Additionally, there was the known presence of mercenaries who had been employed to augment the military and police force.

It was known that the Venezuelan armed forces had large stockpiles of **advanced man portable air defence systems** (MANPADS) capable of targeting aircraft as high as FL250.

While there was no obvious intent to target civil aircraft, the FAA were worried that extremely high tensions may lead to inadvertent firing which could endanger them indirectly. They were also concerned that some of the MANPADS may find their way into the hands of non-state actors who were less predictable, and had less training.

As such US operators were banned at lower levels out of an **abundance of caution** while the situation evolved.

If you'd like to know more, here is a copy of the Background Information note the FAA published at the time.

So, have things improved?

It would be a logical assumption given that the flight restriction has been lifted, but the short answer is that **we don't know**. And the FAA hasn't (yet) provided any explanation as to why the Notam has been cancelled.

The situation in Venezuela is at a standstill. It remains in the middle of an unprecedented social and humanitarian collapse. Although there's news lately of high-level talks to try and improve the situation, right now, it's just that – talk.



It's possible that the **immediate threat** of active fighting and the intentions behind the issue of the original Notam have subsided sufficiently that the risk to civil aircraft from anti-aircraft fire is now considered extremely remote. Although this is purely speculation.

The safest course of action until we know more would be to **remain above FL260** – although this is no longer mandated.

Beware the diversion

If you do overfly Venezuelan airspace, the most important consideration is crew and passenger safety in the event of a diversion. The **security situation** on the ground in Venezuela isn't great – in fact it is among the twenty most dangerous countries in the world, while Caracas itself has previously been ranked as the most dangerous city of all.



The **US Department of State** maintains a 'Do Not Travel' warning (its highest alert) for Venezuela citing risk of kidnapping, crime, civil unrest, terrorism and unlawful imprisonment. All to be avoided. If you're looking for the latest information, the US Embassy website is a good place to check – keep an eye out for any new **security alerts.**

Does this mean I can now fly between Venezuela and the US?

At this stage, no. The FAA restriction was purely to protect traffic transiting Venezuelan airspace below FL260. Another (more political) restriction remains in place, issued by the Department of Transport. It's a heavy read, but basically the commercial transport of passengers or cargo between airports in Venezuela and the US **remains banned.**

We're unsure at this stage whether there is an intention to drop this rule too, and have reached out to both the FAA and the DOT for more feedback. We'll keep this article updated as more info comes to hand.

The Curious Case of the Bonus French ATC Strike

Alexandre Gries 4 July, 2023



Update 29 Jun 1130z: The bonus French ATC strike is underway. Remember, this only affects secondary and GA airports – not the big hubs or overflights. Eurocontrol report that worst affected airports today, with high delays, are as follows: LFOB/Beauvais, LFPB/Paris Le Bourget, LFPM/Paris Villaroche, LFOP/Rouen, and LFST/Strasbourg. And poor old LFRB/Brest is essentially closed until tonight. The strike ends June 30 at 04z.

There's an ATC strike planned in France from the evening of June 28 to the early morning of June 30.

But this is a strange one, because **major airports and enroute ACCs are not on strike - so overflights will not be affected.**

It's only **secondary and general aviation airports** that are striking – around 60 airports in total.

Notable ones that are popular bizav stops include:

- LFLB/Paris Le Bourget
- LFLB/Chambery
- LFOB/Beauvais
- LFLY/Lyon Bron
- LFLP/Annecy
- LFKJ/Ajaccio
- LFKB/Bastia

You can check LFFF Notam F1038 for a full list of airports affected.

LFOB/Beauvais north of Paris is cutting flights by 50 percent, but there are no similar restrictions at any other airports so far...

What happened to the mass ATC strike in France?

This upcoming strike isn't the same thing as the **endless French ATC** strike that's been happening these past few months. That one affected major airports and the enroute ACCs (i.e. overflights), along with various different French overseas territories.

That mass strike was part of nationwide strike action and protests over pension reforms which have been trundling on since mid-Jan. The last day of mass ATC strike action was on **June 6.** Unions met on June 13 to discuss what they might do next, but they haven't made any announcement on the outcome of those talks yet.

If and when they do schedule further action, ATC will probably get involved again and we'll see more of the mass ATC strikes like before. If that happens, you'll need to read this for guidance on what to do.



Other strikes in Europe to watch out for

Spain:

ATC strikes are set to continue at **sixteen airports through to the end of July.** These may lead to delays and other disruption, to coincide with the busy summer season, but the impact of these strikes has only been minor so far. The airports impacted are: LECO, LEAL, LECH, GCHI, GCFV, LEIB, LEJR, GCRR, GCLA, LEDA, LEMI, LEZL, LEVC, LEVX, LECU.

Italy:

There's a **nationwide 24hr ATC strike planned on July 15** (postponed from June 4). There's no Notam for this yet, and so details are slim, but we know that overflights won't be impacted, and there will likely be two time windows when flights to airports in Italy will be guaranteed: 7-10 and 18-21 local time. A few days beforehand, expect to see a Notam get published with more info.

Sweden:

Security staff are planning to strike at several major airports – on **July 3** at ESGG/Gothenburg-Landvetter and ESSB/Stockholm Bromma, and on **July 5-6** at ESSA/Stockholm Arlanda. There are various other dates potentially planned beyond these initial ones, but they're hoping to negotiate a deal to avert more strikes.

LSGG/Geneva:

There might be a **ground staff strike on June 29.** Unless an agreement is reached, workers plan to strike from 12pm that day. If it goes ahead, the union has said that all flights would be grounded – possibly a bit of an ambitious claim, but there would still likely be significant disruption.

EGLL/Heathrow:

Finally, some good news! **The upcoming strikes by security staff have been called off!** More than 2,000 staff were due to strike for 31 days this summer, affecting Terminals 3 and 5. But they've accepted a pay deal now, so the strike has been cancelled.

Come fly around China as much as you like!

Alexandre Gries 4 July, 2023



Local agents in China have confirmed that authorities have **dropped the 6 sector limit on foreign private/bizav flights.**

Until now, aircraft were limited to 6 flights in China – international arrival, 4 internal flights, and international departure. But from June 20 all sector limits have been removed, **so you can now fly as many domestic sectors in China as you want.**

Here's a beautiful graphic we made to illustrate the change:

True to form, the authorities in China haven't officially published this change anywhere. We heard about it from an OPSGROUP member (thanks! please tell us more things!), and double-checked it with a few local agents in China who confirmed the change.

Which local agents?

Three of them, all said the same thing. You can contact them here:

Pandaviation: ops@pandaviation.com

Mainland GroundExpress: ops@mgel.aero

Universal: Chinaoperations@universalaviation.aero

Why has this changed happened?

It's all part of China's big re-opening post-Covid, and aimed at getting traffic levels back up again. **China fully reopened to tourists in March 2023, after three years of border restrictions.** For pax, quarantine was dropped in Jan, and PCR tests were replaced with rapid antigen tests at the end of April. For crew, you no longer need a Covid test at all – you just need a C type visa and to fill out the online health dec form to generate a QR code which you show on arrival.

What about cabotage?

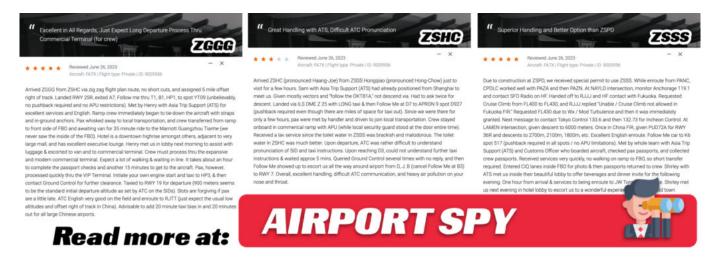
Not really an issue here – foreign reg private/bizav flights can pick up and drop off different pax on domestic flights without issue.

China treats private and charter flights as the same thing. The only difference comes when you have more than 29 seats onboard. In this case, the CAAC will treat you as non-scheduled commercial flight, which means things get more tricky – additional permit requirements including providing a charter agreement, AOC and other aircraft docs.

All interesting in theory. But what are ops to China really like?

We don't know. But we know someone who does - YOU! - fine upstanding members of OPSGROUP!

We've had several reports recently from OPSGROUP members who have flown to China. Head over to **Airport Spy** on your dashboard to read the reports!



We want your reports!

If you've been to China (or anywhere else, for that matter) and can share some info on how the trip went, let us know. Or even better, skip the middle man and file an Airport Spy report!



Got some intel?

Are you an Airport Spy?

envy you. Now, it's time to give back.

For your next trip, pack a notebook, and file your Spy Report below. You'll get a weekly ops briefing in return.

File your report (>)

More info on China ops

- For all your questions on ops to/between/over/avoiding **China and Taiwan**, check here.
- For some general **top tips on ops to China**, check here.
- Want to know what the deal is with **crew visas** in China? Check here.
- Make sure you know about the **hidden permit costs** of operating to China here.
- Read about the latest goings on in the **South China Sea** here.
- OPSGROUP members can download a **Himalayan Routing Guide** here.

EASA: New Ops Risks in Europe

Alexandre Gries 4 July, 2023



In 2020, the industry fell off a cliff as the world went into hiding. Things in 2021 weren't much better. Then finally last year the wheels started to turn properly again – albeit while still pushing against outdated travel restrictions, quarantine and covid testing.

It is really only this year that the brakes have well and truly been released and the industry has been allowed to return to a full gallop. So with peak summer season coming up, EASA has issued a new Safety Information Bulletin on the **emerging new safety risks** in Europe.

Here's a look at some of the main ones...

The Speed of the Recovery

Business is booming, the world is travelling again, and operators are making up for lost time – cash flow has never been more welcome.

But herein lies the problem. The sheer speed at which things have started up again is a threat. The primary issue EASA identifies is that the industry just isn't keeping up with the **pace of change.** We're not managing things as well as we should. And they smell risk – with a delayed fuse...

Shortages of People and Things

There is currently a **lack of qualified operational staff** across the board. This isn't just limited to pilots either – cabin crew, engineers and air traffic controllers to name a few are all in hot demand. And for the ones already employed and working, **fatigue** is becoming a major concern.

For new ones, **lack of experience** is likely to emerge more often in incident and accident reports. EASA are worried about the lack of time and resources to train them all at the pace the industry is demanding of them. The problem with this is that the safety impact may not be immediately obvious but could emerge later.

But it isn't just people. It is the tools they use – there is a significant **shortage of aircraft** and the parts needed to fix them. **Supply chain problems** are leading to cancelled flights and maintenance delays. Carriers are increasingly turning to old and retired aircraft in storage to fill the void as order lists for new ones fill up.

Cyber Attacks

A busy and overloaded system is a **vulnerable** one, and this leaves aviation at risk from those who want to harm it. There have been several instances of this reported in the past months. EASA are concerned that the busy peak season may put aviation in the firing line for digital criminals who are capable of wreaking havoc on Europe's skies.

Lack of Capacity

All of those aircraft need room in the sky and the airways system will be pushed to capacity. That means delays and difficulty securing slots, further exacerbating two major safety elephants in the room – **commercial pressure,** and **fatigue.**

Disruptive Passengers

It's not just operational staff who feel the heat. Passengers dealing with delays, strikes or other inconveniences to their travel plans may act up.

In fact, it is a becoming a major problem worldwide. Just weeks ago IATA put out a new report showing that the number of cases of unruly pax had almost doubled year-on-year after the pandemic.

It's Not Just Europe

EASA may have concerns for Europe, but the lessons in their bulletin apply broadly as the industry accelerates away from the nastiness of the past few years. In our enthusiasm to see better times, we need to be **aware of the threats** that we may be steadily introducing. And this simple document is a good place to start.

Inside it has important suggestions for what a bunch of stakeholders (including operators!) can do to start mitigating these threats now, to avoid the fallout later.

Hurricane Season Approaching: What's in store for 2023?

Alexandre Gries 4 July, 2023



Summer is coming in the Northern Hemisphere and so is the next Atlantic hurricane season, which runs from **June to November.**

But for the first time in eight years, experts in the US are saying **it's not going to be too bad this year** – or rather, they are predicting a "near-average" hurricane season...

The 2022 season saw 14 named storms, eight hurricanes and two major hurricanes – which is actually pretty near average.

The worst of these was **Hurricane Ian**, which hit Florida at the end of September as a Category 4 major hurricane, tracking right across Florida before making a second landfall in South Carolina.

The two surprising things about the 2022 season were **the lack of any storm in August** (a time when Atlantic storm activity normally starts to increase), and the formation of **three hurricanes in November** (Lisa, Martin and Nicole) – right at the end of the hurricane season.

Here's an animation of last year's season's highlights, thanks to the NOAA:

What does 2023 have in store?

CSU Tropical Weather & Climate Research have released their prediction for this season. Here's the lowdown:

- **Good news:** "El Niño is virtually assured in the next couple of months" meaning that increased winds from the Pacific will blast across into the Caribbean and Atlantic and help tear apart hurricanes as they try to form.
- **Bad news:** Warm waters in the tropical Atlantic are at "record levels in the eastern part of the basin" meaning that ideal hurricane conditions are in place which will counteract some of the El Niño effect.

So although they say to expect a "near average" season, **they really don't know yet which way it will go.** Or to put in proper met speak: "Given the conflicting signals between a potentially robust El Niño and a much warmer-than normal tropical and subtropical Atlantic, the team stresses that there is more uncertainty than normal with this outlook."

Southwest hurricane season

This isn't specifically a "northern hemisphere" thing because it **affects countries both sides of the equator.** Similar to the Atlantic season, it generally runs from **June through September.**

India, Pakistan, Sri Lanka, Myanmar, Bhutan, Bangladesh, Nepal, Cambodia, Laos, Thailand, the Philippines, and Vietnam are generally the most affected, although some of the nastier storms can track pretty far south.

Tropical systems bringing nasty weather, heavy rain and often strong winds are also associated with the season. You'll find these forming in spots like the Arabian Sea, Bay of Bengal, and northern Indian Ocean.

The main impacts?

- **Airport operations** can often become the biggest nightmare for a pilot. Weather conditions will often shift as the storm moves through, so there may be windows where the wind is aligned with the runway, but don't let the lack of crosswind fool you, as the turbulence and wind shear caused by the high winds will still present a considerable problem for your approach.
- Airports near the storm will often become full due to diversion traffic so be on the lookout for Notams which often prevent their use as a planned alternative. Some regional airports might close to arrival traffic when they are filling up, so having fuel for an alternate some distance from the storm is handy.
- Be on the lookout for Notams affecting entire airways. In addition, there are often LSWDs (Large Scale Weather Deviations), and FIRs will modify route availability to assist their aircraft management.
- Carry extra fuel. This is especially true for those ultra long range flights. Weather at the time of your departure may be forecast OK. However, 12 hours is a lifetime for these storms, and the airport, which you thought would be OK, could be the storm's firing line. Fuel will give you options.

- Be mindful of aircraft limitations and aware that ATC may not pass on info if they're busy. Ask the approach controller how many aircraft have made successful landings in the past 30 min, just to help create a picture of how things are on the ground.
- After storms pass, the local region can be isolated due to flooding and damage. Power and water are often cut off, and essential services may be limited. For airports, manpower and fuel could be an issue, so FBOs/handlers may not be able to assist with your arrival for days after the storm has passed.

Understanding the forecasts

During hurricane season, some terms get thrown around that aren't always that clear.

Especially:

- The difference between a storm and a hurricane.
- What categories actually mean.
- The actual effect of these categories on the ground.

Hurricanes are measured on a 5-point scale. The bigger the number, the more destructive it will be. Here's a handy little graphic, courtesy of the National Hurricane Center:

https://ops.group/blog/wp-content/uploads/2021/04/SSHWS_animaton.mp4

Getting good intel

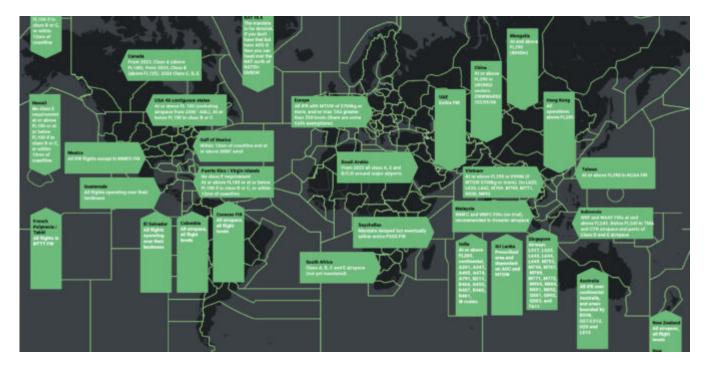
Keep an eye on the FAA OIS website and NOAA website. When new storms form, daily telcons are activated that anyone can dial into. They provide up-to-the-minute operational updates on airports and airspace.

Prepare to help!

After a disaster, we know that knowledge is critical. Getting good information to relief workers literally saves lives – which is why OPSGROUP established Relief Air Wing. It is a team of OPSGROUP volunteers who come together in the aftermath of these storms to help share information to relief agencies so that **help can get through to where it is needed the most.**

Our community contains thousands of skilled pilots, air traffic controllers, dispatchers and other professionals and **together we can make a real difference**. Head on over to the Relief Air Wing website for more info on our mission and how **you can help**.

ADS-B Mandates in 2023



Certain exemptions to the ADS-B mandate in Europe ended on June 7th, 2023, which means that **most** aircraft flying in Europe now need to have ADS-B.

Essentially, you were exempt until 7th June if your CofA was from between 1995-2020, **and** you had a retrofit plan in place, **and** you never benefitted from any EU funding for the retrofit.

Now, you're only exempt if your CofA is from before 1995, **or** you're doing a maintenance or delivery flight, **or** you'll be ceasing ops within EU airspace before Oct 2025.

There's a whole bunch of EU docs out there containing these rules, but the main one to check is 1207/2011.

Other ADS-B mandates around the world

Here's a map of all the current ADS-B mandates we know about, in a lovely green tint, mostly pointing in the right direction of where the airspace they refer to are!

Other ADS-B mandates coming soon

Fiji

July 13th 2023 – ADS-B will be required for all flights in the Fiji domestic sector of the NFFF/Nadi FIR. (You already need it in the New Caledonia sector, i.e. the bit around NWWW/Noumea airport). Ref: AIC 03/23

Canada

August 10th 2023 – ADS-B will be required for all flights in Class A airspace (at or above FL180), then in Class B airspace from May 16th 2024, then everywhere else from some time in 2026. Ref: NavCanada

Any more we missed? Let us know!

Mexico General Aviation Challenges: Old and New

Alexandre Gries 4 July, 2023



This article is from Rick Gardner of CST Flight Services. We asked if he could talk to us about some of the long-standing challenges affecting General Aviation ops to Mexico, as well as some of the more recent issues which maybe haven't been widely reported.

Mexico has been a popular destination for General Aviation pilots and aircraft owners for many years and for good reason. Mexico is a country rich in culture, a diverse geography, incredible cuisine, a fascinating history and a warm and welcoming people. The fact that it sits right on the US border makes it easy to reach by most GA aircraft.

However, there are some **long-standing issues affecting GA aircraft arrivals in Mexico** which many veteran travelers may be familiar with that continue to exist.

Customs

Under Mexican Customs law, only a pilot who can prove that they are the owner of the aircraft they are flying is allowed to bring anything into Mexico other than basic clothes and personal effects. Sporting equipment, electronic equipment other than a laptop or an ipad and anything else that you might want to have with you is **not allowed entry and can be taxed or confiscated.**

Even though the law allows the owner-pilot to have passenger privileges in this regard, **many customs agents are unaware of this allowance** and frequently deny them this privilege.

If the Mexican Customs agents do not have access to a working x-ray machine to scan bags when arriving or departing the country, then customs agents may **open all bags of crew and passengers for manual inspection.** This means that any personal contents inside your bags may become public knowledge very quickly to all those present in the customs arrival area.

Immigration

Mexican Immigration officers are usually very courteous and professional although sometimes they misapply article 14A of the Mexican Tax code which assesses an approximately \$100 USD fee on GA aircraft if they arrive outside of "normal" operating hours or on weekends and/or holidays. The Mexican Tax code specifically states that this fee is NOT to be applied to private flights, yet immigration officers at certain airports apply this fee to all aircraft arrivals regardless of the type of flight or the hours of operation.

Another caveat of Mexican Immigration law is that pilots do not pay certain immigration taxes unless they remain in the country for more than 1 week. This sometimes catches pilots by surprise when immigration officers tell them that they have **overstayed their time and are charged an additional fee.** This is not a fine but simply the same charge that passengers have to pay.



Permits

When you enter Mexico in a private aircraft, you must obtain an **Entry Permit** for the aircraft. There are two types of Entry Permits: a Single Entry Permit (SEP) and a Multiple Entry Permit (MEP).

A SEP is valid for 180 days or until the aircraft departs the country, whichever comes first. A MEP is valid for the calendar year and an aircraft can enter Mexico as many times as the operator wishes during the year without paying for a new Entry Permit, provided that the aircraft does not remain in the country continuously for more than 180 days at a time.

A MEP specifies the crew that brought the aircraft into the country when the permit was issued and **use of** the aircraft by a different crew can invalidate the MEP.

Be aware that neither a Single Entry nor Multiple Entry Permit is valid unless it is accompanied by the original receipt for payment of that permit. If you have a Mexican Multiple Entry Permit (MEP) and you plan

to enter Mexico towards the end of the calendar year, or if you plan to spend New Years in Mexico, you should obtain a SEP when you enter. **The MEP expires on December 31st** and if you have an AOG incident or if you decide at the last minute to remain in Mexico for the New Year, you could face a tricky situation.



For example, a pilot with an Airline Transport Pilot Certificate may be required to have a 1st Class Medical Certificate even though they are flying their own personal Cessna 182. Trying to explain to some AFAC officials how a 1st Class Medical Certificate can become a 2nd Class and then a 3rd Class per 14 CFR 61.23 becomes even more entertaining.

Ramp Checks

Ramp Checks have always been an issue in Mexico and that has not changed. Always be prepared to have valid aircraft and crew documents ready along with the appropriate Entry Permit.

Insurance policies of private aircraft, issued in their country of registry, are valid in Mexico if they include Mexico in the territory coverage and the liability insurance minimum is at least \$ 300,000 USD.

For Charter aircraft, it is a completely different story. Operators of aircraft that are used for both private and charter use need to be extremely careful that if the aircraft is being flown privately into Mexico and an insurance policy (Non-Mexican or Mexican) is presented to the Mexican AFAC that indicates that the policy is for COMMERCIAL purposes, then **the entire operation could be considered as commercial** and the operator will have to present additional proof that the operation is actually private. Otherwise, the operator could be detained, fined, etc. for not having the appropriate permits for charter operations in Mexico.

While not required by regulation, we strongly recommend that if the aircraft is not registered in the name of the pilot or one of the passengers, that you **prepare a notarized letter** identifying the legal owner of the aircraft and that the owner is authorizing the crew to fly the aircraft and the passengers to be aboard

the aircraft on an international flight to Mexico. The letter should also clarify that the flight is a **private**, **non-commercial flight.** This letter can serve to defuse any misconceptions that a private flight may be a charter flight or that the aircraft may be stolen. Sometimes, this letter can help to **avoid the \$100 fee mentioned above** that is erroneously charged by Mexican Immigration by proving that the flight is private. Sometimes......



SENEAM airspace and overtime

This is a topic worthy of its own article. Mexican airspace fee calculation and payment is a topic that will confuse and frustrate even the most seasoned international operator. Suffice it to say that if you flew through the Mexican FIR, even if it was due to a vector by US ATC at the border, and you neither landed nor departed from a Mexican airport on that flight, **you owe Mexico airspace fees.**

If you depart, or arrive, at the beginning, or at the end, of an airport's normal operating hours, you may incur **SENEAM overtime fees** which cannot be paid at the airport. Furthermore, if you requested an extension to the airport's normal operating hours for an early or late operation, the SENEAM overtime fees **cannot be paid along with the airport fees.**

SENEAM overtime fees, like Mexican airspace fees, are **paid through a separate process via a Mexican bank.** Contact us for instructions on how you can inquire directly with SENEAM if airspace or overtime fees are owed.



Safety

The elephant in the room. While theft of aircraft in Mexico has not been an issue for many years, personal safety has gained a lot more attention since 4 US Citizens were kidnapped in the border town of Matamoros leaving 2 of them dead.

For a crime to occur, you need a victim and the right environment. **Avoid being a victim - don't draw attention to yourself** by wearing expensive clothes, jewelry, personal effects and/or by bragging about your success and/or wealth. Don't create the environment. Avoid going "off of the beaten path", don't interact with strangers no matter how innocuous they might appear, avoid using the same taxi driver unless you really know who they are. Avoid border towns.

Another issue pertains to using **app services like Uber**. While Uber is a legally protected service in Cancun, there have been major conflicts between the taxi drivers in Cancun and Uber drivers. These conflicts have spiraled into violent encounters between taxi drivers, Uber drivers and passengers. Until the authorities get a handle on this simmering problem, be very careful with what ground transportation service you use while in Cancun.

Planning for the worse is usually the mantra of pilots. We recommend **fueling on arrival** in a foreign country and leaving enough fuel on board to at least get back to the US border or to another country known to be a safe haven.

We also recommend having **2 satellite based communications devices**, one for the crew and one for the passengers. While sat phones are ideal, they are also terribly expensive. However, devices like the Garmin InReach bring satellite connectivity to a more reasonable level using text messaging. If you are dependent on cellphone or landline technology, you are exposed to getting cut off from the rest of the world and from each other if there is a natural or manmade disaster that interrupts those services.

The US State Department has a couple of useful services for international travel:

- US State Department: Smart Traveler Enrollment Program
- US State Department: Safety and Security Messaging App

New Challenges: Changes to agencies that interact with General Aviation

There is a new political party in Mexico, led by the current president, that has swept into power at the federal, state, and municipal level across the country. This new party has been making **significant changes to laws and leadership** across those institutions that interact with GA arrivals.

The following is a summary of what those changes have been, and the **impact they are having in varying degrees to GA flights** to Mexican Airports...



Security

The Mexican Federal Police (Federales) have been disbanded and replaced with a new entity called the National Guard (Guardia Nacional) which was formed in March of 2019 and **staffed primarily by military personnel.** While still technically a civil organization, it is controlled by the military. The Guardia Nacional now provides security at international airports and at many domestic airports in Mexico, and they are usually the first government agency that an arriving aircraft will encounter. Their degree of interaction with aircraft crews and passengers **varies widely between Mexican airports.**

Civil Aviation Authority

Mexico's CAA formerly known by its acronym of the DGAC was also replaced with the Agencia Federal de Aviación Civil (AFAC) in October of 2019. During the transition process, the top leadership at the central level, as well as the airport level, were **replaced by former military personnel, primarily from the Mexican Air Force.** The AFAC is the agency that issues Entry Permits to foreign aircraft via their central office and local offices at the Mexican international airports and they are the ones who can conduct **random ramp checks** on aircraft arriving at Mexican airports.

Customs and Immigration

In July 2021, another decree replaced Mexican Customs with a new entity called Agencia Nacional de Aduanas de México (ANAM) which falls under the control of the Mexican military. The former civil servants that functioned as Customs officers were terminated and **replaced by military personnel.** Mexican Customs is present at all Mexican international airports and reviews crew and passenger luggage and cargo on arrival into the country and again when departing the country.

In the past, visitors entering Mexico had to complete a Multiple Immigration (FMM) for Immigration control.

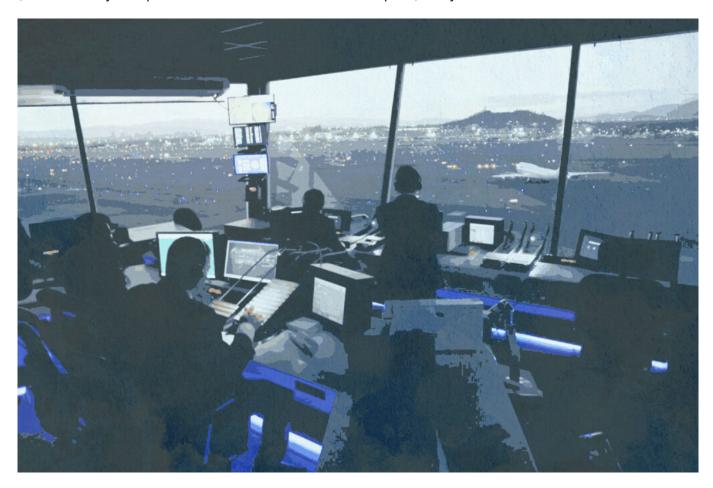
The FMM is a two part form that you fill out upon entering Mexico and the immigration officer would stamp

both parts of the form and return one part to the visitor. Upon departing Mexico, the visitor would surrender their part of this form.

However, the present government is phasing out that form and it is being **replaced with a simple Entry and Departure stamp in the visitor's passport.** Depending on the International airport that you operate from in Mexico, you may, or may not, have to complete the form. It will depend on what stage of the implementation process they are in at that airport.

ATC

In March 2023, a new law went into effect empowering the Mexican military to guarantee the security, sovereignty and independence of Mexican airspace. How this new law will affect the AFAC and SENEAM (the civil entity that provides ATC services in Mexican airspace) has yet to be seen.



How do these changes affect General Aviation?

It is difficult to imagine that these massive changes to so many different federal government agencies that interact with GA would be trouble-free during the transition.

The reality is that at the major airports that receive the highest volumes of visiting GA aircraft, like Cancun, Puerto Vallarta, the 2 Cabo airports, Toluca, Guadalajara and Monterrey, **the impact has been less significant due to the efforts of the airport operators and local FBOs to keep things operating smoothly.** Operators using ground handlers typically fare better because they have somebody on the ground who understands the proper procedures and speaks the language.



However, in all fairness to ground handlers, they cannot interfere with the actions of federal officials doing their duties. So, their abilities to minimize the inconveniences can sometimes be very limited and it is also not in their best interests to antagonize those federal officials that they must interact with every day.

At the other end of the spectrum, international airports and domestic airports that receive little GA traffic can sometimes be more onerous. What we have experienced firsthand is a **lack of coordination between the different agencies which has provoked delays in arrival and departure processing**, frustration on the part of crew and passengers as well as misplaced documents.

For example, the National Guard (Guardia Nacional) will often request that all contents of the aircraft be removed and placed on the ramp to be searched on arrival and departure. Once complete, they may tell you that you can return your items to the aircraft only to have the Customs agent come behind them and tell you to **unload everything again** and to bring it into the airport building. As these agencies rarely identify themselves, it is **sometimes hard to tell who is who.**

Another area of concern has been that these government officials are **using cellphones to take pictures of crew and passenger documents** containing Personally Identifiable Information (PII) such as Airmen Certificates, Medical Certificates and Passports. The ownership of these cellphones, the location where the images are being stored and the steps being taken to protect that data has never been explained.

Unfortunately, we have seen the **AFAC deny entry into Mexico of Experimental Aircraft or pilots using BasicMed**, even though their own published regulations specifically state that Experimental aircraft and BasicMed are allowed with no specific individual approvals.

Another issue that continues to pop up are **AFAC inspectors wanting to see Type Ratings on Airman Certificates for aircraft that do not require Type Ratings.** Fortunately, we have been able to clear up Type Ratings issues by working with the AFAC inspectors.

Bottom line

With so many new personnel entering these Mexican government agencies, some inconveniences are to be expected as they become proficient at the new tasks they are being assigned to do. In the meantime, the best strategy is to **pack an extra case of patience and a large bottle of good humor.** After all, it could be worse, you could have flown on the airlines...

About the author:

Rick Gardner of CST Flight Services, a company which provides a wide range of international trip support services for both owner-pilots and professional pilots. Rick is also the representative for the Aircraft Owners and Pilots Association (AOPA) in Mexico, Central America, The Bahamas and the Caribbean as well as a Bahamas Flying Ambassador, member of The Bahamas Civil Aviation Council and has participated on aviation committees of other foreign countries.

For many years, several individuals and flying organizations like CST Flight Services have collaborated with the heads of the different government agencies in Mexico that interact with US General Aviation arrivals in an attempt to simplify and standardize the entry process. CST's efforts over the years have been successful on a number of fronts such as: obtaining official notification from DGAC that US Issued insurance policies are valid for private aircraft and that you do not have to buy "special" Mexican insurance from 3rd parties, obtaining deferrals for almost 10 years for the requirement of 406 MHz ELTs, obtaining official permission for Experimental Aircraft to enter Mexico in September of 2008 and again in February, 2021, and obtaining an alternate means of filing Mexican APIS for private flights by sending an Excel template via email to Mexican Immigration.

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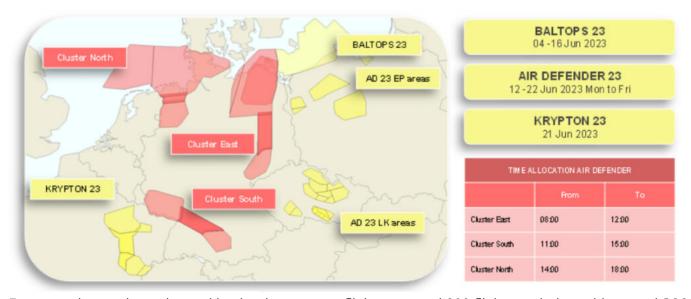
Air Defender 23: Hundreds of flights in Europe to be rerouted each day

Alexandre Gries 4 July, 2023



There are several military exercises planned in Europe until June 22, affecting some busy airspace in Germany (including Maastricht), Czech Republic, northern Poland, and eastern France.

Air Defender in Germany is going to be the one that will cause the most delays and disruption. It's happening June 12-22 (Mon-Fri first week, Mon-Thu second week). This is going to be NATO's biggest ever air exercise, involving 250 military aircraft from 25 countries, and is all about testing their response to a simulated attack on a NATO country.



Eurocontrol are going to be working hard to re-route flights – around 800 flights each day, with around **300 of these expected to have at least 60nm added to their routings.** They predicted the average delay per flight would be around only 3 minutes (but we have to say that feels extremely optimistic!)

They are also warning operators **not to plan flights that will land close to airport closure times**. Several German airports are extending their opening hours on request, although for some you'll have to prove that Air Defender is the reason you need to arrive/depart late: **EDDS/Stuttgart, EDDB/Berlin, EDDF/Frankfurt, EDDL/Dusseldorf** (there may be more!)

For more info, in order of usefulness and how painful they are to read (1 = useful, low pain, 4 = bamboozling, not very useful, high pain), check the following:

- 1. Eurocontrol's summary of how bad they think it's going to be. Click here.
- 2. Eurocontrol's full 65 page briefing. Click here.
- 3. German AIP SUP 7/23 of predicted impact in German airspace. Click here.
- 4. Czech AIP SUP 2/23 of predicted impact in Czech airspace. Click here.

Is TCAS always required on the North Atlantic?

Alexandre Gries 4 July, 2023



Oh, TCAS, you sly little gadget! The Traffic Collision Avoidance System is the knight in shining armour for preventing mid-air collisions. **You would think that TCAS would be an absolute must-have in the NAT airspace**, where the skies are busier than a beehive. But wait for it... surprise, surprise, the answer is a RESOUNDING (but actually slightly complicated) **NO!**

How can this be?

Although most aircraft are still required to have TCAS onboard, a little something called **MEL dispensation** comes to the rescue.

Minimum Equipment List (MEL) is like that cool aunt who lets you get away with stuff. **It allows us to operate with TCAS inoperative, within certain limits.** For some aircraft, it's a two-day pass, while others enjoy ten whole days of TCAS-less adventures (as long as they're departing from a place where fixing it isn't possible).



But what about ATC? Don't they require us to have functioning TCAS?

We reached out to **Shanwick ATC** for a comment, and they had something surprising to say:

- Shanwick supervisor guidelines state that there are no operational reasons for ATC to refuse a request to operate in Shanwick without functioning TCAS.
- There are some caveats: level or route restrictions may be imposed to avoid densely populated airspace, however this is unlikely within Shanwick airspace. ATC here would not automatically exclude the flight from the NAT Tracks. Operators should file and request their optimal routing and ATC will endeavour to approve as requested.
- Where TCAS fails during flight: Shanwick ATC will coordinate with the next unit but advise that the operator should be coordinating with other ANSPs, particularly those without a NAT boundary (for example any Eastbound flight that suffers TCAS failure in Gander FIR Gander would coordinate with Shanwick and Shanwick would coordinate with Shannon).

A discussion with **Gander ATC** on the other side of the pond resulted in much the same information:

• There is no rule prohibiting an aircraft operating under TCAS MEL relief from operating anywhere in the NAT HLA or on the NAT Tracks.

It all boils down to **airspace design and risk mitigation.** When intelligent folks design these controlled airspace areas, they put the responsibility of traffic separation on ATC. So, whether we have TCAS or not, it keeps their game plan the same. Our fancy onboard collision avoidance measures, whether TCAS or a creative SLOP manoeuvre, are like sprinkles on the icing of the airspace cake.

A word of caution

MEL isn't there to make us feel invincible. It's not a license to fly with broken stuff just because we can. It's more like a get-out-of-jail-free card to prevent us from being stranded without a paddle.

And also, before making grand plans for TCAS-free adventures, remember that **our departure and destination airports may have something to say about it.** The busier places like London or New York might only be keen on welcoming an aircraft with TCAS.

So, what are our options? We might need to make a detour to a quieter second or third-tier airport, which might not be as glamorous as our passengers desire. We'll have to calculate the impact on remaining time and fuel and consider getting our aircraft to a maintenance base before the MEL expires.

Gimme the bite-sized version

- En-route ATC centres don't have any operational reasons to refuse entry into the NAT. If it breaks before the flight, you must let all of them know. If it breaks in flight, they will help you.
- You may not get your planned level or track you will need more fuel as a contingency.
- Be mindful that the **MEL doesn't intend us to fly with broken equipment simply because we can**... it's a tool for us to get aircraft to equipped maintenance centres
- Your departure or destination airports may not accept you without TCAS. Consider where you would go and how that would impact the remaining time of deferred defects.

US will not delay 5G aircraft retrofit deadline

Alexandre Gries



Telecoms firms will be rolling out 5G near major US airports from July 1, 2023. **Most aircraft need to upgrade their radio altimeters** by this date to continue certain operations, and the FAA has said it will not be extending the deadline.

What do you mean by "certain operations"?

These ones:

- Special Authorization CAT I, CAT II and above approaches.
- Auto-landings.
- Head-up display landings.
- Enhanced vision systems through touchdown.

For ease of reference, we're going to call these **"fancy landings"** for the rest of this article.

What do you mean by "most aircraft"?

Aircraft that need to do this are "Transport and Commuter Category Airplanes." Just like it says in the FAA rules!

What FAA rules?

The initial set of rules (Airworthiness Directive 2021-23-12) was published in Dec 2021. But that got superseded in May 2023 (right at the death, with only 1.5 months to go until the July 1st deadline!) with Airworthiness Directive 2023-10-02. This really is the place to go to find answers to all questions.

The rules set two deadlines:

July 1, 2023: All transport and commuter category airplanes, regardless of the type of operation (Part 91, Part 135, Part 121), will be **prohibited from performing these fancy landings at any US airport unless they have upgraded their radio altimeters.** Aircraft without upgraded radio altimeters will be able to operate into any airport, but cannot fly the fancy landings.

Feb 1, 2024: US aircraft operating under **Part 121** need to have upgraded their radio altimeters to be able to operate **anywhere in the contiguous US.**

What are "transport and commuter category airplanes"?

Commuter Airplanes = multi-engine, max pax seats 19, max takeoff weight of 19,000lbs. If you have more than 19 seats, or you're heavier than 19,000lbs, that makes you a **Transport Airplane.**

So this basically means everyone.

EVERYONE everyone? Or just N-reg aircraft?

Yeah ok, not EVERYONE everyone. The rules only apply to N-reg aircraft.

So, technically, if you're not N-reg you can carry on flying the fancy landings in the US after July 1st even if you haven't upgraded your radio altimeter. But that's probably not a great idea, because **the 5G** interference is still going to be an issue for you!

As the FAA says in the rules (in response to no fewer than eleven foreign airlines who asked this very same question):

"Under ICAO Annex 8, Airworthiness of Aircraft, the state of registry of an airplane

is the state responsible for its airworthiness. For this reason, FAA ADs

apply only

to U.S.-registered airplanes. To the extent the FAA's bilateral partners agree with

the FAA's finding of an unsafe condition in U.S. airspace, the FAA encourages those

authorities to adopt the FAA AD or similar requirements as mandatory continuing

airworthiness instructions for airplanes registered in other countries.

The FAA also plans to publish information in the FAA's Aeronautical Information

Publication to alert international operators to the 5G C-Band situation in the U.S.,

including the agency's use of Domestic Notices. The FAA strongly urges operators of

foreign-registered airplanes to voluntarily comply with the actions required by this

AD when operating in the contiguous U.S. given the unsafe condition affects their

airplanes as much as the airplanes subject to this AD."

What if I don't care about these fancy landings?

If you're N-reg but don't have approvals to do these fancy landings, you don't need to worry – **no radio altimeter upgrade is required.**

Before July 1st, just stick this table into your AFM, and you're done:

Figure 4 to paragraph (i)— AFM Revision for Non-Radio Altimeter Tolerant Airplanes

(Required by AD 2023-10-02)

Radio Altimeter Flight Restrictions

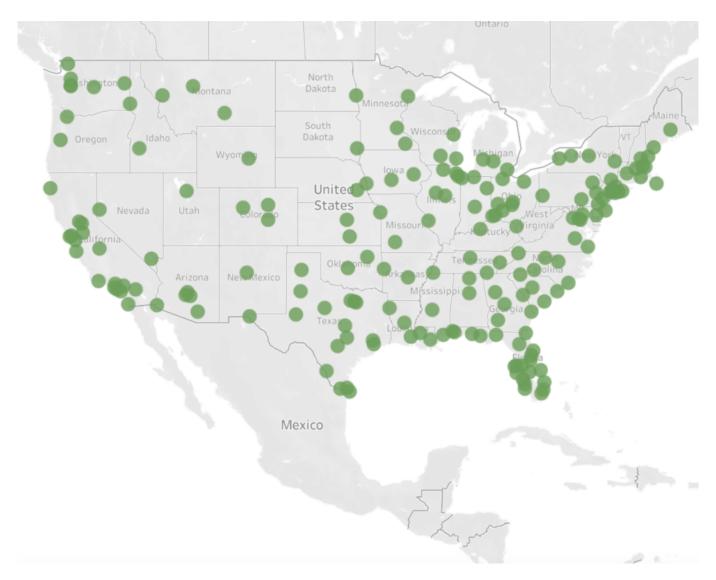
Due to the presence of 5G C-Band wireless broadband interference, when operating in the contiguous U.S. airspace, the following operations requiring radio altimeter are prohibited:

- Instrument Landing System (ILS) Instrument Approach Procedures (IAP), SA CAT I, SA CAT II, CAT II, and CAT III
- Automatic Landing operations
- Manual Flight Control Guidance System operations to landing/head-up display (HUD) to touchdown operation
- Use of Enhanced Flight Vision System (EFVS) to touchdown under 14 CFR 91.176(a).

As of February 1, 2024, this airplane must not operate under 14 CFR part 121 in the contiguous U.S.

Which airports are affected?

Right now, there are almost 200 US airports with 5G interference issues. **The FAA has an interactive map** of them all here, where you can check all the restrictions for each one.



This list of airports is probably going to increase after July 1st, as more 5G towers are installed across the country.

What's the backstory to all this? Please make it short

In Dec 2021, the FAA had concerns about 5G networks interfering with aircraft radio altimeters due to similar frequencies. They banned fancy landings at some airports, issued some guidelines, and allowed some exemptions. In the end, a deal was made to delay activation near major airports, initially until July 2022 but extended to July 2023.

Where can I find more info?

- Really, truly, head here first for the **FAA rules** on all this, to get it from the horse's mouth.
- Then if you're still keen, you can check here for the FAA website on all things 5G.
- And also here for a recent **webinar by AIN** on the impact of 5G, with a focus on bizav.
- Then finally here for the most recent **special airworthiness information bulletin** issued by the FAA on 24th May 2023, where they're basically asking manufacturers and operators to continue assessing the whole 5G issue and report back to them their findings.

Asia Airspace Risk: Why North Korea's Lastest Launch Matters...

Alexandre Gries 4 July, 2023



**Update: June 2, 07:35z **

South Korea, the Philippines and Japan have all issued new airspace warnings by Notam due to the risk caused by falling debris. Japan's in particular is worth noting as it also suggests an 'anti-ballistic missile' may be launched from several potential locations within the RJJJ/Fukuoka FIR to shoot down the craft if it enters Japanese airspace during launch.

The Notams to be aware of are:

South Korea:

RKRR Z0298/23 - ROCKET LAUNCH WILL TAKE PLACE FROM NORTH KOREA. IN THE INTEREST OF AVIATION SAFETY, WI INCHEON FIR ALL ACFT ARE STRONGLY ADVISED TO KEEP LISTENING TO THE FREQUENCY AND FOLLOW THE INSTRUCTION OF ATC.

EXPECT FALLING AREAS ARE AS BLW:

- 1. 360656N 1233307E-352431N 1232247E-352001N 1234837E-360226N 1235911E
- 2. 340554N 1230159E-332328N 1225153E-331632N 1232940E-335858N 1234004E
- 3. 145410N 1284006E-111918N 1291050E-112649N 1295408E-150142N 1292403E.
- 31 MAY 08:38 2023 UNTIL 10 JUN 15:00 2023. CREATED: 31 MAY 08:38 2023

Japan:

RJJJ P2445/23 - ALL ACFT INTENDING TO FLY WI FUKUOKA FIR ARE ADVISED TO PAY SPECIAL ATTENTION TO THE FOLLOWING INFORMATION.

A ROCKET IS EXPECTED TO BE LAUNCHED FROM NORTH KOREA AND THE ANTIBALLISTIC MISSILES MAY BE LAUNCHED FOR THE DESTRUCTION OF THE

ROCKET.

- 1.ROCKET LAUNCHED FROM NORTH KOREA
- (1) LAUNCH SITE: NORTH KOREA
- (2) FALLING AREAS COORDINATES:

FIRST STAGE

360656N1233307E 352431N1232247E 352001N1234837E 360226N1235911E

SECOND STAGE

340554N1230159E 332328N1225153E 331632N1232940E 335858N1234004E

THIRD STAGE

145410N1284006E 111918N1291050E 112649N1295408E 150142N1292403E

2.IN ACCORDANCE WITH ARTICLE 82-3 OF JAPAN SELF DEFENSE FORCE LAW,

THE ANTIBALLISTIC MISSILES ARE DEPLOYED AT POSITIONS BLW,

(1)NAHA-SHI : 261219N1273929E (2)MIYAKOJIMA : 244602N1251930E (3)ISHIGAKIJIMA : 241953N1240828E

(4)YONAGUNIJIMA: 245838N1225716E. SFC - UNL

30 MAY 15:00 2023 UNTIL 10 JUN 15:00 2023. CREATED: 30 MAY 13:57 2023

Philippines:

RPHI B1867/23 - SPECIAL OPS (SATELLITE LAUNCH ACT) WILL TAKE PLACE WI:

145410N 1284006E - 111918N 1291050E - 112649N 1295408E - 150142N 1292403E -

145410N 1284006E.

SFC - UNL, 30 MAY 15:00 2023 UNTIL 10 JUN 15:00 2023. CREATED: 30 MAY 02:31 2023

It has been a busy week for the aspiring North Korean space program.

In an unusual turn of events, on May 29 they actually provided prior notice of an **impending launch** of a (suspected) surveillance satellite into orbit. Then on May 30 it actually lifted off, although unsuccessfully. Alarms were briefly triggered in South Korea and Japan. No sooner had the dust settled than Pyongyang announced their intention to try again – sometime before June 11.

Similar attempts in the past have turned out to be yet more **thinly veiled missile tests.** Nevertheless, the global community is taking these warnings seriously, and word is being spread by Notam.

Unlike conventional missile tests which we have frequently reported, an attempt to put something into orbit not only uses UN-sanctioned technology, but creates **far broader hazard areas for civil aviation - well beyond the ZKKP/Pyongyang FIR where traditional missile tests lie.** Which is why we're collectively sitting up a little straighter.

Not all of the beans are being spilt though. Only some of them. Which is why this week's launch window was notably broad – extending for a full ten days. Subsequent launches are likely to be same.

The risk for aircraft was from falling debris from rocket staging, or even a complete failure of the craft.

The Notam...

On May 29, South Korea (the RKRR/Incheon FIR) published the following Notam (which has since been cancelled):

- Q) RKRR/QWMLW/IV/BO/W/000/999/3535N12700E999
- A) RKRR B) 2305301500 C) 2306101500
- E) ROCKET LAUNCHED FROM NORTH KOREA. IN THE INTEREST OF AVIATION SAFETY, WI INCHEON FIR ALL ACFT ARE STRONGLY ADVISED TO KEEP LISTENING TO THE FREQUENCY AND FOLLOW THE INSTRUCTION OF ATC.

EXPECT FALLING AREAS ARE AS BLW:

1. 360656N 1233307E-352431N 1232247E-352001N

1234837E-360226N

1235911E

2. 340554N 1230159E-332328N 1225153E-331632N

1232940E-335858N

1234004E

3. 145410N 1284006E-111918N 1291050E-112649N

1295408E-150142N

1292403E

There were three major hazard areas - portions of the Yellow Sea, East China Sea and the Philippine Sea.

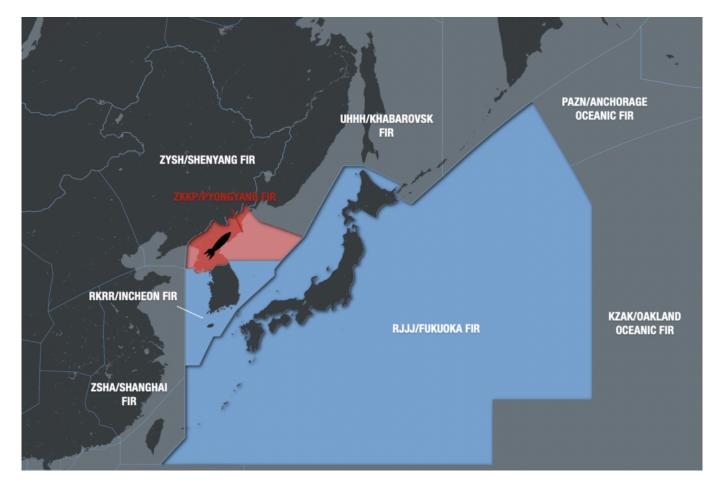
Don't think in capitalised type-written coordinates? Neither do we. Here's what that looked like on a map:



The official advice was avoid them completely, if practical. Otherwise, to listen out to ATC for potential updates.

The Plot Thickens...

Given the current state of affairs, any launch is **politically sensitive** and risks far greater political fallout. Japan has been especially vocal in denouncing them saying that they 'threaten the peace and safety of Japan, the region and international community...' They have vowed to shoot down any satellite or debris if it enters Japanese territory – important note: there are currently **no airspace warnings for air defence activity anywhere in the RJJJ/Fukuoka FIR.** With the best intentions, history has shown this type of activity can inadvertently put civilian aircraft at risk.



It's no wonder too – there is a well publicised record of North Korean missile launches coming uncomfortably close to Japanese territory, often landing well into the Sea of Japan.

Political Posturing

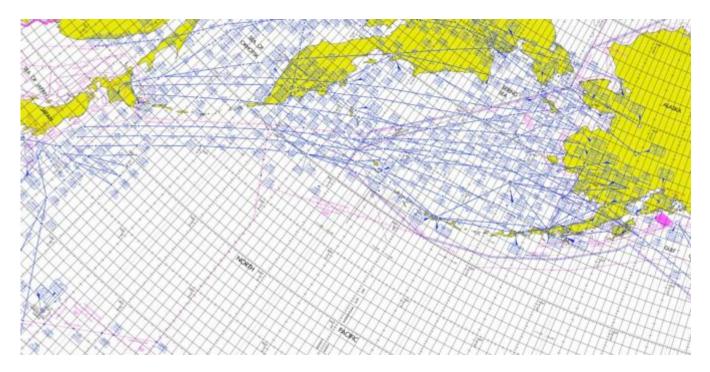
It's unclear whether these are genuine attempts to put a craft into orbit, or more simply a political statement to flex North Korea's ballistic missile capabilities. If subsequent launches were successful it would be North Korea's first foray into space ops. However, it comes at a time when there have been large scale live-firing military exercises near the North Korean border by South Korea – part of a seemingly constant cycle of diplomatic muscle flexing that seems to characterise to the region – and as such we may need to take things with a grain of salt.

From an airspace perspective though, these launches should be **treated as real hazards.** At the very least because it is better to be safe than sorry.

We'll continue to report on any changes as they emerge. Many of these risks are well publicised, and safeairspace.net is a great place to start for that info.

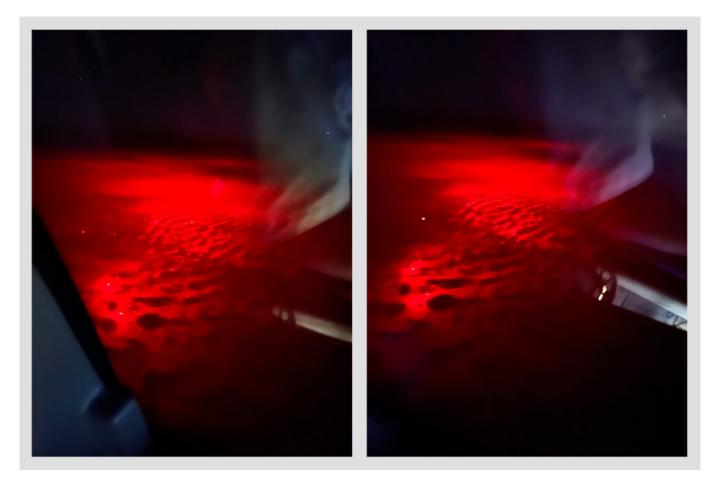
Navigating the NOPAC Redesign Project

Alexandre Gries 4 July, 2023



To revolutionise the efficiency of the North Pacific Route System, the FAA and Japanese CAA have embarked on a journey called the **"NOPAC Redesign Project".**

In 1974, when NOPAC was initially born, five parallel routes were drawn for pilots to spend many nights staring into nothingness between Japan and Alaska. If lucky, you would see the aurora borealis or maybe even a mysterious red UFO floating near the ocean []



However, it was a dark and quiet journey across the North Pacific for most.

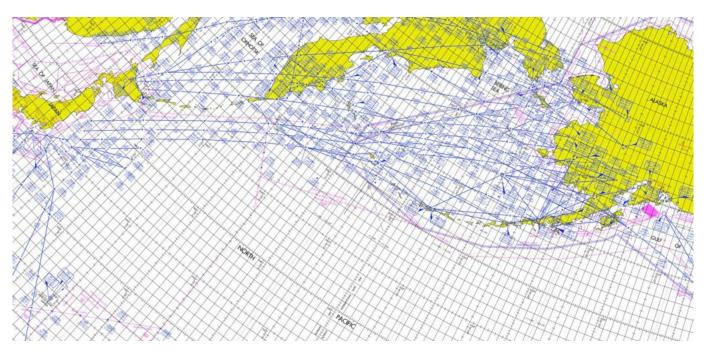
This new project aims to **compress four routes into less airspace**, leaving pilots more room for

creativity and manoeuvrability.

So, fasten your seatbelts and join us on this adventure through the whimsical world of airspace redesign...

Wait! Where are we talking about??

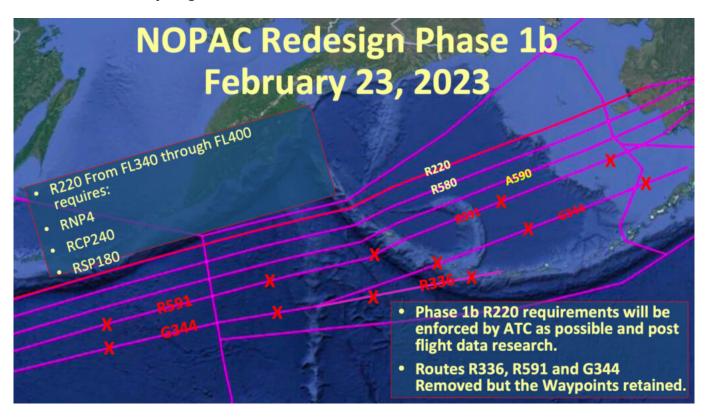
This area, from Alaska, over the North Pacific and down to Japan:



That's just a big mess of yellow land and indiscernible blue lines

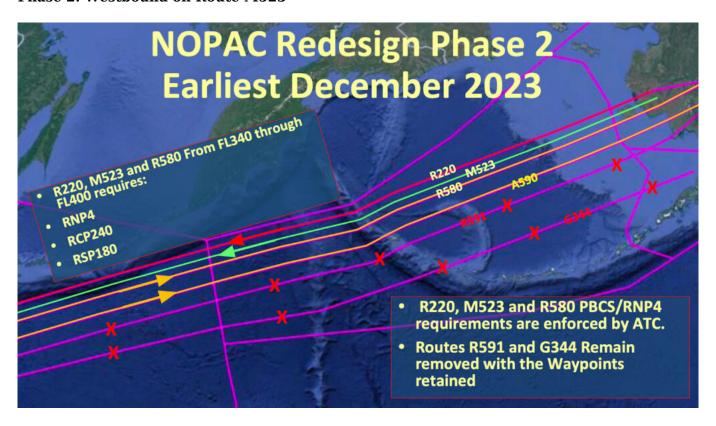
Yep, but thanks to the FAA we have some nicer maps available, showing exactly what is changing...

Phase 1B: The Story Begins



- The two southernmost routes, **G344** and **R591**, were zapped out of existence on Feb 23, 2023.
- But for the hoarders, fear not, as the waypoints defining these routes were preserved. Think of them now as magical breadcrumbs to help pilots file their flight plans. This unlocked the airspace south of **A590**, providing opportunities for User Preferred Routes (UPRs). Free to do as we please, making for a more efficient trip.
- The remaining three routes are: R220, R580, and A590.
- Aircraft flying on **R220** west of waypoint NULUK must have **PBCS** (RCP 240, RSP 180 and RNP4 approvals) to operate from **FL340-FL400**.

Phase 2: Westbound on Route M523

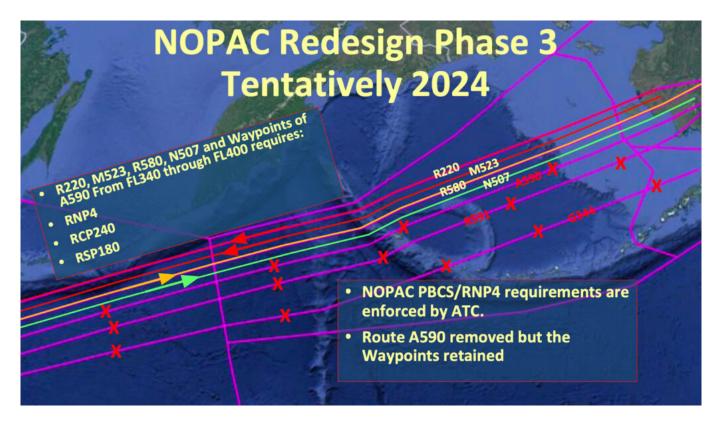


- At the end of 2023 (but most likely in Jan 2024), Phase 2 of this redesign will unfurl.
- Brace yourselves for the birth of a new westbound ATS Route named **M523**. It is ideally situated between R220 and R580. Think of it like adding a secret passage to an already perplexing labyrinth. But unlike the old routes, M523 will only be open to westbound aircraft operating from FL340-FL400.
- At this point, **R220**, **M523** and **R580** will all require PBCS from FL340-FL400, to ensure lateral separation between aircraft (which is now down to 23nm).
- **Don't have PBCS?** If you are flying a plane lacking these approvals, you can merrily explore **R220 and R580** either at or below FL330 or at or above FL410. Do you want something more optimum? Then you can plan eastbound on A590, or a westbound route at least 50nm south of A590.

My head hurts

We're almost there now, only one more phase to go...

Phase 3: Eastbound on Route N507



- Cast your mind forward to mid-2024, when Phase 3 reveals itself. Behold the birth of the **new eastbound route N507**, positioned 25nm south of R580. Emerging from the charts, this route gives pilots more options to zigzag through the airspace. To maintain order amidst the chaos, aircraft operating on R220, M523, R580, N507, and the soon-to-be-deleted A590 waypoints will have to have PBCS.
- **Don't have PBCS?** You can operate on R220 and R580 at or below FL330, at or above FL410. Or you could operate at least 75nm south of N507. PBCS requirements do not apply in this southern airspace extravaganza.

Words words numbers numbers... just tell me what I need to know

A brave new world is appearing in the North Pacific, and to help us navigate the upcoming requirements, aviators should **consider obtaining PBCS approvals** in advance. Think of them like collecting golden tickets for new airspace adventures. So, dear pilots and planners, prepare yourselves for the challenges and delights that await in the world of NOPAC!

And to read all this information again in its pure, unbridled form, click here for the briefing from the FAA Anchorage ATC team.

Parking Pain in Portugal

Alexandre Gries 4 July, 2023



It looks like summer ops to Portugal are going to be tough. There are restrictions at the two main airports, LPPT/Lisbon and LPPR/Porto, and parking elsewhere is going to be challenging too. Here's the lowdown...

Strikes

Just before we get stuck in, it's worth knowing that there are **border control staff strikes** planned over the next month at the major airports in Portugal.

- LPPT/Lisbon will be impacted 05-10 local time every Sat-Mon until the end of June.
- Strikes at other airports are planned for all day every Friday until the end of June.

More info here.



LPPT/Lisbon

Until the end of the official IATA Summer Season (that's Oct 29, to you and me), most aircraft will be limited to **max 60mins turnaround time** (and Code A and B aircraft only get 45mins). There's no Notam on this – it's hidden away in AIP SUP 61/22. Local handlers expect limited summer slots too. Contact them at lis@omnihandling.com. So essentially, it's **drop-and-go's only from now til November!**

LPPR/Porto

Porto also expects to be busy this summer. They're saying that **parking will only be granted for 4 days max** (96 hours), and can be requested only **within 15 days** of your planned trip. They do have a hangar which could accommodate longer parking, but **the airport does not have a towbar for GA/BA aircraft** so you'll have to bring your own! Contact local handler opo@omnihandling.com for more info.

LPCS/Cascais

One to consider, especially if you're headed to Lisbon as it's jus up the road. You don't need slots here, and they say that **they normally have parking availability** over the summer. The airport is open from 7am till sunset, but will open early/late for an extra fee. Contact the local handler at cascais@omnihandling.com.

LPFR/Faro

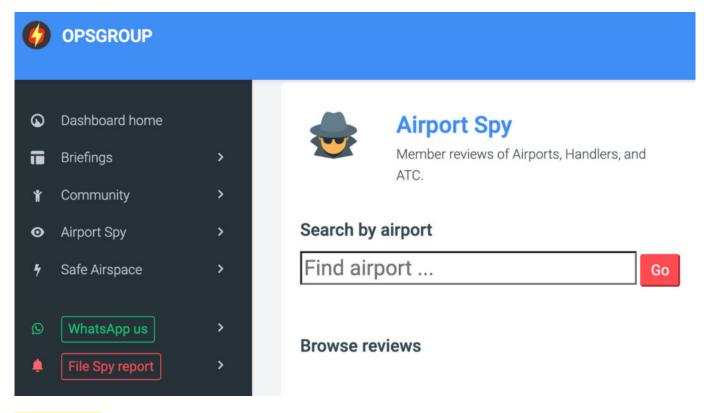
You need slots and parking approval, and **they regularly run out of both during the summer months.** Although technically open 24/7, the runway is closed every night from 23-06z due to noise restrictions. Contact the local handler at fao@omnihandling.com.

LPBJ/Beja

A cheeky extra option to consider. This is a join civil/military airport, so you just need to get clearance in advance (they say to give 48hrs for this), but **they usually have parking available.**

Your Reports!

We've had a couple of recent Airport Spy reports from OPSGROUP members who have operated trips to Portugal – there's one for LPPT/Lisbon, and one for LPCS/Cascais.



LPPT/Lisbon

- Had to wait for fueler and missed our TSAT. **Make sure you respect your numbers** in LPPT... don't mess with TSAT and EOBT otherwise you are not going anywhere.
- Slots required, +/-20 minutes. **Pax must remain onboard** unless they want to take a ride to the terminal and clear immigration, but **there's no FBO** to sit in anyways.
- We had four outbound crew members and all of the bags to support a two-week trip, plus
 catering. We dragged all of it up and down a few sets of stairs in the terminal, and everything
 had to go through a carry-on sized x-ray scanner at the security checkpoint. It took at least 20
 minutes from curbside to parking stand and it wasn't pretty.
- We did not experience aircraft servicing delays as indicated in other reports; our late-night (2300) timing may have helped. There is a **hard midnight curfew for non-commercial ops** and some night restrictions for commercial ops outlined in the 10-1 pages, so be mindful of **potential delays sinking a late-night tech stop.**

• Almost all of the parking stands require a pushback. The parking stand was assigned by the airport authority on an ad-hoc basis, so the handler could not reserve one of the few taxithrough parking stands ahead of time. Pushback was with a Lektro, so no towbar required. TOBT was coordinated through the handler and pushback was requested/authorized by ATC.

LPCS/Cascais

- We ended up in LPCS when, less than 12h to departure time for an 8h leg we were informed that **LPPT would be unable to accommodate parking despite booking weeks in advance.**
- LCPS has a short runway but is still very accommodating for larger aircraft. If you have the marginal performance to land (and depart) there, **this should be your top choice!** There is ample ramp space to accommodate even the largest BizJets and local terrain is of little concern for most BizJets at the weights required to get in and out of their runway.
- Omni handling was excellent and they clearly were very proud of their airport, they are incredibly friendly and welcoming. The handlers were a bit discombobulated on the departure, handing us the wrong flight package and then an incomplete package but they worked hard to get us everything we needed.
- Clearing customs inbound was a bit difficult unfortunately **they have to manually inspect your baggage.** If you have a lot of luggage do plan extra time. It took at least 3-5min per luggage (including hand luggage.)

We want your reports!

If you've been to Portugal and can share some info on how the trip went, let us know! Or even better, skip the middle man and file an Airport Spy report!



Are you an Airport Spy?

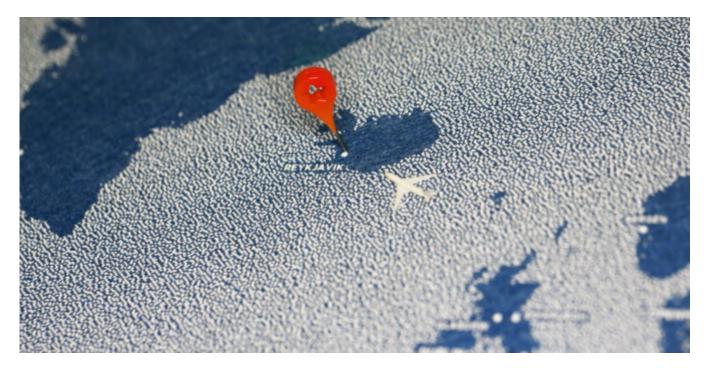
You go to unusual places and see curious things. Your turboprop friends envy you. Now, it's time to give back.

For your next trip, pack a notebook, and file your Spy Report below. You'll get a weekly ops briefing in return.

File your report (2)

Iceland Airports Reopen to GA/BA Flights

Alexandre Gries 4 July, 2023



Update 1000z May 18: The summit is over, and the restrictions on flights at BIKF and BIRK have now been lifted. Below is original story from May 16.

There's a big state summit happening in Reykjavik this week, which means **restrictions for GA/BA flights at Iceland's main airports BIKF/Keflavik and BIRK/Reykjavik.**



BIKF/Keflavik

This is the most common stop for GA/BA flights doing North Atlantic stops. **There's no parking allowed here from 0000z May 15 to 1000z May 18.** That's what this super vague Notam A0133/23 actually means:

A0133/23 - EAST APRON/WEST APRON RESTRICTED FOR SPECIAL OPERATION.

STATE, DIVERTED AND AMBULANCE FLIGHTS ARE EXCLUDED.

15 MAY 00:00 2023 UNTIL 18 MAY 10:00 2023.

CREATED: 11 MAY 14:37 2023

We checked with a local handler at the airport, who said that **quick turns are not allowed either** during this period. You can contact them for more info at ops@southair.is.

BIRK/Reykjavik

From 0700z May 16 to 1900z May 17, GA/BA flights are **not allowed to go here either!** Not unless your flight is directly related to the summit, in which case you need slots. And you can't use it as a FPL alternate.

The days before and after (May 15 and 18), BIRK will be somewhat restricted as well – it'll be busy, all areas and access to the airport will be restricted and guarded by police, and access will only be granted to operating crews, VIPs and staff that have been approved and listed by authorities. Roads and areas close to the summit in downtown Reykjavik will be closed or restricted as well, so good to keep that in mind if crews are staying at a hotels close to the summit.

The Notams for BIRK are actually pretty clear (unlike those for BIKF), and if you need more info about all this, you can contact the local handler at ops@reykjavikfbo.is, but also check out AIP SUP 6-23 below:



Where else to go?

If you want to use Iceland as a North Atlantic night stop this week, local handlers are advising to use **BIEG/Egilsstadir** or **BIAR/Akureyri** in the north of the country.

BIEG/Egilsstadir is open weekdays 0800-1745z and weekends 0915-1745z (400EUR charge outside these hours), and are able to handle almost all GA/BA flights – but they <u>do not have a VIP lounge or FBO</u>. There seem to be a few different handling agents able to make arrangements here. We've been speaking with jetcenter@icelandair.is – so maybe get in touch with them for more info.

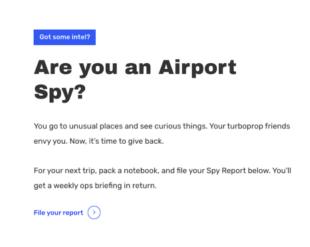
BIAR/Akureyri is open 0700-2300z (and outside these hours, for an extra fee), and they <u>do have an FBO</u> for GA/BA flights – so this might be the airport to go to. Local agents have reported that there is still space at the airport right now, but it's busier than usual due to the summit. Contact them at jetcenter@icelandair.is.

Anything else worth knowing about ops to Iceland?

- There's been a change in AFTN addressing for filing of flight plans in the BIRD/Reykjavik FIR. IFR FPLs now need to be sent to BIRDZPZZ. VFR and mixed FPLs should be sent to BIRDZPZX. AIC 8-23 refers.
- Iceland's airspace is now entirely covered with ADS-B. Coverage extends from the North Pole to Scotland and from the Greenwich Meridian to the west of Greenland. You can see their coverage map including flight levels at this link.
- There are some specific route requirements for flights to BIKF/Keflavik and BIRK/Reykjavik. These can be found in AIP ENR 1.8.4.1.3.7 which explains exactly how you should file your flight plans to/from both BIKF and BIRK. But to make all this blurb easier to understand, the good folks at Isavia have published some handy graphic presentations of the requirements which you can find here.

Anything else big we missed? Let us know! Or even better, if you've operated to Iceland recently and can share some info on how it went, file an Airport Spy report!





Movie Stars and Racing Cars: Special Flight Ops in Southern France

Alexandre Gries 4 July, 2023



The sun's back out in Southern France, and so are the high rollers, race car drivers and movie stars.

That's right – it's that time of year again, with two major events stacked back-to-back – the Cannes Film Festival (May 16 – 27) and Monaco Grand Prix. It's the jewel of the F1 calendar (May 25-28).

This means an influx of business jet traffic to two major airports – **LFMD/Cannes** and **LFMN/Nice**, where some of the world's wealthiest will come out to play.

It's not all caviar and roulette though – you'll still need to be able to land there first. **Three AIP SUPs** have been published to help that happen. Here's what you need to know about them.

LFMD/Cannes

AIP SUP 30/23 has the deets here.

The airport itself isn't normally co-ordinated, but you'll **need a slot** to go there between May 16 – 29. That info is found on this website. The apron is going to be chock-a-block too – a word of warning, you won't be allocated a slot unless you have confirmed parking too.

If you like to manage things yourself on the ground, you're out of luck. Handling services will be mandatory during this period, and it seems there's only port-of-call:

AEROPORT CANNES MANDELIEU / SKY VALET

https://cy.myhandlingsoftware.com

E-mail: operations-acm@cote-azur.aeroport.fr

Phone: +33 (0) 4 93 90 41 10

You may not get your requested slot, so a little flexibility may help here. When you get an **authorisation**

number, this will need to go into Item 18 of your flight plan. Without it, EUROCONTROL will likely refuse it.

Don't be tempted to fly the hop between Cannes and Nice either, in either direction. These flights will be **banned** between May 26 – 29.

LFMN/Nice

AIP SUP 27/23 is the one to check out here.

Nice is co-ordinated year-round, so there's less of a surprise. As above, you'll need to co-ordinate a slot to arrive or depart.

Once again, hiring ground handling services will be mandatory. This time there is a little more choice though. According to the AIP SUP, roll the dice and pick between:

AVIAPARTNER EXECUTIVE

https://www.aviapartnerexecutive.com/nice E-mail: nce.executive@aviapartner.aero

Phone: + 33 (0) 4 93 21 37 37

DC AVIATION G-OPS

https://www.dca-gops.com/ E-mail : nice.ops@dca-gops.com Phone: +33 4 93 21 58 12

Monaco

Monaco itself doesn't have an airport. In fact, it is the second smallest country in the world and is found on France's Côte d'Azur – its south-eastern coast. Inside Monaco is the district of **Monte Carlo**, where the F1 race is taking place. Most fans and participants will enter via Nice.



If you're looking for crew accommodation there, book early. Things fill up, and it becomes astronomically expensive – if it isn't already.

Restricted Airspace

Info on this is published in yet another SUP - this one: AIP SUP 076/23.

From May 16 – 28, unless you are special traffic you will **not be able to overfly the city of Cannes** at low level.

Keep an eye out for intensive helicopter traffic. For **IFR traffic departing on a SID**, it is important to follow published climb gradients and altitude requirements. If you don't think you'll make it – let ATC know with your start request. You may get hit with a delay, but it's better than the alternative..

We're expecting another AIP SUP to be published closer to the F1 Grand Prix which may be more restrictive, and so we'll keep this article updated.

Finished: The FAA Northeast Corridor Improvements

Alexandre Gries 4 July, 2023



It's finally done. On April 20, the last phase of the FAA's Northeast Corridor Atlantic Coast Routes Project crossed the finish line, officially ending (well almost) the **biggest change to the US NAS** in decades.

And April was perhaps the largest update yet - here's a summary of exactly what went down.

Wait, the what?

If you haven't heard of it, our previous article may be a good place to start. But in a nutshell, over the past few years the FAA has been introducing **new and amended Q and Y-routes** to replace the high-altitude route structure running north and south along the US East Coast.



....Asking for a friend, what are J, Q and Y routes again?

J-routes (or jet routes) are high altitude airways (FL180 – 450) that rely on VOR or VORTAC fixes back on ol' terra firma. Q and Y-routes are based off RNAV (GPS) navigation.

It's not that the existing airways were broken, but they were showing their age. The project has been part of a larger transition away from ground based NAVAIDs and towards **PBN-centric US skies** – i.e. satellite based navigation, the good stuff.

Rome wasn't built in a day – and neither was this project it seems. In fact, changes first appeared back in October 2019 – then the world caught the flu. Since then the roll-out has been **delayed several times** with staggered changes spanning the past three years.

If you'd like to see a complete list of those 160+ changes, the FAA has produced this handy slide. For the ones that came into effect on April 20, read on...

The April 20 Update

The final seven J-routes on the chopping block were axed (J37, J55, J79, J121, J174, J191, and J209), along with a number of their associated fixes. In their place twenty Q-routes were either introduced or amended.

To make sure all these new routes were set up and ready to use, **most were published last year.** However there were a stack of 'not authorised' Notams in the system that have now been removed – essentially raising the barrier for traffic to actually use them.

On the East Coast, STARs at three major airports were amended to remove ground-based transitions. At **KPHL/Philadelphia**, look out for new ones on the JIIMS 4 and PAATS 4 arrivals. At **KEWR/Newark**, the PHLBO 4 has been updated along with the JAIKE 4 over at **KTEB/Teterboro**. The good folk over at the Teterboro User's Group have published some additional information on the latter.

The Goal Posts

Let's address an **elephant in the room**. There's a small chance someone will call us on the 'finish line' statement – fair game. There are some **small changes still to come** on June 15 – one more Q-route is being updated (Q101). There will also be a new STAR at **KCLT/Charlotte** along with some deletions. But the big changes are now done and dusted.

There's Been A Little Trouble

Since the changes on April 20, news from the Boston ARTCC has been that foreign operators inbound from the NAT have not always been filing the **new preferred IFR routes.** This is causing a bit of headache at the boundary for pilots and controllers while traffic is 're-jigged.' To see the preferred ones, click here.

The worst is likely over already, but the FAA has also advised **airborne delays are possible** while the system gets used to the changes. ATC may apply traffic management procedures to help keep the flow orderly. Consider a little more contingency fuel while things settle down.

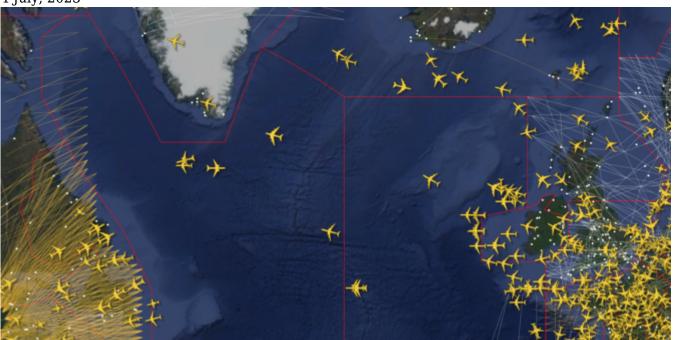
Still have questions?

There are couple of FAA contacts provided in the official briefing:

Reggie Davis **FAA Management Co-Lead** reginald.e.davis@faa.gov Joey Tinsley **NATCA Co-Lead** joseph.b.tinsley@faa.gov

Formidable Shield 2023: NAT Airspace Closures

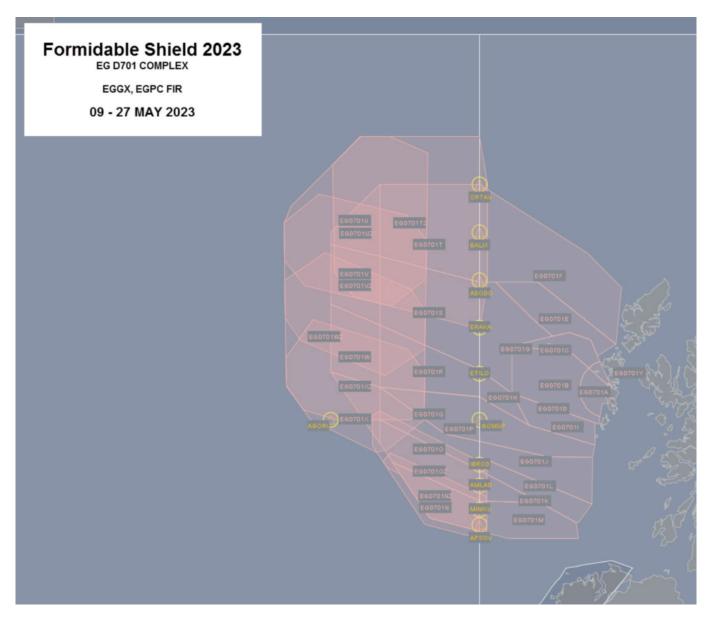
Alexandre Gries 4 July, 2023



Formidable Shield is happening again this year, from May 9-27, which will mean **parts of North Atlantic airspace will be closed to all flights** for several hours at a time.

Back in 2021, the airspace closures were pretty big, stretching halfway across the EGGX/Shanwick FIR. Things aren't so bad this year though – it looks like the closures will just be limited to an area off the west coast of Scotland.

Deep in the bowels of the Eurocontrol website they have published this doc which tells you all about the different closures in the various little chunks of airspace.



So for planning NAT flights, watch out for the whole area from ORTAV in the north to APSOV in the south. And for any questions on Formidable Shield, you can contact the UK Airspace Management Cell at SWK-MAMC-ManagedAirspace@mod.gov.uk.

The Finish Line: NOTAM SPRINT 2023

Alexandre Gries 4 July, 2023



From **May 8-12**, the NOTAM Alliance will host a **NOTAM SPRINT**: a workshop to create a framework for a vastly improved NOTAM Briefing for pilots and dispatchers. The NOTAM Alliance is a user-led group of airlines and aircraft operators focused on radically changing how NOTAMs are provided to flight crews, and includes major airlines like Austrian, Lufthansa, Aer Lingus and United Airlines.

The background to the NOTAM Sprint is a year of tremendous gains in NOTAM improvement. 2023 started with an FAA system failure, which in turn brought global attention to the NOTAM issues that pilots face every day – oversized 50-page+ briefing packages that are impossible for crews to parse. This creates a huge safety risk: critical updates affecting their airports and route of flight are regularly missed.



After decades of attempts to solve the NOTAM problem, the advances in Artificial Intelligence and a fresh

approach to the core issues in 2023 led to a two-month review of the content of NOTAM messages. During February and March, a working group of 50 pilots, dispatchers and NOTAM experts created a "Top 50" list of tags that can be applied to any NOTAM, across 9 categories: Airport, Approach, Runway, Taxiway, ATC, Navigation, Airspace, Hazards, and Library. A Large Language Model (LLM) can then used to apply the appropriate tag to any NOTAM, which allows them to be sorted and filtered.

The result is a shortened "**SuperNOTAM**" Briefing harnessing the "**Dark Cockpit Philosophy**" – presenting first only critical NOTAMs to flight crew, with the more routine operational NOTAMs in a Supplement for reference. Irrelevant NOTAMs are filtered out. Each airline can set their own preferences as to which NOTAM types are deemed most critical (eg. Runway closures, Fuel warnings, Rescue/Fire cover), and which are routine/operational (eg. Parking stand changes, frequency outages, taxiway changes). The most persistent "junk" NOTAMs – Birds, Grass Cutting, and Obstacle Light outages – can be consigned to the scrap heap if desired.

The NOTAM SPRINT aims to create a working prototype of the model, turning the theory into reality, and reducing the NOTAM content at least tenfold. Over five days, airlines, operators, pilots and dispatchers will work on the key areas of the model.

All users are welcome to participate in the event, which will have daily Zoom group chats, a Slack working group, and an evening *Notam Newsletter* to summarise the day's progress. At the end of the five days, the goal is to have an open-source blueprint for a NOTAM model that all aircraft operators will be able to employ, and ultimately, bring long-awaited and much needed relief to flight crews and dispatchers worldwide.

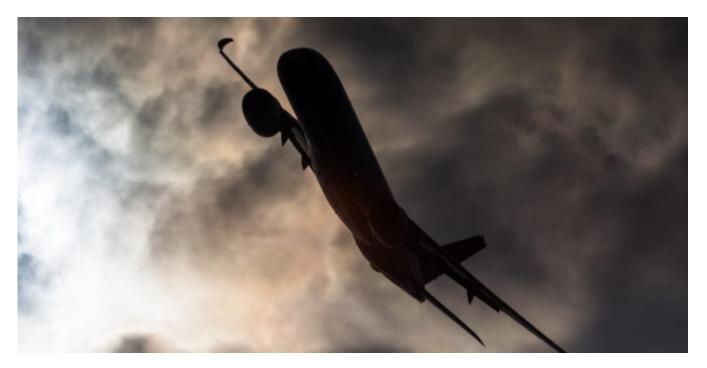
To read more about the event, visit the event page NOTAM SPRINT 2023, and to **register**, use this link.

NOTAM SPRINT 2023 - links

- NOTAM SPRINT 2023: About this event
- Register for NOTAM SPRINT 2023
- NOTAM SPRINT Poster (PNG)
- The NOTAM Tags concept
- Fixing Notams a guide
- The NOTAM Alliance home

Circling: Why Is It So Dangerous?

Alexandre Gries 4 July, 2023



Here's a startling statistic – according to the Flight Safety Foundation, **straight-in approaches are twenty-five times safer than circling ones.** *Twenty-five times!*

It's no wonder then that **the NTSB are concerned.** In fact, they identified that there were ten major accidents involving Part 91 and 135 operators between 2008 and 2023 while flying a circling approach.

We smell risk, and so does the NTSB. Which is why in March 2023 they issued a new safety alert. Asides from the obvious risks of operating a high-performance aircraft at low speed and altitude in poor visibility, there appears to be another threat too – key differences between **ICAO PANS-OPS** and **US TERPS.**

Let's take a closer look...

The NTSB Alert

The NTSB's key takeaway seems to be this: **you don't need to circle**. You can also request a runway aligned approach, or if that isn't practical, a diversion.

Of course, if a straight-in approach isn't available, a diversion for a commercial operator would likely be a tough sell when there is a legal and procedural approach to the runway in front you.

But if you do, it implores you to understand and thoroughly brief the risks.

The reality is that circling approaches are far riskier. They involve manoeuvring an aircraft low to ground, and low in energy in marginal conditions. This opens the door to two major dangers – **loss of control, and collision with the hard stuff.**

They're also not particularly conducive to a stabilised approach, which typically involves being runway aligned by 500' off the deck in VMC conditions, or higher in the soup.

Then there is the elephant in the room – **our own limitations.** As pilots we are responsible for setting our own personal limits. More often than not, these rest within the ones defined by law. Familiarity, experience and conditions all come into play when assessing our appetite for risk.

In other words, just because a procedure is legal doesn't mean we should fly it.

The NTSB also identifies that **training (or lack of) is an issue.** When was the last time you circled in the

simulator? To fly circling approaches safely, we need to be practicing them in our re-currents regularly and in different conditions.

This is where the NTSB alert ends, but there may also be more to it than that – the way circling procedures are designed may also be partially to blame...

The PANS-OPS versus TERPS Conundrum

It will likely be no surprise that instrument approach and departure procedures are designed to keep aircraft safely away from terrain and obstacles to internationally accepted standards.

To make this happen, there are two main sets of procedures:

- 1. ICAO Procedures for Air Navigation Services **(PANS-OPS)** used throughout Europe and in many other parts of the world. You can these in ICAO Doc 8168.
- 2. United States Standard for Terminal Instrument Procedures **(TERPS)** used throughout the US, Canada and in some other countries such as Korea and Taiwan. Those details are in FAA Order 8260.3D1.

When we circle, we need to understand **how the procedure was designed** (PANS-OPS or TERPS) and **what the differences are**, which can be significant.

The reality is that under TERPS, in some cases aircraft are required to fly slower, with higher angles of bank in more restrictive circling areas despite improvements made back in 2013. And all of this can happen in lower visibility than in PANS-OPS procedures.

Could this be one of the **contributing factors to circling accidents** in the US and Canada? Possibly.

What are the differences?

In both systems, a radius is drawn from the centre of the threshold for a particular runway inside of which obstacle clearance has been assessed. It's known as a circling area, or domain.

The size of this area increases with aircraft category – essentially **if you're heavier, you need to fly faster which means your turn radius increases, and you need more room to circle.** This is taken into account using TAS and bank angle when the procedure is designed – along with a healthy dose of mathematical wizardry.

But herein lies an essential difference.

PANS-OPS bases TAS on altitude and **circling IAS.** TERPS on the other hand bases this on altitude and **IAS at threshold**. The result is a much smaller circling area, and in some cases higher bank angles.

Take a Category C aircraft for instance (threshold speed 121 – 141 kts). Under PANS-OPS the circling area for an approach would extend to **4.2nm**, while under TERPS (with an MDA of less than 1000') the same area would extend only as far as **2.7 nm.** For lower category aircraft, this also increases minimum bank angle beyond 20 degrees. **Things can start to get tight.**

In a nutshell, because ICAO uses higher IAS for its TAS calculations, and assumes a lesser angle of bank, its circling areas are far roomier.

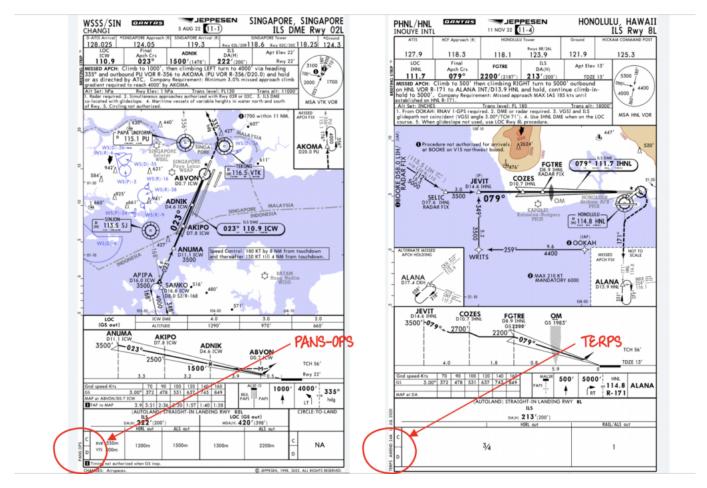
International operators in particular may be at risk of straying outside of the circling area if they are not familiar with the **more restrictive TERPS procedures.** To make matters worse, some countries may not be 100% one way or the other. A straight-in approach may be designed to PANS OPS, while the circling

approach is designed to keep you within a TERPS assessed area - Mexico and Chile being examples.

And in some cases, all of this can happen down to a minimum visibility of just **1.5 miles** (2.4km) under TERPS, versus **2.3 miles** (3.7km) under PANS-OPS.

How do I know what kind of procedure I'm flying?

Get your magnifying glass out. **It will be written in the margin of your chart.** If you're using Jeppesen, have a look at the bottom left-hand side, written vertically. It's far from obvious.



Once you've established what type of approach you'll be flying, **you'll need to think about speed, your circling area, and whether the visibility is appropriate.** We've put together a little cheat sheet that may help...

The Stats Don't Lie

We're getting circling approaches **tragically wrong.** What the industry is currently teaching pilots doesn't seem to be cutting the mustard – and the Flight Safety Foundation agrees. Pilots need to be **more aware of the design criteria** used for circling approaches, and the **limitations that places on their aircraft.** This also needs to be made far clearer on approach charts if we're to reduce risk on these challenging manoeuvres.

Pilot Mental Health: What can we do right now?

Alexandre Gries 4 July, 2023



This article is from Karlene Petitt – international airline pilot, author, and speaker. It occurred to us that we hadn't talked much about **pilot mental health and wellbeing** here on the OPSGROUP blog, and we wanted to change that. We know that pilots not being able to talk openly about mental health struggles for fear of being grounded is the big problem that needs fixing. But for now, we wanted to start at the individual level, with these questions: **How can we help people right now? What can pilots do if they feel they have limited control of their environment?** Over to Karlene for some answers...

As a pilot I have spent years navigating storms around the globe. Not a difficult task because technology enabled me to identify the strength and location of those systems—I could see what was ahead and avoid them. However, every so often we would get pounded by clear air turbulence. In those unexpected situations, there was no time to do anything but grab the controls and deal with the issue at hand. When the unexpected happens, pilots deal with it quite effectively because we are trained to fly the plane and then solve the problem. The stress of an emergency doesn't immobilize us - we learn from it and carry that experience forward.

From my experience, flying airplanes is easier than navigating life. As humans we are not issued radar equipment; few, if any, read their systems manual; there are no standard operating procedures; and most of us don't receive training as how to deal with life's unexpected surprises that pile up. How do you deal with unethical management, dysfunctional operations, irritating co-workers, fear of reporting safety concerns, extreme work environments, or even harassment? Throw in a mortgage, toddlers to teens, tuition, increasing life expenses, relationship issues, or even a neighbor's barking dog.

How often have we laid awake thinking about stuff? Perhaps your mind even wanders to someone who harmed you in the past. An attorney told me that he knew he had everything that should bring him joy, a great job, great wife, great kid; yet daily happiness eluded him until he reached to anti-depressants to

make his world a better place. At least when we have life problems, we can justify the reason for unhappiness. But what if there is no apparent reason? What if the unhappiness is simply that you are working in an environment that opposes your values and you justify that behavior or look the other way?

I was told that people do not want to be told to drink less, read a book, and do yoga to solve their problems. While I love reading, I often do it with a bourbon in the tub, as I contemplate joining a yoga class. I get it. Instead, I recently joined a group who was inspired by a post I had written on pilot suicide. The group's title: *How to talk to pilots*, turned out to be **verbal vomit filled with big words, theory, and discussion of all the problems within corporations, but no solutions were offered.**

I then reached for one of the first books I'd written, Flight to Success, Be the Captain of Your Life, and opened it to a quote, "Happy is right here, right now, living the journey." A prolific statement, but how do we achieve that feeling? Is happiness a feeling, a way of life, or how we think? My answer - yes to all.

The question is how to get there? A good counselor can help with that journey. But when I recently said to an integrative medicine doctor, "Do you know how hard it is to find a good counselor?" He emphatically said, "Yes I do!" Even those helping others need help too. We all do.



Unfortunately, as a pilot, as in many other professions, **mental health counseling places you in the** "danger category" to the public and therefore must be reported to officials, placing your career at risk, and thus keeping many people away from getting assistance to balance their life. This archaic thought is ridiculous at best and prevents people from getting the help they need. Far too many pilots and military personnel have taken their lives after years of personal issues that snowballed. **Problems addressed early prevent them from being perceived as hopeless.**

We all know the first step is to identify the problem before you can solve it. Anyone who has the foresight to seek help for themselves before life problems become insurmountable has a strong mind, not the other way around. But that is not where we are in society today. Which is extremely frustrating because our world is in a substantially chaotic mess, a time when we could use help more than ever.

What To Do

Take my words for what it's worth because I have been through hell and back multiple times in my life, and I'm still figuring it out. But along the way, I have learned a few things and today they are all coming together like a jigsaw puzzle. I am happy. Not to be confused with moments of being pissed off. Yes, you can be happy and get angry too. No... you are not bipolar.

I am the middle of five daughters from a broken home at the age of nine. I became an airline pilot despite my entire formative years being told that girls couldn't fly. Growing up, I babysat, mowed lawns, bagged groceries, and bussed tables. My airline career was another story. Furloughed. Bankrupt. Merged. I started over eight times. Despite women not being able to fly, I earned eight type ratings and became an instructor. I raised three daughters, and during my journey I earned a Master's in Human Services, an MBA, and subsequently a PhD. My survival skills pattern was to attend college and learn more to address life problems of the time. Not always my own, but that of our aviation industry as well. Hundreds of books have found their way into my home.

This overachieving goal-setting behavior would later haunt me when my airline paid a doctor \$74,000 to

state I was bipolar after I gave them a 45-page safety report. What should have been my golden years of flying, I ended up in the middle of a seven-year nightmare of litigation. Not until November of 2022 when the airline finally threw in the towel after having lost in trial and on appeal, offering me a settlement of what the judge originally ordered, did my health finally turn for the worse. I was done with the hard part. I won. It was over. But my physical body gave up.

I suspected my health decline was due to my frame of reference and how I perceived that settlement. In January 2023 I lost my first class medical. Then on January 31st I retired, leaving the last 4.5 years of my career behind. I did not medically retire. I walked away from this airline to heal my life and subsequently myself.

I'm not going to tell you to drink less, but I will share with you what I learned in the process of restoring my health. I won't ask you to read a book, but I will share principles I learned from books I've read, through my education and from experience. **Not theory, but practical application.** Below is a litany of suggestions, and I offer you to take what works for you.

Journaling

Challenging my bipolar diagnosis, Dr. Trenerry at the Mayo Clinic had asked me what I had been doing during my time off, due to my composure before him. He said, "Most people would be an absolute wreck having gone through what you have." I told him I was writing novels. He asked if I was in those books, and I said, "Yes," and then explained a scene in *Flight for Truth*, where one character (me) told the other character (also me), "They might very well get away with this, but your life will not be over. It will just be different." He said with a smile, "Keep writing."

I had to convince myself that no matter what happened in my life, it would not be over – just different. Life doesn't often go as we planned, but the acceptance of doing all you can do, and then accepting the reality is the only way to move forward. As it's been said, if you want to make God laugh tell him your plans.

Most experts say that journaling is one of the best things to do when dealing with a life issue.

Unbeknownst to me, I simply took journaling to the next level by writing novels—truth in fiction.

Writing works. Perhaps your life, too, can be a story. As Stephen King said, "Write for the garbage can." Do not edit. Do not re-read. Just put your story onto paper, and one day you'll have a book. That's what I did. Polishing will come later. But there is something freeing to place all the thoughts you have running around your head onto paper. You free yourself from thinking about them. There will be a time to revisit the situation later.

If you cannot tell your problems to a psychiatrist, you can tell them to the computer. If you want to have a little fun, after you've written a passage, play counselor and type these words: What do you think about that? What can you do about that? What does that mean to you? Is there a better way to look at this situation? Then answer those questions. You've just participated in a form of self-directed therapy, and you do not have to report it to the FAA or any controlling agency.

Music

It's harder to be sad when uplifting music is playing. **When you're having a bad day, change the record.** Shift your emotion from thinking about what's happening, to listening to something enjoyable. Sing. Dance. The more emotion and physical movement you put into it, the more you will smile and shift your energy to a positive a frame of thinking.

One day I had sat down to read a legal motion that the airline's attorney had written. The more I read, the angrier I became at their false assertions. I stopped reading, plugged into some good music, and went outside and mowed my lawn. I found myself dancing while I mowed. This didn't make the legal motion go away, but it just **changed my attitude, changed my feelings, and enabled me to better address the issue.**

Take a Walk

I'm not going to tell you to exercise. I am going to tell you that the process of exercising enables your body to naturally increase your happy brain chemicals called dopamine and serotonin. These are the drugs psychiatrists prescribe for depressed patients, but without the negative side-effects. **When you exercise, you simply feel better.**

If you feel like the world is imploding, take a walk. My current routine is to awaken, drink water with Zip Fiz on the elliptical or bike, even before I have coffee, while listening to fun music. My day is much more productive this way. I have also passed many type-rating programs studying during my morning exercise routine, while listening to music. In the middle of the day, break away and get moving... even if it's a powerwalk around the building or through the passenger cabin.

Stress Management

Not all stress is bad, it simply gets blamed for everything. There is good stress that engages, provides experience, improves resilience, and enables us to grow. It's the bad stress that I speak of today. I recently learned of a Stress Management and Resiliency Training (SMART) program from the Mayo Clinic. Not unlike Marci Shimoff's, *Happy for No Reason*, Dr. Seligman's *Authentic Happiness*, or *The Rabbit Effect* by Dr. Harding, research supports that **the events in our life are not what cause us problems, it's how we perceive those events.**

Do you perceive the event in your life as a transient issue, or that your life will always be like this? Do you believe that you have control over your world, or does your world control you? Do you believe there is a way out, or do you believe your situation is hopeless?

I can state with absolute certainty that your life will not always look like this. You absolutely have control over your life, despite external events trying to exert their existence. **There is always a way out. Nothing is hopeless.** Seeing a positive future is powerful. If you cannot see it yourself, that's when you need to get help to paint that picture for you. My sister was taking a course during nursing school and the instructor asked the students to envision the life they had now, and what that will look like ten years in the future. She saw the way her life was headed, cried, and then changed it. You, too, have that power.

Do You Know That To Be True?

How often do we place judgement as to the actions of another? **How often do we think the worst?** For example, you receive a note from your boss, "see me after work". Who would not spend their day catastrophizing thinking the worst case possible? We all create mental images filling in the pieces because the human psyche needs to have answers. Marci's suggestion in *Happy for No Reason*, is that when you find your brain going down that path to stop and ask yourself, "Do you know that to be true?" Most often we do not. So don't allow your thoughts to go there. **This question stops negative thoughts from taking hold.** "How" we think about things causes most of our life issues.

Negative thinking could be construed as a human condition because our brains tend to **default to survival mode.** Some refer to this as the reptile brain. At the beginning of time when we were faced with predators and finding food and shelter where a priority for survival, this default condition was necessary.

But we no longer need those same survival skills because we don't have the same threats in our external world. Thus, the mind defaults to survival from threats within and will create a threat that is not there. **We ruminate, worry, and catastrophize.** We think about how someone harmed us, we regret what we did, we bemoan what we should have done, and we fear what the future might look like. The trick is training your mind to not go there and convincing it to travel down a different path.

When you assume something, ask yourself, "Do you know that to be true?" While exercise, listening to music, and meditating will help with stress management, it is imperative to train your mind to be focused,

preventing it from wandering through a minefield. When a negative thought pops in, let it go and replace it with something you are grateful for. Create a practice of gratitude to replace your negative thoughts.

Create Enjoyment

In that we spend much of our waking hours at work, if we don't find value, enjoyment or gratitude in our work, our health will suffer and negatively impact our life in many ways. Unless you are a manager or executive, you have no control over the external work environment. But you do have control of how you deal with that environment. If your work feels like a miserable place and you don't have any option other than to weather the storm, find a way to improve the quality of your work environment. Sometimes that is as simple as changing how you perceive your job, and how you see your personal value in what you bring to your work.

When Covid hit, flight crews flew long days and then were isolated with 24-hour layovers locked in a room. Socialization dropped to nothing, which for many the layover was the best part of the job. This impacted the mental health of many people. Isolation in general from Covid did that to much of society. With socializing at the end of a flight gone, I made an effort to stand at the boarding door and talk with the passengers as I gave wings to the kids before I was locked into the flight deck. I made an effort to engage where I could.

Layovers were tough for most. I once had a 72-hour layover locked in my room in Korea. Instead of complaining I soaked in the tub, watched movies, I ordered room service, wrote, and caught up on emails. What was perceived as torture to many crews would be a vacation to any stay-at-home mom. I opted to turn my situation into a hotel staycation. **Perspective.** Change your perspective on any negative situation and you will improve the quality of your life.

Money and Happiness

Depending upon the research, the country, or the participants surveyed, you will find a variety of statistics on whether money can buy happiness. Dr. Harding asserts that once we have enough money to provide shelter, food, and proper medical care that the **additional income doesn't improve the level of happiness.** This assertion could be supported by those rich and famous who take their own lives despite apparently having it all. If your value is truly amassing a fortune for the sake of having money, then perhaps more money could bring happiness. However, if you think that more money brings happiness because of the stuff you can buy, the reality is that stuff doesn't bring you happiness. **Happiness comes from gratification.**

Job Loss and Gratification

If the job is miserable and you cannot change your perspective or find value in your work, the question is not necessarily can you afford to quit... **but can you afford not to?** That will be a personal choice. But what if you are forced to leave due to a mandatory retirement age or a layoff, how do you deal with that?

Retirement should bring happiness, but far too often it does not. The stuff we buy might bring a moment of pleasure, some think it makes you happy, but the feeling is fleeting. For true happiness we need to feel gratification. Take a pilot who is forced to retired. This person was highly trained and used their skills daily to accomplish the goal of a flight. They spent a couple hours of preparation to depart, and then spent hours enroute either engaged in conversation with their fellow pilot, reading a book, or appreciating the beauty outside their flight deck, followed by a skilled landing... it was a journey. On the layover, they shared dinner with coworkers, had a beer and much laughter. While there was often bad weather, fatigue, and all the issues that could make the day more challenging, those issues improved gratification of a job well done.

Now, imagine this highly trained individual being told they can no longer do their job because someone

said they are too old, or the company sold out and their services are no longer needed. They may have saved wisely and could buy stuff to make them feel happy, but they don't feel it. There is a hole because stuff doesn't make you happy.

Anyone who works in an extremely gratifying, highly skilled, job will have the most difficult time in leaving their employment. **The solution is to find something meaningful in your life.** The happiest retired pilots I know have either found another flying job, purchased a camper and are traveling, golfing, working at a non-profit and giving back, or have gone back to school to begin another career.



The Solution

If I could impart any wisdom, it would be to **change how you perceive your world.** Create habits of listening to music, exercising, journaling, adopting a different perspective, or meditating, to improve how you feel. Change your perspective on the word "mental health" and simply think of these suggestions as activities to feel the daily joy you deserve. Your physical health will follow. What that looks like, will be specific to you. For me, my morning habits simply make me feel better. I'm doing something for me, before I give my day to everyone else. There is a reason we tell passengers to put on their oxygen mask first before they help others. I also know that I love learning, creating, writing, and helping others. **Figure out what** *you* **love to do, what pulls you into a flow, and then create a life around those activities.** Habits create the tapestry of life in the fabric of existence. They will either lift you high or hold you down. The choice of which is yours.

Q&A

Here's the bit where **Dave from Opsgroup** asks some questions, and **Karlene** gives some answers.

1. If we need help as pilots, where can we go? What are some of the resources out there available to us?

Trust but verify. Your AME is an excellent resource; however, like any profession, there are some AME's that are better than others. Some will be your advocate, while others play it safe and not necessarily to your benefit. Find an AME that has your back, and someone you can be completely honest with. Then, despite all the advice you receive, visit the FAA.gov website yourself, and type your questions into the

search box and educate yourself on the rules and regulations.

If you choose not to see a counselor or psychiatrist because of an archaic FAA reporting requirement, I suggest seeing an Integrative Medicine Doctor. These doctors are not counselors and not psychiatrists. The integrative medicine doctor I saw at the Mayo Clinic was an MD. Integrative medicine is an evidence-based approach to improve your health and wellness, through physical, mental, emotional, and spiritual impact on your health. You can list this doctor as an MD, and the reason you are seeing him/her is for your overall health and wellness. But they are an excellent source to help deal with life issues.

2. What questions can we ask each other to check how we're doing?

Pilots are not trained to assess each other. There is no magic pill. No specific question to ask. With respect to the most recent pilot suicide at my airline, nobody would have known he was ready to leave this earth. Sometimes you just can't tell. But what we can do is listen and listen for comments of hopelessness. If you think it's more than just a bad day, encourage them to speak to someone.

Anything we missed?

If you have questions about any of the above, or if you think there's something we missed, let us know!

About the author:

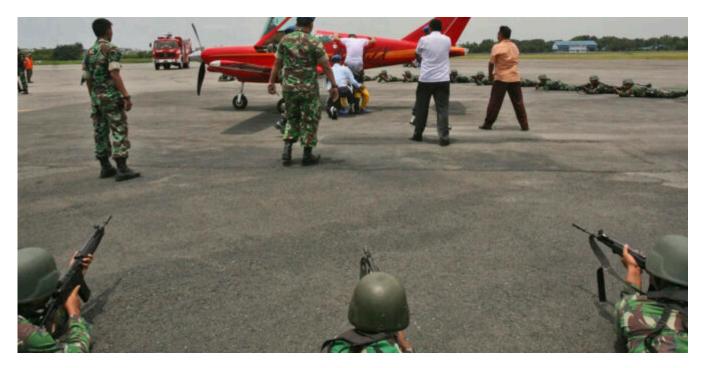
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Are you someone with knowledge to share?

Know something about something worth knowing? Want to write about it? Let OPSGROUP know! Maybe we can work together and write an article on it.

Detained Abroad: Pilots Behind Bars

Alexandre Gries 4 July, 2023



I recall one flight to an undisclosed location in South East Asia when I noticed the other pilot was carrying his passport in his front pocket. On asking why he was keeping it there and not his flight bag, the response was quite confronting – 'in case something goes wrong, and we need to get out of here in a hurry...'

This got me thinking – every time we step foot in a foreign country, **we are taking a risk** – albeit a controlled one.

If we find ourselves on the wrong side of the law (guilty or otherwise), we are at the mercy of whatever legal system presides over us. This applies regardless of our nationality, the number of bars we have or even our preconceived notion of what constitutes a **fair and reasonable legal process.**

And pilots are maybe at higher risk – simply because of the sheer amount of time we spend abroad compared to the travelling public. You may not think it will happen to you, but even trivial offences can land us in hot water. If that happened, would you know what to do?

Guilty Until Proven Innocent

Perhaps the most likely way you may find yourself in trouble is in the aftermath of an **accident or incident.** Unfortunately, history has shown that in some cases the pilots become the default suspects regardless of who or what was at fault.

Take Nov 18 last year for instance, at Peru's largest international airport, SPJC/Lima. An A320 collided with a fire truck during its take-off roll on an active runway. At the time, CCTV footage showed that *for some reason* a truck had entered the runway. Everything else was just speculation. Despite that, the crew of the A320 was **immediately detained without charge.**

This highlights a disturbing precedent – **compulsion for authorities to act.** Holding pilots responsible sometimes seems to be a knee-jerk reaction to allay the concerns of the public and an invasive media scramble that systems and processes had no part to play. **Human error** is the easiest explanation – after all, the pilots were there.

This is the risk that we are all taking, whether we are aware of it or not. We can very easily become **scape goats.** And with highly punitive investigations in some parts of the world, it's no wonder we're carrying our passports in our front pockets.

Wrong Place, Wrong Time

It isn't just incidents and accidents though. Like the public, we can get also get caught up in the middle.

Around the same time last year, narcotics were found stashed in a maintenance bay of a Canadian CRJ shortly to depart the Dominican Republic. The drugs were discovered and dutifully reported by the crew to the authorities. **Shortly afterwards, they were all detained - for months.** There was no evidence linking any of them to the discovery, nor any charges laid.

We can also find ourselves in trouble for **exercising liberties** that may be commonplace at home, but are still **punishable abroad**. Drugs and alcohol are obvious culprits, but this can also extend to our **behaviour**, **preferences or even our freedom of speech** in foreign countries. Then there are issues related to **immigration**. You and your crew can be held if there are issues with your paperwork, including visas and gendecs.

So what can we do?

On April 6, IFALPA published some guidance on what pilot associations, and individual crew should do if arrested in a foreign country. Here is a quick 2-minute summary:

Pilot Associations:

- Contact the **local pilot association** in the country where a pilot has been detained, and ask for help to get him or her released and out of the country asap. Failing that, look for **legal assistance** there or get in touch with the relevant embassy. Also contact the **IFALPA emergency number +44 1202 653 110.**
- Get in touch with the pilot's employer and work along side them. You'll also need to advise the pilot's family the big ticket advice here is to **stop them talking to the media**. If there is a lot of heat, you may need to help re-locate them.
- Likewise, unless you have media specialists on your team, don't issue any statements.
- If practical, consider sending a rep to the pilot to assist. At the very least this would lift morale, along with providing a myriad of additional support.

Pilots:

- It may feel counter-intuitive but comply with the orders of police or authorities. **Resisting** arrest isn't going to help. Make it clear you are willing to fully cooperate but don't make any statements until you have spoken to a lawyer.
- If you must say something, use the suggested **safety phrase** on the card below.
- Get onto your pilot association's hotline without delay. If you can't reach them, contact the IFALPA emergency number above. The sooner you get in touch, the sooner you'll get help.
- Less is more don't volunteer or offer information, and never speculate on what has just happened. And for the love of Pete <u>don't sign anything.</u> Not unless it is written in a language you fully understand, and you have taken legal advice.

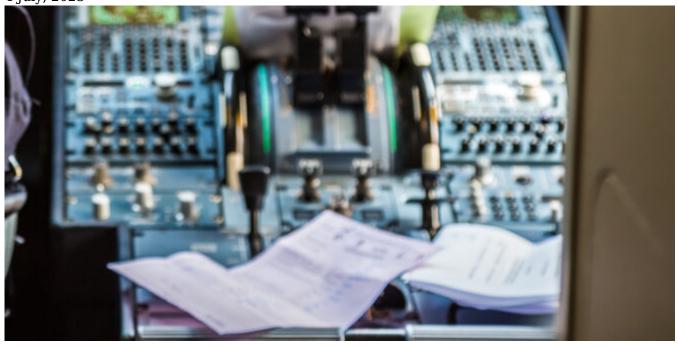
Ouick Reference Card

IFALPA also recommend that associations produce a card or booklet with actions to follow if a pilot

becomes incarcerated. Using IFALPA's advice, we've put one together – it may be a good one for the flight bag. Click the image below for a downloadable PDF.

Flight Plan Alternates in Europe

Alexandre Gries 4 July, 2023



In the US, under certain conditions you can get away with not having to select an alternate – as long as both ends of one runway are suitable and available, you have two runways. In Europe, there's a similar rule, but the key difference is that there has to be **separate runways** – not one runway which you could land at either end of.

EASA recently issued this reminder letter to Third Country Operators:

For a flight to be conducted in accordance with the instrument flight rules, at least one destination alternate aerodrome shall be selected and specified in the operational and ATS flight plans, unless the duration of the flight from the departure aerodrome, or from the point of in-flight re-planning to the destination aerodrome is such that, taking into account all meteorological conditions and operational information relevant to the flight, at the estimated time of use, a reasonable certainty exists that:

- 1. the approach and landing may be made under visual meteorological conditions (VMC); and
- 2. separate runways are usable at the estimated time of use of the destination aerodrome with at least one runway having an operational instrument approach procedure.

In accordance with the ICAO definition, separate runways are two or more runways at the same aerodrome configured such that if one runway is closed, operations to the other runway(s) can be conducted.

Several ICAO contracting States have filed a difference to ICAO with regard to this standard, because their national regulation does not contain a requirement for separate runways at the destination aerodrome when opting to file a flight plan without a dedicated destination alternate aerodrome.

Please be informed that EASA expects TCOs to plan their flights in compliance with the ICAO standard. This means that an alternate aerodrome has to be listed in the ATS flight plan where required in accordance with standard 4.3.4.3.1 of Annex 6 Part 1 to the Chicago Convention, even though your national regulation is less restrictive in this aspect.

The respective destination alternate fuel shall be included in the pre-flight calculation of usable fuel in accordance with standard 4.3.6.3 of said Annex.

EASA will verify compliance by means of sampling flight documents during the initial authorisation and during continuous monitoring of TCO authorisation holders.

Furthermore, ramp inspections performed under SAFA/RAMP inspection programme will serve as an additional source of information for non-compliance.

Where a non-compliance is found, EASA will raise a level-2 finding in accordance with Part-ART of the TCO Regulation (EU) No 452/2014.

We therefore, encourage you to review your flight planning procedures and where necessary to align those to ensure full compliance with the respective above-mentioned standards.

So can I plan a flight in Europe without an alternate?

Yes, but only in certain circumstances. EASA CAT.OP.MPA.182 has the details:

AMC2 CAT.OP.MPA.182 Fuel/energy scheme — aerodrome selection policy — aeroplanes

FD Decision 2022/005//

BASIC FUEL SCHEME — DESTINATION ALTERNATE AERODROME

- (a) For each IFR flight, the operator should select and specify in the operational and ATS flight plans at least one destination alternate aerodrome.
- (b) For each IFR flight, the operator should select and specify in the operational and ATS flight plans two destination alternate aerodromes when for the selected destination aerodrome, the safety margins for meteorological conditions of AMC5 CAT.OP.MPA.182, and the planning minima of AMC6 CAT.OP.MPA.182 cannot be met, or when no meteorological information is available.
- (c) The operator may operate with no destination alternate aerodrome when the destination aerodrome is an isolated aerodrome or when the following two conditions are met:
 - (1) the duration of the planned flight from take-off to landing does not exceed 6 hours or, in the event of in-flight replanning, in accordance with point CAT.OP.MPA.181(d), the remaining flying time to destination does not exceed 4 hours; and
 - (2) two separate runways are usable at the destination aerodrome and the appropriate weather reports and/or weather forecasts indicate that for the period from 1 hour before to 1 hour after the expected time of arrival, the ceiling is at least 2 000 ft (600 m) or the circling height 500 ft (150 m), whichever is greater, and ground visibility is at least 5 km.

Or if you want to keep it simple, just file an alternate airport in your flight plan.

A Cautionary Tale

Here's a recent report from an OPSGROUP member on this:

We were doing flights all over the EU without an alternate, when the weather didn't require one as per our rules. Then we got SAFA ramp checked in EGSS/Stansted, and the ramp inspector took umbrage that we were coming in without an alternate on a clear day. We now carry an alternate for all single runway ops in the EU, with a realistic routing.

A Realistic Routing?

This is another thing to watch out for in Europe. You have to make sure your route to alternate is

computed and included in your flight plan, that it's **realistic**, and that it **doesn't break any rules**. Let's tackle those in order:

Computed and included in your flight plan:

It should look something like this:

WAYPOINTS COORDINATES	AWY	WIND DIR/SPD OAT/ISA	TAS GS	HDG CRS	LEG REM	REM	ACT	FLOW	LEG REM	ATE	EPU
LSZH N4727.5/E00832.9	1400	- - -2/-14	0		- 176	17327	-	0	0:38	-	
AMIKI N4734.4/E00902.2	I16 FL204	H20 051/030 -30/-9	319 302	090 094	28 148	16491	836	8148	0:06 0:32	0:06	
ZUE N4735.5/E00849.1 ZURICH EAST 110.05	DCT 16200	T21 051/030 -30/-9	402 423	277 274	9 139	16471	856	969	0:01 0:31	0:07	
BODAN N4735.2/E00927.1	Z601 9000	H24 056/031 -14/-6	317 293	084 087	26 113	16304	1023	1894	0:05 0:26	0:12	
KPT N4744.7/E01021.0 KEMPTEN 108.4	Z601 9000	H29 060/030 -8/-6	292 263	070 072	37 76	15766	1561	3757	0:09 0:17	0:21	
ATMAX N4755.8/E01045.0	Z999 9000	H30 059/030 -10/-7	291 261	052 052	20 56	15486	1841	3736	0:05 0:12	0:26	
MERSI N4758.9/E01102.6	DCT 9000	H24 061/025 -12/-9	290 266	070 071	12 44	15315	2011	3712	0:02 0:10	0:28	
BETOS N4804.1/E01121.0	T468 9000	H25 061/025 -12/-9	290 265	063 063	14 30	15128	2199	3711	0:03 0:07	0:31	
-TOD- N4808.5/E01139.3	BETOS1A 9000	H25 061/025 -12/-9	290 265	065 066	13 17	14945	2382	3709	0:03 0:04	0:34	
OTT N4810.8/E01149.0 OTTERSBERG 112.3	BETOS1A 6000	H24 062/019 -13/-12	269 244	066 066	7 10	14868	2458	2726	0:02 0:02	0:36	
EDDM N4821.2/E01147.2	BETOS1A 1487	H2 087/019 -7/-14	248 246	354 349	10 -	14751	2576	2762	0:02	0:38	

Realistic:

This means you've included a proper route to alternate like the one shown above, **not just one big DCT.** The routing doesn't have to be fully Eurocontrol compliant, it just has to be realistic. That means making sure you **have enough fuel for a missed approach, climb, and descent to alternate.** If you use a SID from your destination airport and join it up with a STAR for your alternate, that's probably a safe bet.

Doesn't break any rules:

The French DSAC recently partnered up with IS-BAO to take a look at hundreds of de-identified ramp check findings in order to analyse **the most frequent CAT 2 and CAT 3 findings in business aviation.** A common one was flights planned to unavailable alternates – usually those that **cannot be used as per AIP or Notam**, or those where you need **PPR**.



RAMP CHECK FINDINGS *Top Offenders*









- LFMD, LFOB, LFLX and LFBE are the usual
- straight lines, outrageous speeds below FL 100, and ridiculous fuel computations.)
- * Had the wrong number of pax onboard, or pax sitting in the wrong places. The same errors
- Pilot bafflement when asked about the various empty/operating/maximum masses of the aircraft.

Documents

* Different versions of the same manual or checklist found onboard.

The state of the s

- * No instructions for challenging airports.
- * No procedure for in-flight fuel checks.
- Dangerous goods not listed properly (i.e. lithium
- * Outdated versions of the QRH found onboard, or sometimes not found at all!
- Mismatch between the aircraft configuration and the QRH, or the equipment on the aircraft and the MEL.
- * (0) or (M) procedures inadequate or missing.

Charts

- Defects * Maintenance action from the MEL hadn't been done.
- * Inoperative equipment not mentioned in the tech log, or missing info from engineers.
- Flight operations conducted beyond the due dates.
- Outdated navigation databases or charts (in one case by up to a decaden.
- Missing instrument charts.
- * Use of an unapproved EFB.
- No storage device installed for the

Cabin Safety

- * Beds open during critical phases of flight and taxi, blocking emergency
- * Luggage stored in the toilets, left on the floor or seats or in front of an emergency exit.
- * Straps or nets not used to secure stuff in the cargo hold.
- * Household coffee machine installed in the galley.

LFTH/Toulon - can't be used as alternate without PPR.

LFMD/Cannes – can't be used as alternate except for flights to LFTZ/La Mole.

LFMQ/Le Castellet – this sometimes gets used as an alternate for LFMN/Nice and LFML/Marseille. But LFMQ rarely publishes TAF/METAR reports, so if you want to use this, you need to make sure you select at least one other alternate with a weather report!

Do you know of any more? Let us know!

More info

Head here to download the latest ramp check guidance straight from the horse's mouth.

Battleships: Updated Risks on the South China Sea

Alexandre Gries 4 July, 2023



Increasing military activity in the disputed **South China Sea** has been making headlines for civil aviation again recently.

We've seen reports of **unauthorised clearances** being issued over VHF, along with instances of **GPS jamming.** Here's what we know, why it's happening, and what pilots can do about it.

What's your vector, Victor?

On March 2, IFALPA put out a new safety bulletin – at the same time, several major carriers began to publish their own internal memos too.

There have been recent cases of civilian aircraft being **contacted by Chinese military vessels** on 121.5 or 123.45 and **given vectors** to avoid airspace above them. This has been happening not only in the South China Sea, but also the Philippine Sea and far eastern areas of the Indian Ocean.

In the eyes of aviation law, this is a **big no-no.** Unauthorised ATC transmissions are not only illegal, but highly dangerous because they can reduce your separation with other aircraft or lead to airspace busts. In this case the military vessels involved have no jurisdiction (or business) to be controlling aircraft in open airspace over international waters.

All the wrong signals

Then on March 20, reports emerged of another issue. Aircraft operating off Australia's Northwestern coast have been encountering **GPS jamming,** purportedly from Chinese naval vessels in the area. This is unusual for the region.

The same problem has also been recurring over in the Western Pacific, and of course in the South China Sea itself.

Unfortunately, as we have seen in other parts of the world such as the Eastern Med, GPS signals are commonly interfered with in areas of **high political tension** as it makes it harder for the opposition to locate and gather whatever intelligence they are looking for.

It appears this region is no different.

Quit staring at me

So why is this happening?

We've written about the South China Sea dispute in detail in the past, and so this article may be a good place to start. But here is the thirty second version.

It may come as no surprise that the South China Sea is **heavily disputed**. Several states have staked some sort of claim on the region.

Attracting the most noise (and perhaps the most powerful claimant) China, has been steadily increasing its military presence in recent years including the construction of man-made islands, air bases and military warships.

All this activity attracts **international attention**, and the US military along with other countries have been keeping a close eye on what is going on – predominantly through aerial surveillance.

Herein lies the problem.

China maintains that under **international law,** foreign militaries cannot conduct intelligence gathering activities like surveillance inside its exclusive economic zone (or EEZ for short).

On the other hand, the US argues that under the UN Convention of the Law of the Sea (think of it as a legal rulebook for all marine and maritime activities), that freedom of movement through EEZs should be universal. And that essentially means that countries should not be required to provide notification of their military doings.

It's worth pausing here – an EEZ is not the same thing as a country's territorial waters. In the same document, the UN explains it is just a sovereign right to what is beneath the surface. The important part is this: the surface itself is still international water.

The result is lots of people looking, and some that don't want to be seen which is why we are seeing

interceptions, signal jamming and now unlawful clearances becoming more of a problem.

What can we do about it?

Essentially – **protect yourself** as best you can. These risks don't look like they'll go away anytime soonn, despite their disregard for civilian air traffic.

In their safety bulletin, IFALPA explains that IATA and ANSPs all recommend **ignoring any unauthorised contact** on the radio. Essentially, give them the silent treatment and continue on your cleared route. It is also important to let controlling ATC know immediately, and also to **file a report.**

Likewise, if you encounter GPS jamming it is also essential to let people know. You can read a little more about this issue here.

Let's not normalise the risk

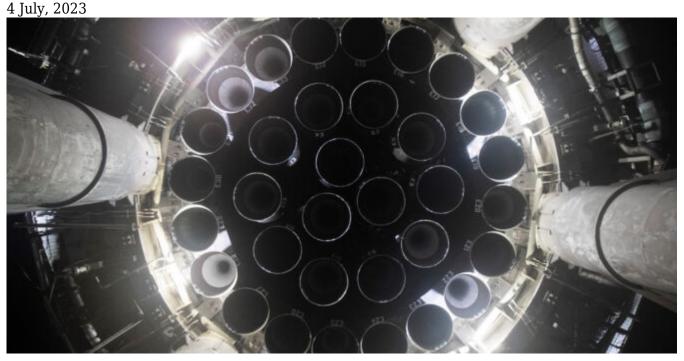
A recent high-profile interception in the region was described by a military official as just 'another Friday afternoon on the South China Sea.'

These issues are no secret. But for civil aviation it is important we keep an eye on these trends and developments as our safety may depend upon it. The more present a risk is, the more comfortable we tend to become with it. We can't allow that to happen.

OPSGROUP will continue to keep you updated with changes, along with our free conflict zone and risk database safeairspace.net.

Major US Rocket Launch Incoming

Alexandre Gries



Update: April 12, 02:00z

The launch has been delayed. It will now take place on April 17, with back up days on April 18 – 23. The new launch window will be from 12:00 – 15:05z each day.

On April 10, SpaceX is planning on test launching a **prototype re-useable superheavy rocket** – Starship – from a launch facility in Southern Texas. The impact on the US NAS will be larger than most rocket launches due a reasonably **high chance of failure** of the ten million pound behemoth. Elon Musk himself has only given the launch a 50/50 shot of actually working. But he is 'guaranteeing excitement' either way.

The FAA are taking no chances, and on launch day **several large hazard areas** will be established for both liftoff, and subsequent reentry. This will impact coastal traffic over the **Gulf of Mexico** near the Texan coast, along with traffic in and out of **Hawaii**.

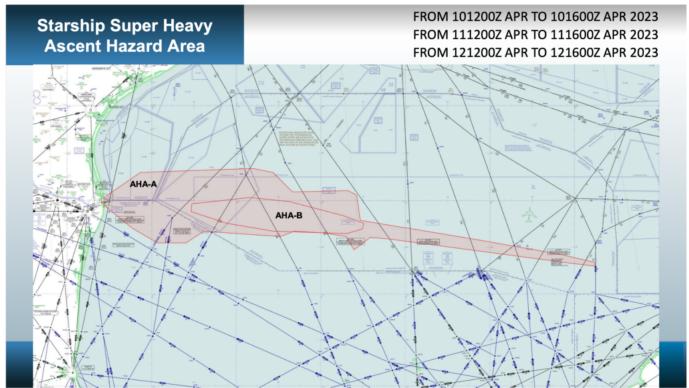
Let's take a closer look.

Launch

Liftoff will take place from a facility in Boca Chica, on the coast of Southern Texas.

The official launch date is April 10, with April 11 and 12 standing by as back ups. The action will take place between **12:00z and 16:00z** (07:00 – 11:00am LT) each day.

In addition to a TFR extending 12nm off the coast from the launch site itself, for the ascent there will be two large hazard areas established well out into the Gulf of Mexico protected by Altitude Reservations.



Several airways off the coast will be impacted – primarily for those running north and south between the mainland US and Southern Mexico. Major ones include L207, L208, A766, A770, L214, and L333 impacting boundary waypoints IPSEV, DUTNA, KEHLI, IRDOV and PISAD between the **KZHU/Houston Oceanic** and **MMFR/Mexico FIRs.**

The good news for east/westbound traffic is that the hazard areas are fairly narrow, which means for the most part those published tracks will avoid the worst of the disruptions.

Additional congestion will be felt on alternative routes – especially for aircraft transiting to and from **Florida's airspace** via waypoint CANOA, and inland of the Texan Coast.

Reentry

Because this is simply a test flight, the rocket will reenter again on the same day as the launch, this time affecting **Hawaii**.

The reentry window is set for **13:10 - 17:45z** (03:10 - 07:45 LT), with a hazard area established in a line from just north of the island group, extending well west into the Pacific.

Three airways connecting to the mainland US will be affected – A331, R463, R464 with transitions via waypoints ZIGIE, APACK and BITTA. There is also a Guam-bound airway to the west that will be impacted – A450 via the transition BRIUN.

Starship Reentry Hazard Area

FROM 101310Z APR TO 101745Z APR 2023 FROM 111310Z APR TO 111745Z APR 2023 FROM 121310Z APR TO 121745Z APR 2023

Mission Accomplished

Once the mission is complete, the airspace will be returned to the US NAS and we'll be back to ops normal. Likewise if the mission is scrubbed, the airspace will be opened up again and the launch rolled over to back up days.

If you're tired of space related disruptions, we feel you. In fact it is a growing issue now that we're having to share the skies with competing interests. We wrote an article on that very issue, which you may find an interesting read.

For more on this upcoming launch, see the official FAA briefing here.