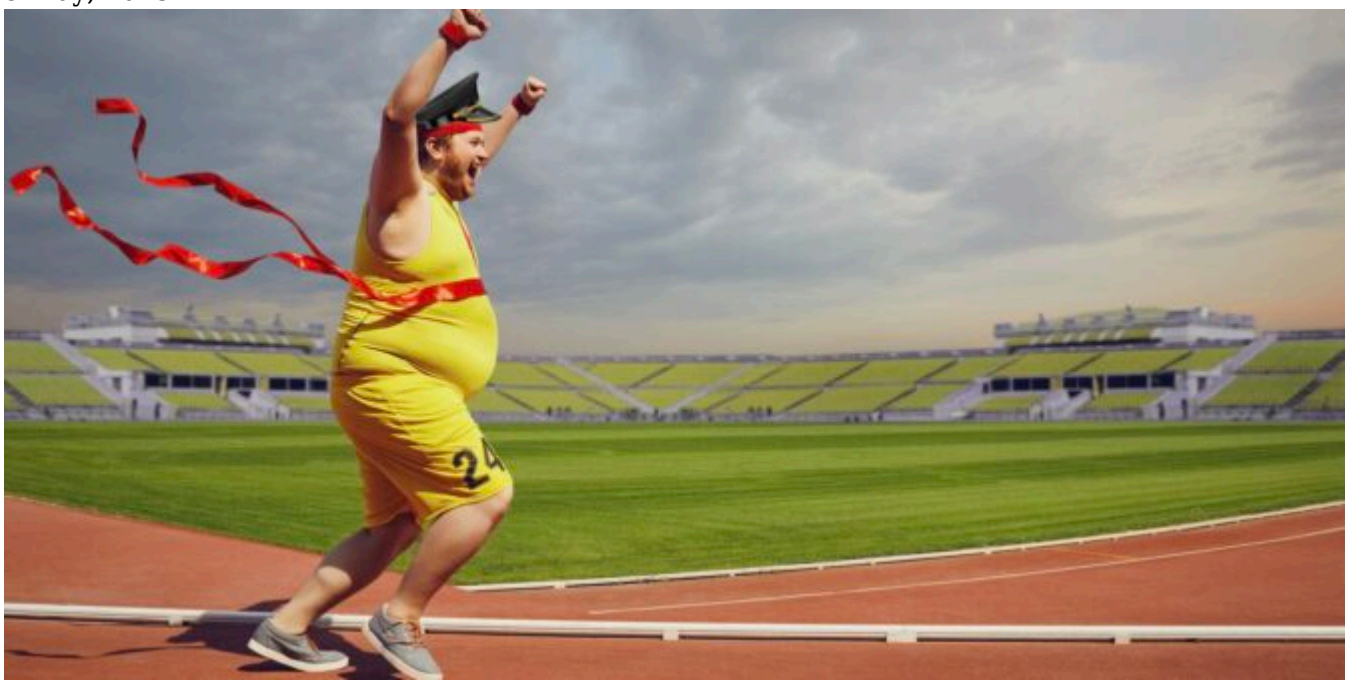
Finished: The FAA Northeast Corridor Improvements

Chris Shieff
9 May, 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?

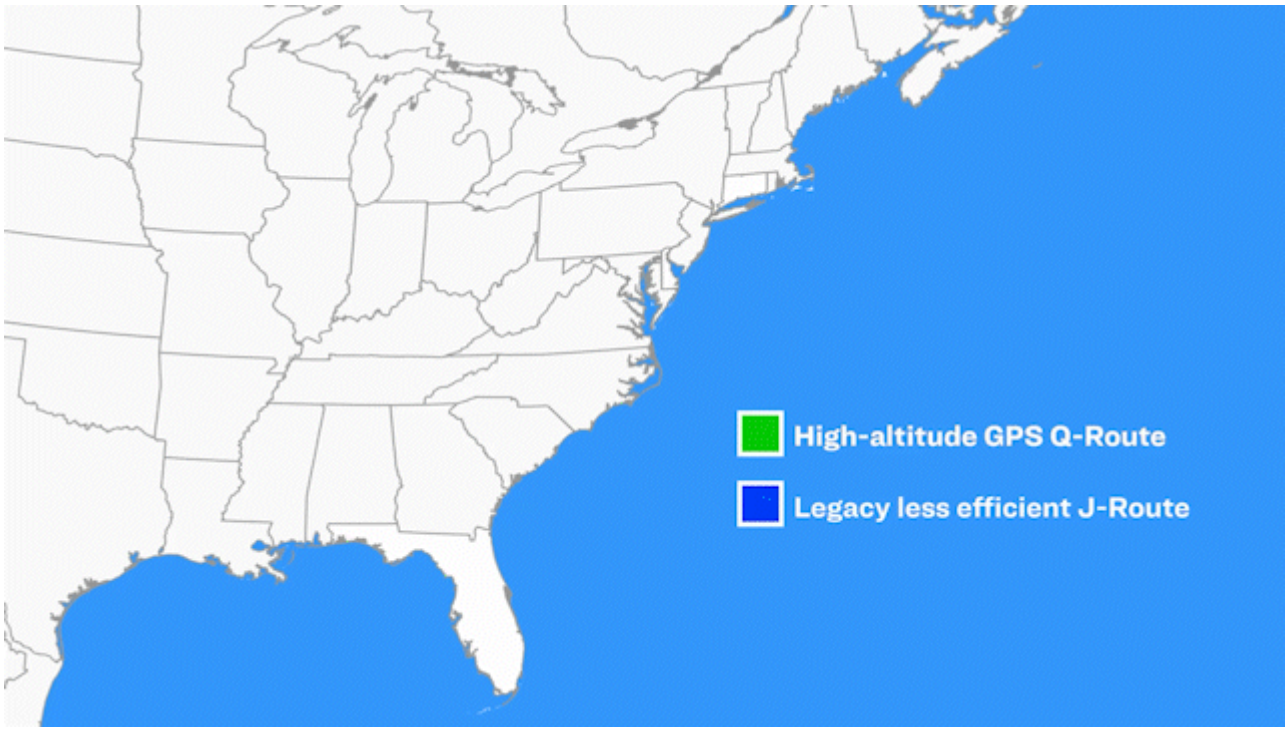
If you haven't heard of it, our previous article may be a good place to start. But in a nutshell, over the past few years the FAA has been introducing **new and amended Q and Y-routes** to replace the high-altitude route structure running north and south along the US East Coast.

….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.



The legacy J-Routes are far less efficient than satellite based ones. Courtesy: FAA

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.

A bunch of 'not authorized' Notams have now been cancelled.

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

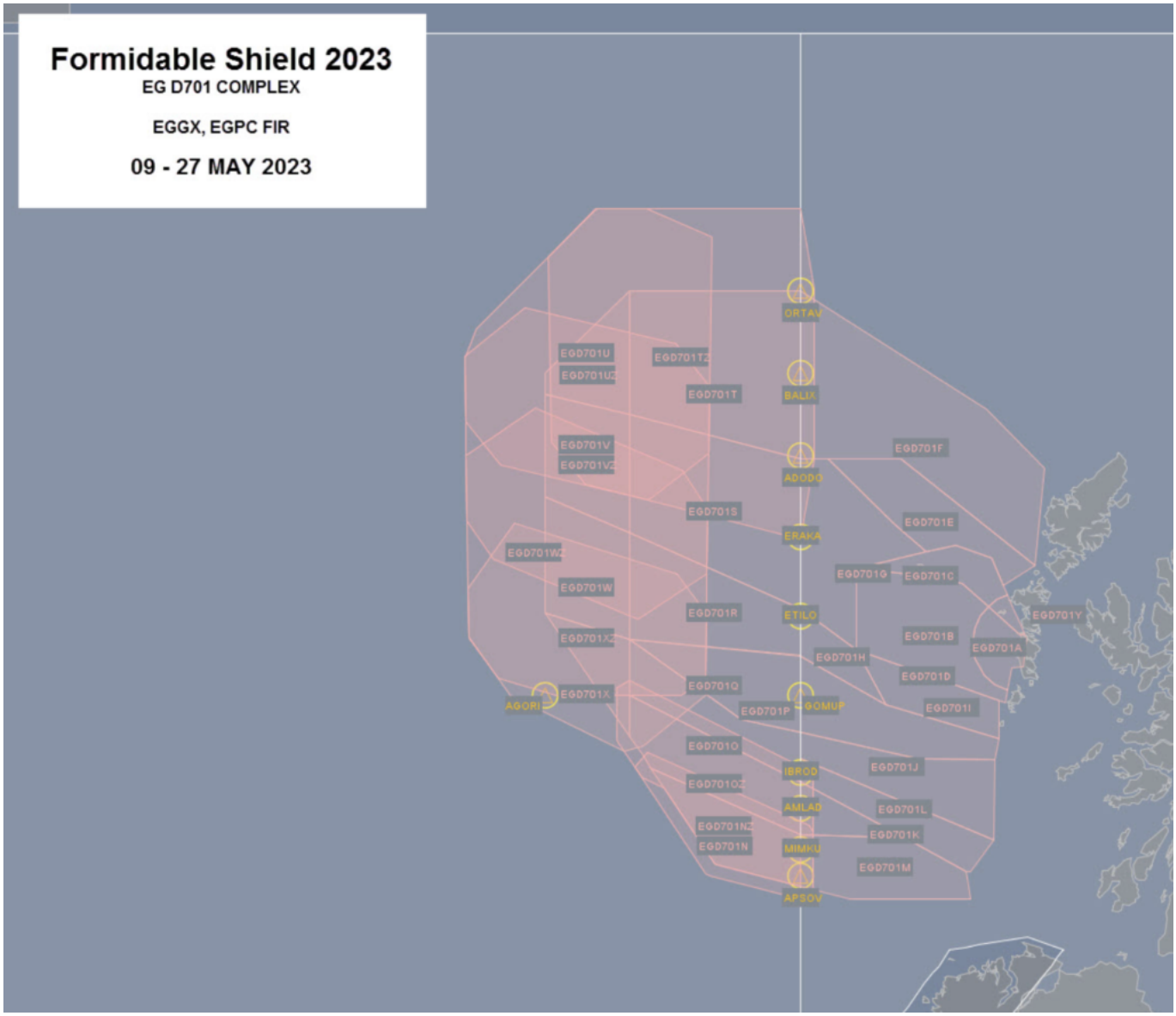
Formidable Shield 2023: NAT Airspace Closures

David Mumford
9 May, 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

OPSGROUP Team
9 May, 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 particpiate 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?

Chris Shieff
9 May, 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.

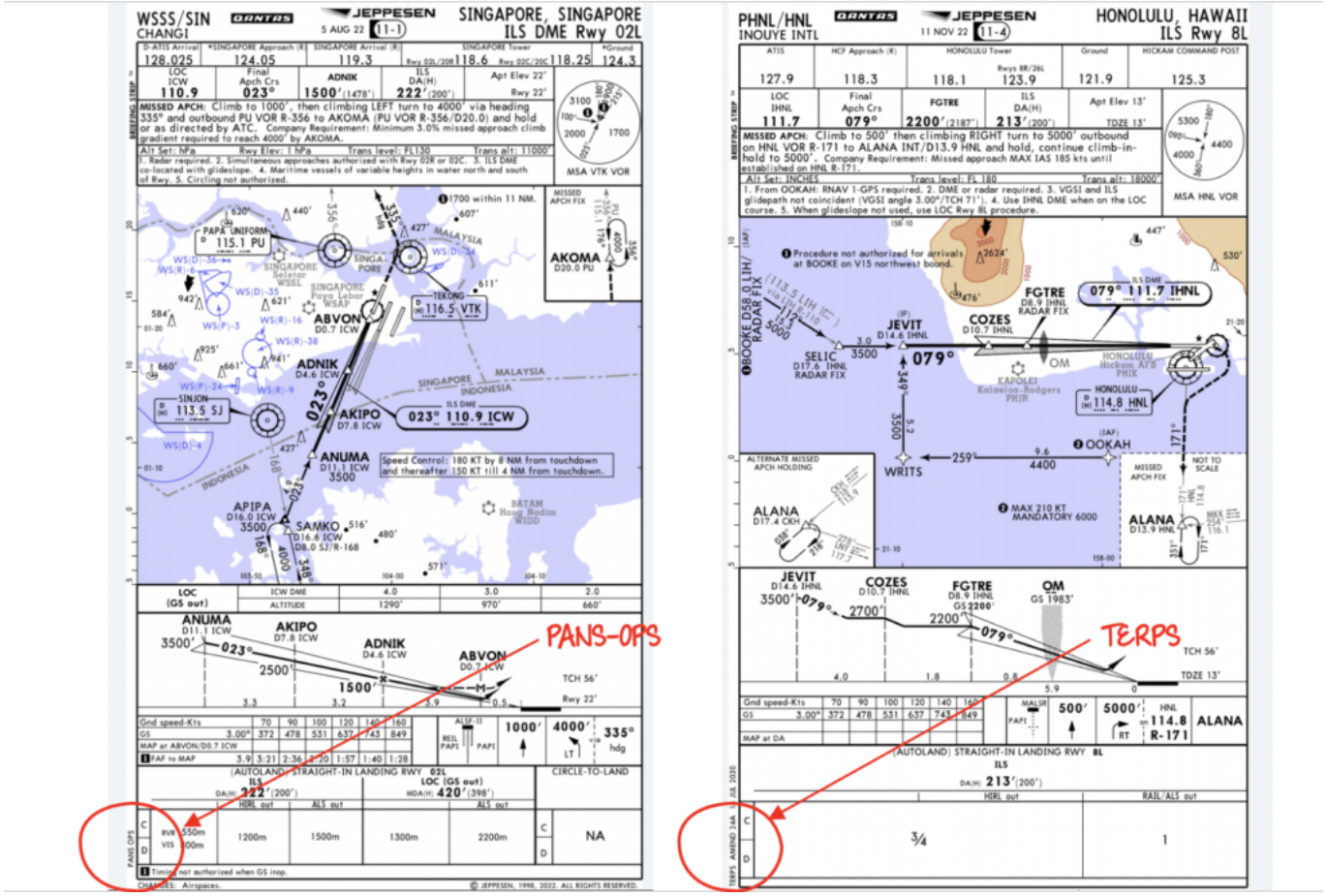
International operators in particular may be at risk of straying outside of the circling area if they are not familiar with the **more restrictive TERPS procedures.** To make matters worse, some countries may not be 100% one way or the other. A straight-in approach may be designed to PANS OPS, while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



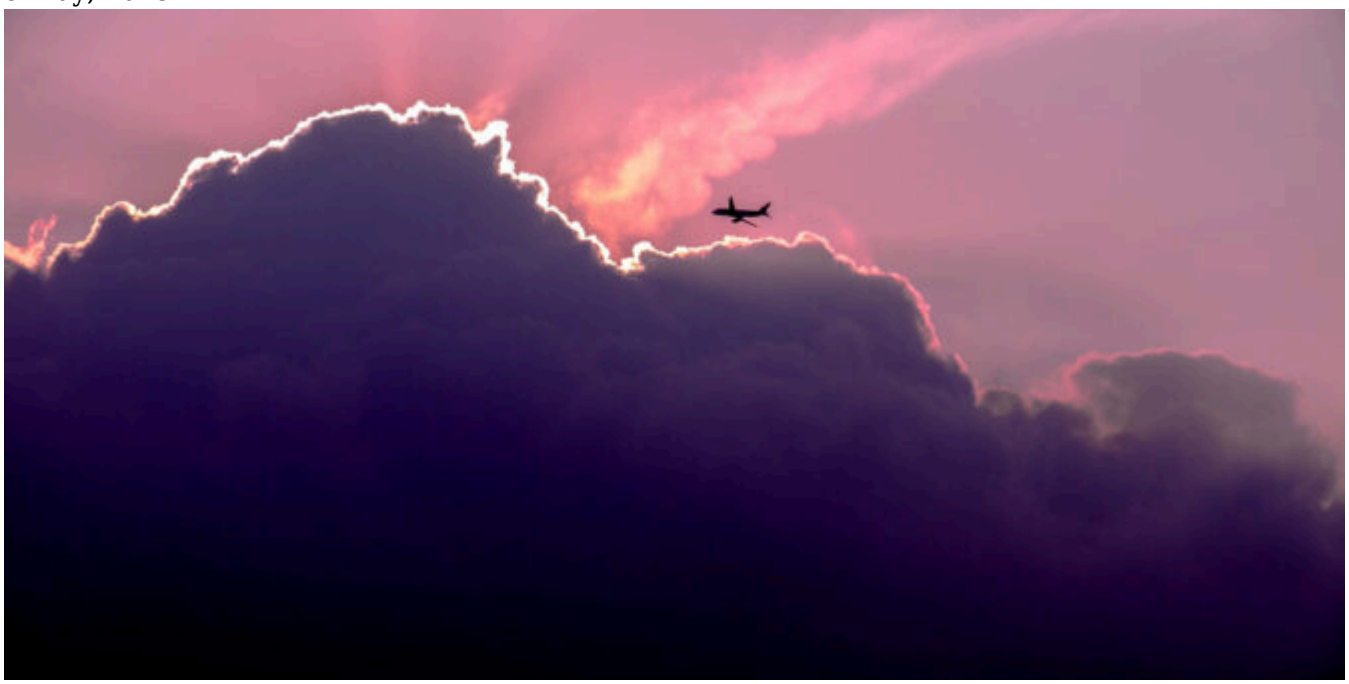
Once you've established what type of approach you'll be flying, **you'll need to think about speed, your circling area, and whether the visibility is appropriate.** We've put together a little cheat sheet that may help...

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?

David Mumford
9 May, 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:
Karlene Petitt. PHD. MBA. MHS. Type rated on A350, A330, B777, B747-400, B747-200, B757, B767, B737, B727. International Airline Pilot / Author / Speaker. Dedicated to giving the gift of wings to anyone following their dreams. Supporting Aviation Safety through training, writing, and inspiration. Fighting for Aviation Safety and Airline Employee Advocacy. Safety Culture and SMS change agent.

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

Chris Shieff
9 May, 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 – **don't sign anything.** Not unless it is written in a language you fully understand, and you have taken legal advice.

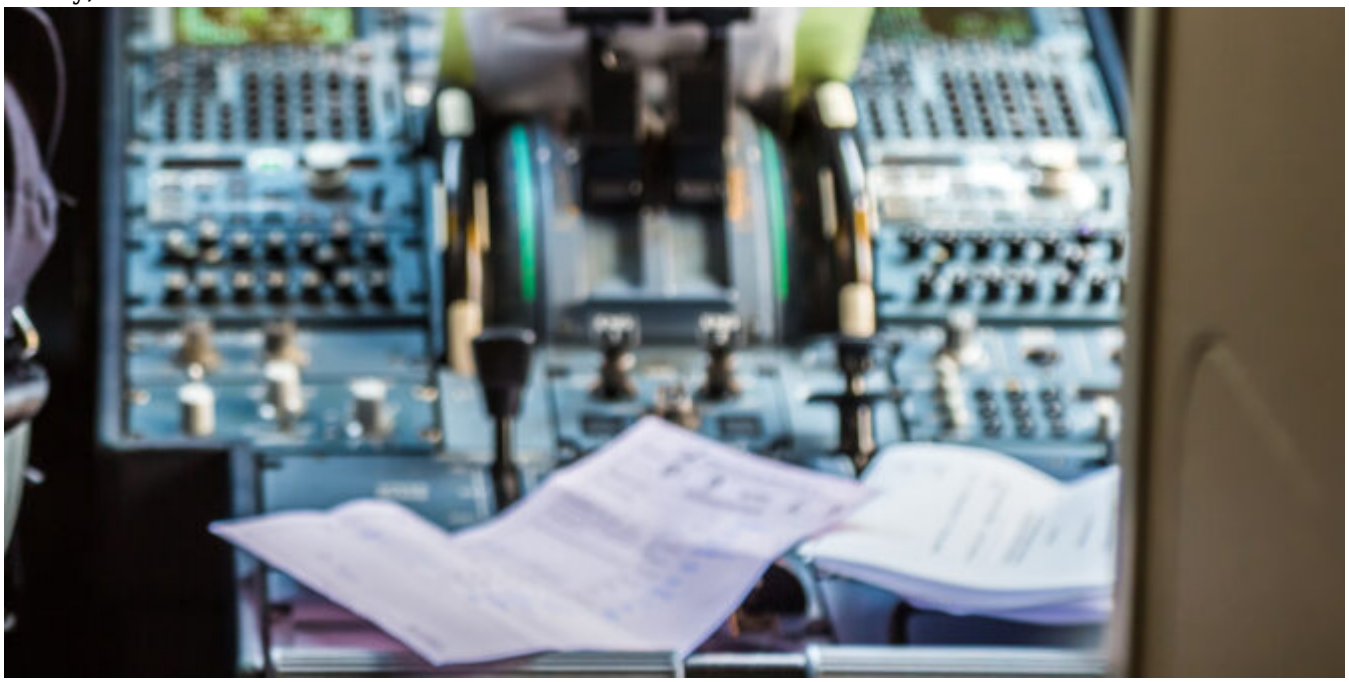
Quick Reference Card

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

David Mumford
9 May, 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

ED Decision 2022/005/R

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 re-planning, 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:

ALTERNATE #1 EDDM / ROUTE: AMIKI ZUE Z601 KPT Z999 ATMAX MERSI T468 BETOS BETOS1A
CRUISE PROFILE: MACH 0.87 @ FL90

WAYPOINTS COORDINATES	AWY ALT	WIND DIR/SPD OAT/ISA	TAS GS	HDG CRS	LEG REM	REM	USED ACT	FLOW	LEG REM	ETE ATE	EPU
LSZH N4727.5/E00832.9	 1400	- - -2/-14	0 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.**

Common ones to watch out for:

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

Chris Shieff
9 May, 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

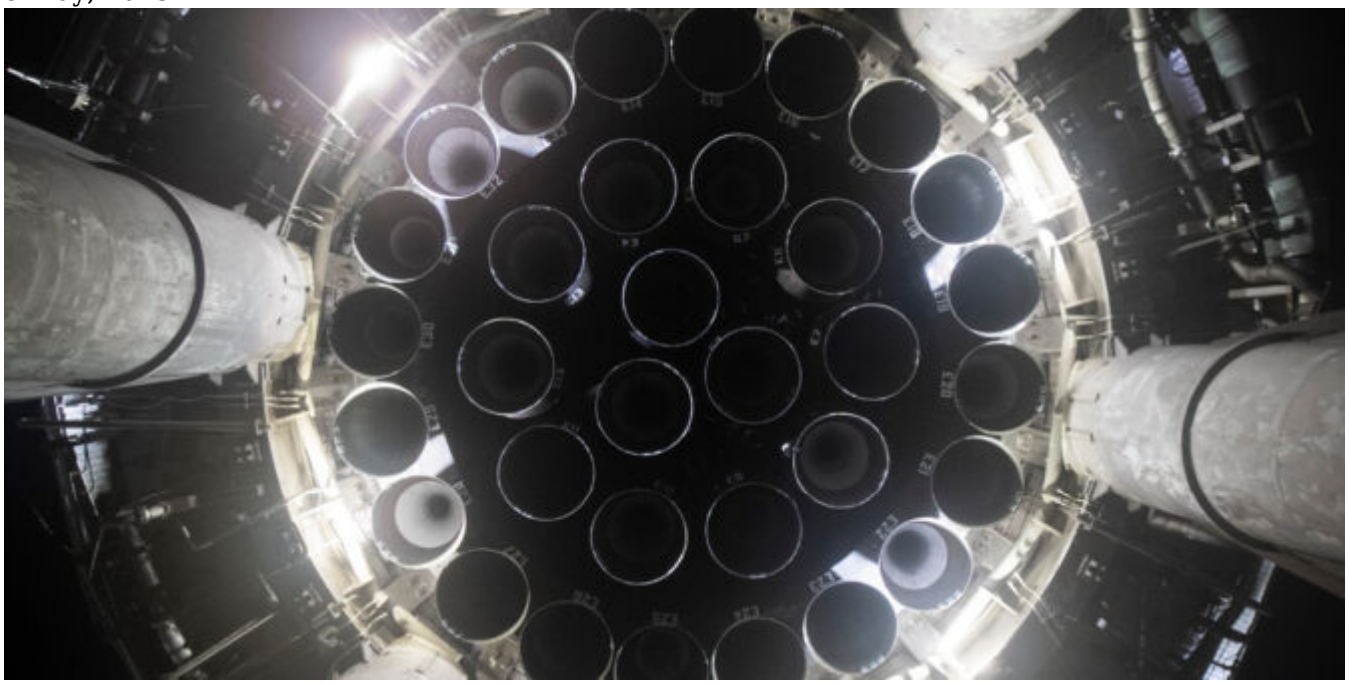
A recent high-profile interception in the region was described by a military official as just 'another Friday afternoon on the South China Sea.'

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

Chris Shieff
9 May, 2023



****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**.

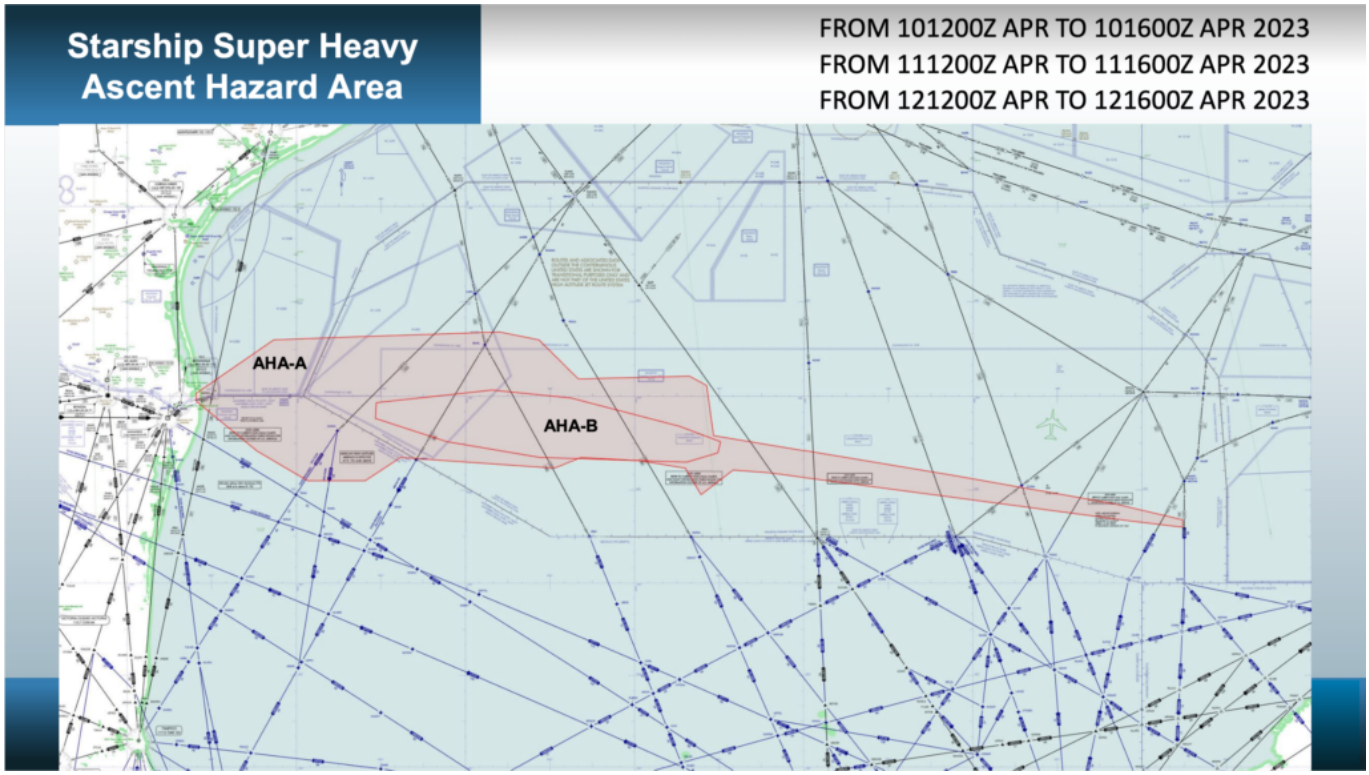
Let's take a closer look.

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.

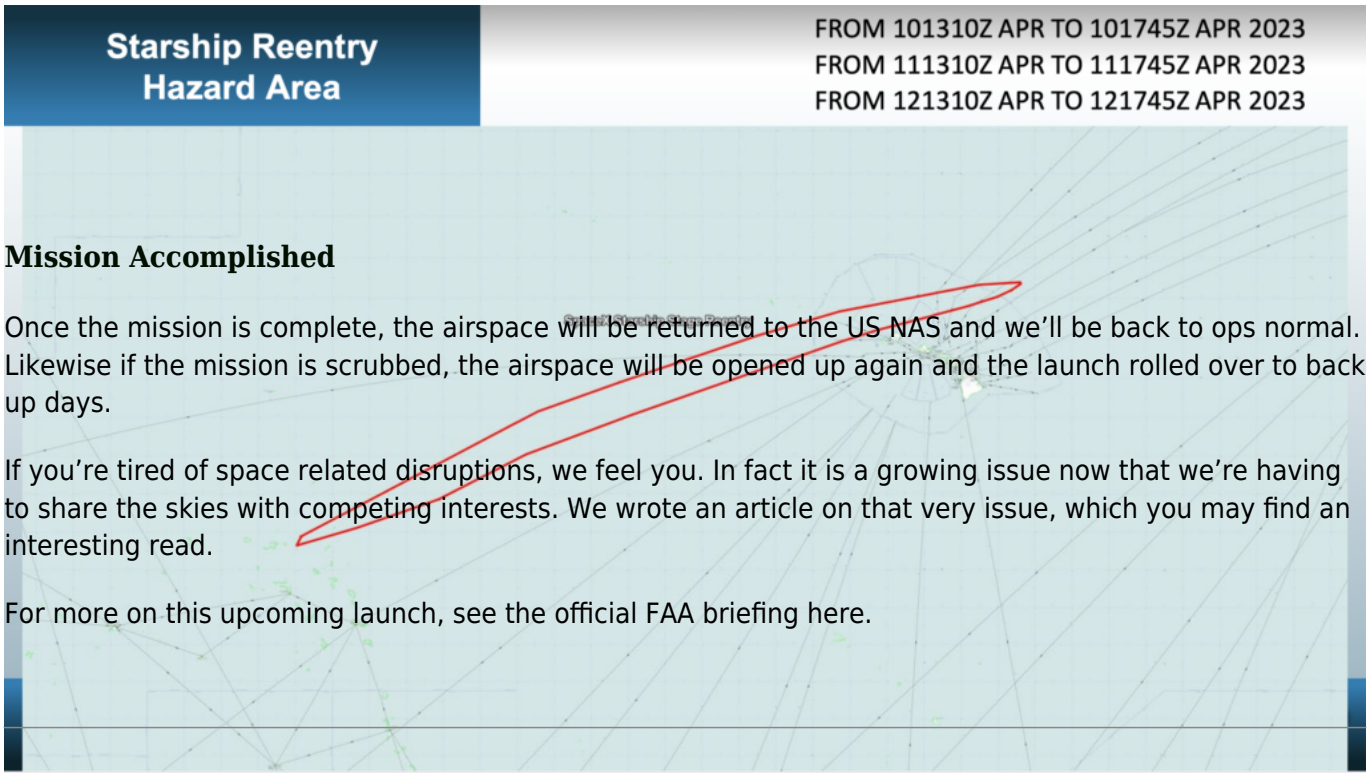
Additional congestion will be felt on alternative routes – especially for aircraft transiting to and from **Florida's airspace** via waypoint CANOA, and inland of the Texan Coast.

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.



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.

(Adventurous) Flight Ops Assistant WANTED!

David Mumford
9 May, 2023

Hi there!

We're hiring again: this role is for a **Flight Ops Assistant** at **OPSGROUP**. Might this be you?

There are some hidden instructions in this post. Read carefully! At the end, you're going to go on an *adventure*, so be ready!

Let's get started!

The first question you might have is, what does a **Flight Ops Assistant** do? This role is a junior one, but you'll be a core member of the OPSGROUP Team. You'll assist with the daily work that we do for our members, and at the same time learn more than you can imagine about the weird and wonderful world of International Flight Operations. So for the right person, it's a win-win.

A day in the life of a Flight Ops Assistant…

When we say "Every day is different", it's actually true here. That's the beauty of international flight ops – Monday is a problem on the North Atlantic, Tuesday is an ATC strike in France (OK, that's every week right now, but …), Wednesday is a typhoon heading for Tokyo. But an overview of the things you would do are this:

– Keep an eye on **member messages** – a request for help, or a notification of something new.
– **Fact-check**: assess reports coming in, and communicate with CAA's, FBO's, ATC, Airports to nail down the skinny on the latest risks and changes.
– **Write** crisp, clear **ops alerts** in plain human-friendly English for our members.
– **Help** compile the Daily Brief for members.
– Research larger operational risks and changes for blog articles and guidance to members, and write helpful, clear articles.
– **Coordinate** our chats, meetings, events: Danger Club, Coffee & Waffle, OPSGROUP Local.
– **Help** with some of our focus work: NOTAM reform, Safe Airspace, Pilot-Controller workshops.
– Take part in our **Team chats**, and help track new ideas for member tools, resources, useful articles,

maps, and other genius things.
– Keep our flight ops databases, member information, and airport info up to date.

Who are you?

Here's the first (*not so hidden*) instruction – when you start your adventure down below, make sure to give us a sense of **who you are**. For sure, some flight ops experience is important, but we like working with people we like. That doesn't mean "people like us", it just means that you bring great energy.

As this is a junior role for an assistant, we're not expecting you to have twenty years at the pointy end of international flight ops – but you should have a solid basis in flight operations: dispatch or flying, real world, a few years at least. We'll help take that foundation and expand your world; you'll learn, grow, and take on new challenges here.

The deets

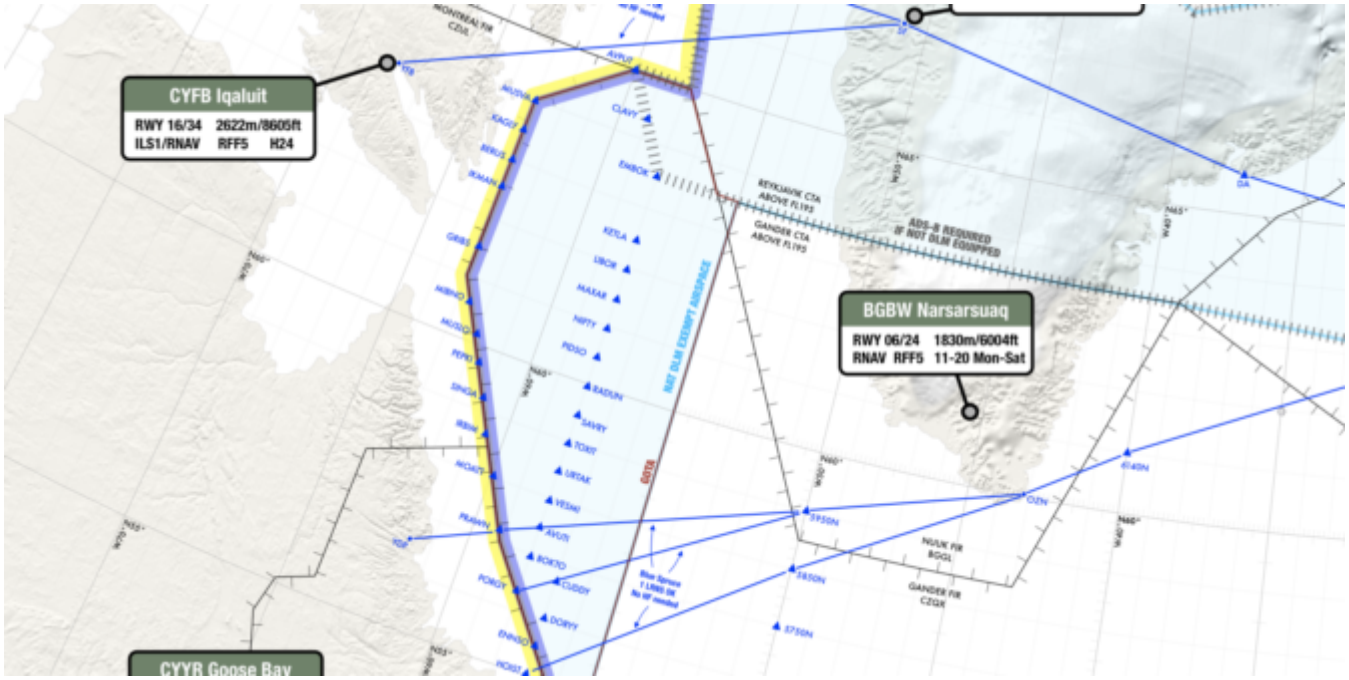
- **Working hours**: **Weekdays** (Monday-Friday), daytime hours, **full-time**. We have a target of 6 hours of good work each day, and most weeks will average out at 30-40 hours of work. You decide (mostly) when that happens – no night shifts or back of the clock grinding required!
- **Payment**: Monthly, fixed-rate. Some weeks more, some weeks less – depends what's going on.
- **Location**: Your island, cabin, apartment, garden, boat, tiny home, co-working space – wherever you have a quiet spot to yourself and some decent internet. We *might* have a preference for a US timezone in this regard (UTC-4 to UTC-8), but we're open.

Ready?

You can do your first interview already! It'll take about 20 minutes. We'll take you on a little adventure, ask you some things, tell you some things. All you need is your big computer (couple of practical things to do, so your phone isn't ideal) and a little time.

NAT Datalink Exempt Airspace – 2023 Update

David Mumford
9 May, 2023



There have been some changes to the boundaries of the datalink exempt airspace in the northern bit of the North Atlantic.

This used to extend down south to SAVRY, but now only goes as far as EMBOK.

So now you need datalink in the NAT oceanic airspace over Greenland controlled by Gander.

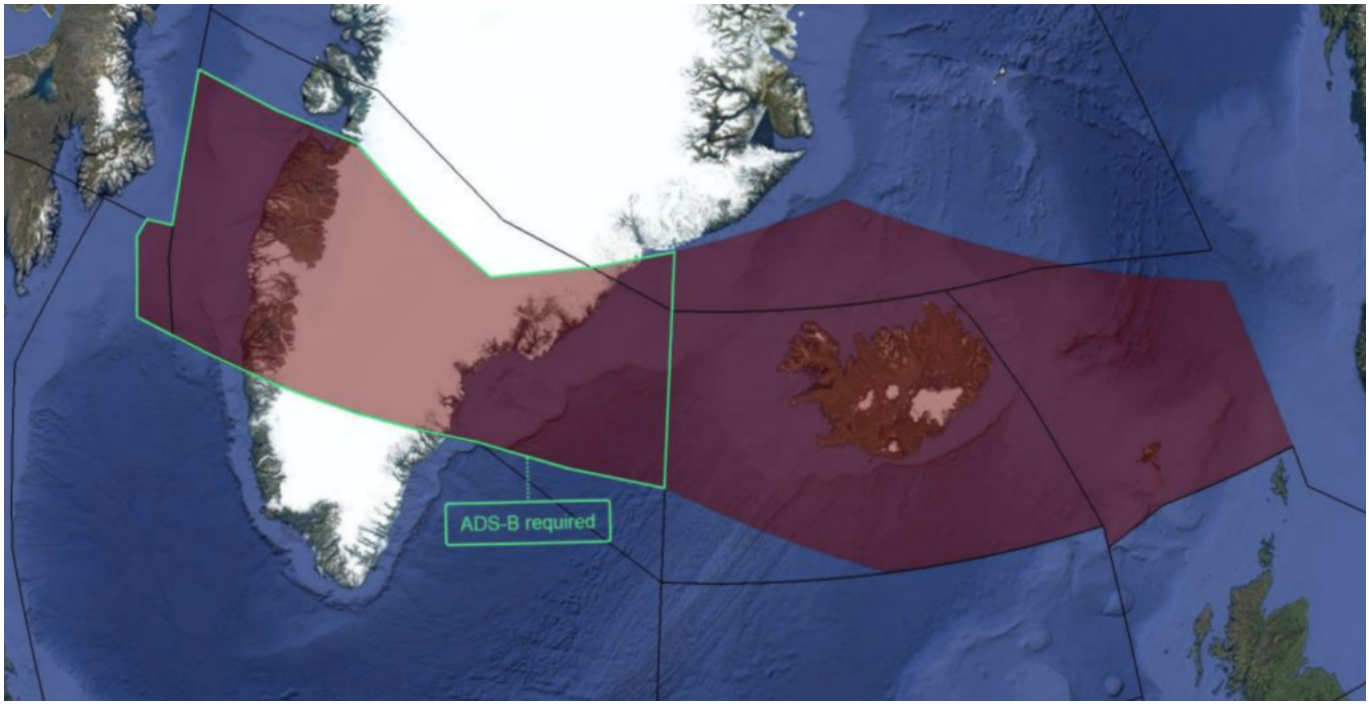
Here's a pic of what that now looks like:

You don't need datalink in GOTA airspace. We discovered this in Aug 2022, after some lengthy discussions with the authorities. (So that's why GOTA is shaded blue!)

You don't need datalink over the northern half of Greenland either, but if you don't have it, you must have ADS-B (as per the grey hatched line in the pic above).

When did this change happen?

It was actually published in the updated NAT Doc 007 in Jan 2023, but we only just spotted it now!



The new coordinates are as follows:

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

Why has this happened?

At the end of 2022, Canada decommissioned some VHF and ground based ADS-B sites in southern Greenland, and therefore no longer have the datalink exempt area in the northern portion of Gander oceanic HLA airspace. So at that point, **all Gander oceanic airspace became DLM airspace** (although GOTA stayed datalink exempt).

The 127.9 frequency continues to be used by Gander IFSS for the Blue Spruce Routes.

So, to recap…

- **Datalink Airspace:** Remember, NAT DLM airspace only applies from FL290-410. Below or above that, you don't need datalink in the North Atlantic.
- **If you have full datalink (CPDLC and ADS-C):** You can go where you like. But watch out here – "full datalink" means you have Inmarsat or Iridium. HF datalink alone (ACARS) does not meet the satcom part of the NAT DLM requirement. So if you want to fly in NAT DLM airspace (FL290-410 in the NAT region) "J2" in field 10a of your FPL isn't enough – you need "J5" for Inmarsat or "J7" for Iridium.
- **For GOTA airspace:** You need a transponder, automatic pressure-altitude reporting equipment and VHF. If you have ADS-B, that's helpful for ATC.
- **For oceanic airspace over Greenland controlled by Gander:** you need datalink.
- **For the Blue Spruce Routes:** You need datalink for the southerly ones, but not the northerly ones. (If you're flying on these then you're probably doing so below FL290 anyway, in which case you're below NAT DLM airspace and don't need datalink).

We've updated our dedicated NAT page with this info. This has a timeline of North Atlantic changes stretching back to the dawn of time (actually, 2015, but basically the same thing).

South Africa's Unapproachable Approaches

OPSGROUP Team
9 May, 2023

South Africa is going through some troubled times on the aviation front right now. Fuel issues, power outages, and now, apparently, they are losing a whole load of their instrument approaches nationwide.

The Fuel Thing

Not as serious as their 'fuel thing' in 2022 (when floods disrupted the main transport line to FAOR/Johannesburg and they had severe jet fuel shortages for months).

This is **limited to BP**, who are to **stop providing jet fuel** at airports across the country. They've already withdrawn from FACT/Cape Town, and will do so at other main airports FAOR/Johannesburg and FALE/Durban from the end of April.

Shortages have also been occurring FABE/Port Elizabeth, FALE/King Shaka, FAEL/East London and FAUT/Mthatha.

So if you're headed there, double-check with your local agent what alternative fuel suppliers are available, and what actual fuel is available for that matter.

The Power Thing

Load shedding is an ongoing issue. All airports have their own generators, so ops generally aren't the issue. However, it is causing some concerns (again) for fuel.

Airlines have been **tankering into FACT/Cape Town** due to potential limits after the load shedding

caused problems with the primary supplier.

There have been some Notams suggesting **limited tower availability** at some (generally smaller, regional) airports.

The Instrument Approach Thing

Authorities are **suspending instrument approaches** at a whole load of airports across the country. A check of South Africa's Daily Airspace Plan shows issues with **ILS, VOR, RNAV and GNSS approaches** at various airports:

Central Airspace Management Unit — **DAILY AIRSPACE PLAN 30 MARCH 2023**

Telephone Number: 011 928 6433
Email: camuhelpdesk@atns.co.za

Last Update: Thursday, 30 March 2023 06:02 South African local time
Next Telcon: Week days at 0630UTC excl. Public Holidays

ATC Overview – All times in UTC unless stated otherwise

Primary Aerodrome Issues

Location	Details	RWY	Approach Mode	Rate
CAMU				
FAOR	RAPID EXIT TWY INDICATOR LGT FOR RWY 03R/21L AND 03L/21R U/S. AWOS SERVER INTERMITTENT. RWY 03R/21L CLSD 2303300731-2303300801 RWY 03L/21R CLSD. 2303300700- 2303300730	21	VMC	53
FACT	**F0121/22 :** FACT ILS Z RWY 19 (ILS-02): PILOTS ARE PROHIBITED FROM FLYING THE PUBLISHED HOLD OR RACETRACK. REFER TO NOTAM FOR PROCEDURE. 5 PALS CAT II LGT RWY 01 U/S. CLR DELIVERY 122.1 MHZ OPS HR CHG TO: SAT-SUN 0400-1700. PWR LINE ON RWY 16 AND RWY 19 APCH BLW 2 PERCENT NOT CLEARLY VISIBLE DRG POOR WX COND. SID DEP-03 RWY 01 IMSOM 1A DATED 10 MAY 2007 SUSPENDED SID DEP-02 RWY 01 KODES 1A DATED 03 JAN 2019 SUSPENDED	19	VMC	30
FALE	ILS CAT II RWY 24 & 06 DOWNGRADED TO CAT I DUE SINGLE TRANS OPS. RWY 24 SUBSTATION UNINTERRUPTIBLE POWER SUPPLY (UPS) U/S. IN CASE OF PRI PWR FAILURE, THE FLW FAC WILL NOT BE AVBL FOR 10MIN:1. PAPI RWY 24, 2. TWY M AND H STOPBARS, 3. RTZL 24 U/S. DURBAN WX RADAR (294226.07S 0310453.91E) U/S. AFFECTED AREA 200KM RADIUS AROUND FALE. DURBAN S-BAND PSR (295853.39908S 0305757.11099E) OFFLINE. BIRD RADAR U/S.	24	VMC	24
FALA	ILS LOC LAI 110.7 MHZ RWY 07 U/S. ALL ASSOCIATED PROC SUSPENDED. 1830-2200	07	VMC	16
FAGG	IAC VOR-02 VOR RWY 29 DATED 01 MAY 2014 SUSPENDED. IAC VOR-01 VOR RWY 11 DATED 01 MAY 2014 SUSPENDED	29	VMC	15
FAPE	FOURTH ROW PAPI LGT ON THE RIGHT OF RWY 26 U/S. TWY LGT PANEL IN THE TWR U/S. TWY LGT INTST ON MANUAL AND IS ADJUSTED BY THE ELECTRICIAN IAC VOR-02 VOR RWY 26 DATED 07 JAN 2016 SUSPENDED.	26	VMC	17
FAEL	GRASS CUTTING TAKING PLACE ON ALL RWY, TWY EDGES AND RESA.DLY 0730-1930 IAC VOR-01 VOR RWY 11 DATED 03 JUL 2008 SUSPENDED IAC ILS-01 ILS Z RWY 11 DATED 03 JUL 2008 SUSPENDED	29	VMC	17
FABL	ALL STOPBARS & GUARD LGT U/S. IAC VOR-01 VOR RWY 02 DATED 11 DEC 2014 SUSPENDED IAC RNAV-01 RNAV (GNSS) RWY 02 DATED 30 MAR 2017 SUSPENDED SID DEP-01 RNAV (GNSS) RWY 02 DATED 30 MAR 2017 SUSPENDED STAR ARR-01 RNAV (GNSS) RWY 02 DATED 30 MAR 2017 SUSPENDED	20	VMC	12

Central Airspace Management Unit — **DAILY AIRSPACE PLAN 30 MARCH 2023**

Telephone Number: 011 928 6433
Email: camuhelpdesk@atns.co.za

Last Update: Thursday, 30 March 2023 06:02 South African local time
Next Telcon: Week days at 0630UTC excl. Public Holidays

Secondary Aerodrome Issues

Location	Details
FAKM	TWY A CLSD AD GRASS CUTTING TAKING PLACE. DLY 0600-1400. TWR/APP OPS HR CHG TO: SUN 0800-1600. IAC VOR-01 VOR/DME RWY 02 DATED 12 DEC 2013 SUSPENDED IAC VOR-02 VOR/DME RWY 20 DATED 12 DEC 2013 SUSPENDED
FAKN	KRUGER MSSR (252300.9S 0310633.94E) U/S.
FAPN	ATZ DOWNGRADED TO CLASS D AIRSPACE. TWR 118.4 MHZ OPS HR CHG TO: MON-FRI 0600-1400, SAT-SUN 90MIN PN CTC OIC 063 938 8670 IAC VOR-01 BREAKCLOUD VOR/DME 05 DATED 08 JUL 2004 SUSPENDED
FAPP	MIMIC PANEL U/S. ATC UNABLE TO CTL AD LGT IAC ILS-01 ILS RWY 05 DATED 12 OCT 2017 SUSPENDED IAC VOR-01 VOR A RWY 05 DATED 15 SEP 2016 SUSPENDED.
FAPM	IAC RNAV-02 RNAV (GNSS) RWY 34 DATED 18 JUL 2019 SUSPENDED IAC RNAV-01 RNAV (GNSS) RWY 16 DATED 20 JUN 2019 SUSPENDED
FARB	IAC VOR-04 BREAKCLOUD VOR 23 DATED 08 JUL 2004 SUSPENDED IAC VOR-03 BREAKCLOUD VOR/DME 23 DATED 08 JUL 2004 SUSPENDED IAC VOR-02 BREAKCLOUD VOR/DME 05 DATED 08 JUL 2004 SUSPENDED IAC VOR-01 BREAKCLOUD VOR/DME 05 DATED 08 JUL 2004 SUSPENDED
FAUT	PRIVATE CLOSE USER GROUP (PCUG) AND TEL LINES U/S. TEMPO CTC TEL NR 0664333871. NIL NGT OPS. MID WINDSOCK RWY 14/32 U/S. AERONAUTICAL AUTOMATED INFORMATION SYSTEM (ANAIS) AND AMHS AGENT TERMINAL INTERFACE SYSTEM (AMATIS) U/S. SAR CANNOT BE NML FOR VFR TFC AND THE APPLICABLE AD CANNOT BE NOMINATED FOR ANY SAR ACTION FOR BOTH VFR AND IFR TFC.
FAWB	ONE THR LGT ON RWY 29 U/S. FOURTH ROW PAPI LGT RWY 29 U/S. TWR CTL PANEL FOR RWY 11/29 LGT U/S.
FAUP	IAC VOR 01 VOR/DME 35 DATED 06 MAR 2014 SUSPENDED IAC RNAV 01 RNAV (GNSS) RWY 35 DATED 08 DEC 2016 SUSPENDED
FAGM	PAPI RWY 17 & RWY 11/29 U/S. ABN OBST LGT U/S.

The reason for these suspensions is not yet clear, but seems to be related to an **ICAO safety audit** that is currently taking place – as most of the suspensions got published by Notam half-way through their visit.

What does this mean for operations?

It means you might want to **see what is available at alternate airports**, because many approaches might not be and that could turn out to be a nasty surprise for pilots.

Beyond that, it is not currently clear why they are being suspended – whether audit findings suggest safety issues, or if some are due to problems with power outages and intermittent signals.

If you have any information, please get in touch at news@ops.group

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UK Air Passenger Duty Rate Hike

OPSGROUP Team
9 May, 2023

The UK Air Passenger Duty Rates are increasing!

What:

Air Passenger Duty rates – a charge for each passenger on flights originating in the UK.

Who:

It applies to **fixed wing aircraft weighing 5,700 kg or more** (12,500 lbs) and only applies to passengers you have onboard, not your crew. It applies to private non-revenue and charter flights too.

There are some exemptions:

- Emergency, training, military, humanitarian, search-and-rescue and air ambulance flights

- Cargo flights
- Transit passengers possibly
- Tech stops so long as no-one gets on or off
- Not really an exemption, but if a passenger has an onward connecting flight it only looks a the first leg when deciding what to charge

There is also an *'opposite exemption'* which applies to passengers on flights using aircraft of 20,001 kg (44,094 lbs) or more with fewer than 19 seats. For this they **apply a premium rate** which is in fact about double the standard business/first class rate.

When:

The new rates come in from **April 1, 2023**, and will be applied for the tax year 2023-2024. (So if you're reading this post after March 31, 2024 then this probably won't be accurate anymore.)

Where:

Everywhere in the UK.

They are based off where the journey ends outside of the UK. *"This is their final destination"*as HMRC state quite dramatically on their website.

How:

They are introducing new bands – specifically, **a new domestic band and a new ultra long-haul band.** Current rates will also increase.

- The new **domestic rate will be set at £6.50** (that's actually been reduced from £13)
- The new **Ultra long-haul rate will start at £91**

From April 1 there will be **4 (instead of the current 2) bands** – Domestic, A, B and C.

Band	Distance from London to destination capital city
A	0 to 2,000 miles
B	2,001 miles to 5,500 miles
C	over 5,500 miles

Of course, it is the UK so never just that simple. There are also **3 types of rate, based off seat pitch:**

- **Reduced:** seat pitch less than 40″ (1.016m)
- **Standard:** seat pitch more than 40″
- **Higher (the premium rate we mentioned earlier):** airplane weighs 20 tonnes or more but has 19 or less seats.

If you go to this page you can see all the destinations and which band they fit into, as well as a lot of info on how to calculate your seat pitch and the rate you need to pay.

Rates from 1 April 2023

Destination bands	Reduced rate	Standard rate	Higher rate
Domestic	£6.50	£13	£78
Band A	£13	£26	£78
Band B	£87	£191	£574
Band C	£91	£200	£601

So the new ultra long-haul rate is the one that will really sting. This is for flights to countries whose capitals are over 5,500 miles from London, and so that includes key hubs like Bangkok, Hong Kong, Kuala Lumpur and Singapore, where the rate will now be as high as £601 per pax depending on how much leg room they have!

If you want more information then you can find it in several places:

- The HMRC webpage on the changes
- The HMRC webpage for checking specific rates
- Talk to **Ann Little** on the phone at 03000 586096 or by email: ann.Little@hmrc.gov.uk

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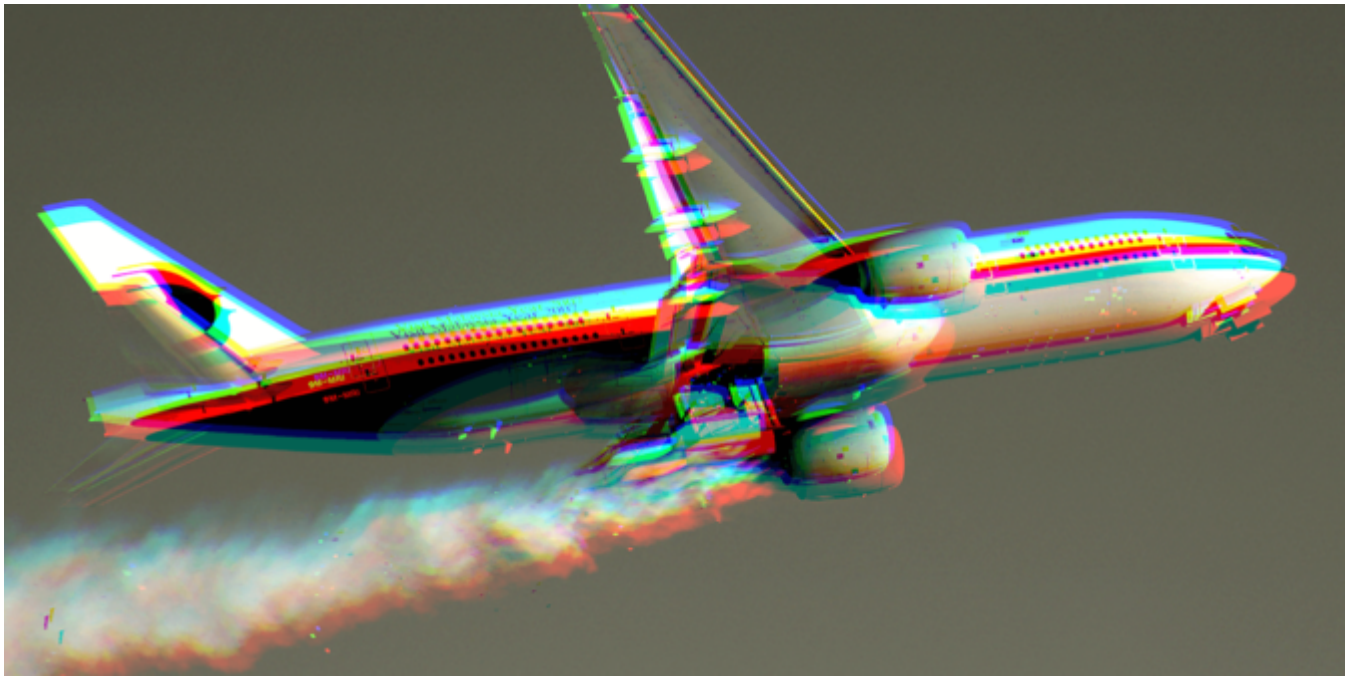
Emergency: We're all getting MAYDAYS wrong.

Mark Zee
9 May, 2023



Pilots and Air Traffic Controllers communicate with each other every day. But it's not very often that we get to **talk to each other** in real conversation: sharing experiences, exchanging ideas, learning, and just having some fun and getting to know each other. Yesterday, in Danger Club #11, that's what we got to do, and it was eye-opening.

150 people came along to the meeting yesterday on **MAYDAY's and Emergencies**. For such a critical aspect of our intertwined worlds, we found a lot of unsolved mysteries, and a lot that we're getting wrong. We can both make life much easier on each other, it seems!

So, let's make this a starting point for figuring out some of these mysteries. With more collaboration, we can improve how emergencies unfold, and how we handle them in the cockpit and in front of the radar screen. In no particular order, let's jump in!

This is a living page. We'll update and revise this as we get more feedback, so please comment below ⬇ or email us with your thoughts!

~~Declaring an Emergency~~ 🚫 MAYDAY! 🚫

The first incident we looked at was a 747 on departure from Tokyo with a cargo fire warning. For two agonizingly long minutes, the crew tried to tell ATC they had a problem and neeeded to return: without success. Why? Primarily, **phraseology**. There was no mention of the word MAYDAY (or PAN-PAN). Key points on this:

- US pilots, in particular, tend to use the phrase "*Declaring an Emergency*". It's baked into the US aviation system, but it has **no legal or functional basis**. Officially, it's meaningless, but in the US it's just the way we do things (more on this below).
- When we go international, that becomes a problem, because it's not something controllers are trained to understand. In airspace where English is not the first language, we must say MAYDAY, or PAN-PAN. That, and only that, is the trigger for ATC to understand and help.
- **The FAA** AIM 6-3-1 covers Emergencies. **The wording needs urgent improvement**. The opening paragraph essentially says "*Say what you want, really*". It follows with "*The ICAO way*

(MAYDAY and PAN) is better, however", but it doesn't mandate using it. As a result, in the US, we have no solid guidance on how to handle emergency communications, and no phraseology guidance or examples. **This looks like the root of the problem**. **@FAA: fix this please!**

- If your GOM(Ops Manual)/SOP's suggest using "*Declaring an Emergency*" as the radio call, you're setting your pilots up for failure, especially when going international. Make it MAYDAY!

2. What does a perfect MAYDAY call sound like?

Like this:

- AAL001: "**MAYDAY, MAYDAY, MAYDAY, American 1, Engine failure, continuing straight ahead, STAND BY"**
- DFW TWR: "**American 1, Tower, MAYDAY roger**"

And especially internationally, these points are important (we cleared up some misunderstandings here as well):

- It doesn't matter if it's the first call or you're already in contact with ATC on the frequency, **always say MAYDAY**.
- **It's a trigger for ATC**. The frequency may sound quiet, but the controller may be on a phone call with another sector. Hearing "MAYDAY" will ensure immediate attention. Compare that to "*Uh, we gotta problem here, and blah blah*". There's no key phrase in there to force the controllers brain to listen immediately.
- **It's a trigger for other aircraft on frequency**. As soon as a MAYDAY call is made, everyone is listening and paying attention. If the controller doesn't come straight back with an acknowledgement, it's likely that another aircraft will jump in to try to get their attention. Also, everyone else will know to be silent.
- **Speak slowwwwwwwwly**. Like half normal speed. Say it once, say it clearly. When you describe the problem, use no more than three words, clear and slow "Cargo … FIRE .. warning".
- That ***STAND BY*** part is not in the books, but it's critical. If you're lucky, you'll get that ideal ATC response above which means "Got it, and I'll be quiet now for a bit, so you can do your thing". **You're not likely to be lucky**, so you need to ask for that silence. STANDBY will improve the chance of that happening.

3. Everyone's panicking for a minute

Listen to Shamrock 12G declare a MAYDAY here, just airborne from Orlando.

Listen to the voice change of the pilot. The physiological response, the startle effect: you can almost hear the increased heart rate. You can also hear the controllers stress response.

- Despite the startle, the Shamrock pilot makes a perfect MAYDAY call. **This is how it's done**. (And despite that, the controller asks "*Are you Declaring an Emergency*". Back to the FAA problem – very muddled guidance on emergency phraseology in the US. **@FAA: fix this**

please!)

- As pilots, **we might not think** that "our emergency" is stressful for the controller. It is. The controller is just as startled as we are. Every controllers heart skips a beat when you say "MAYDAY".
- For both of us – pilots and controllers – once you've sorted out the immediate actions, a moment to **sit on your hands** and breathe is essential. For pilots, Aviate, Navigate, Communicate – get the airplane safe – and then take a moment to get your physiology into a more helpful place. For controllers, Ack the call, separate the immediate traffic, and then … **Three deep breaths**, perhaps (IFALPA have been discussing this recently, as the startle effect become more understood). Bottom line is we don't make great decisions when we are responding instinctivly.

4. Dear ATC, here is our 5 minute wishlist.

This one is going to be a work in progress, but we discussed a few things that might help a controller to understand what a pilot really wants in those **first five minutes**. We should try to distill this into a flash card, after some more discussion?

So, "*American 1, MAYDAY, STANDBY*", ATC says "*American 1, MAYDAY, Roger*" … what then?

- **MAYDAY** is just what we say to get attention. It very, very, very rarely means that we're going down in flames like a bad Steven Seagal movie. Even though we'll be startled for a moment, our training kicks in and **we know exactly what we have to do**.
- The biggest obstacle to us doing that is **distraction**. Hence, the greatest gift you can give us is **SILENCE**.
- Start by letting us know that you heard us. Acknowledge the call, and "MAYDAY Roger" is just fine.
- Depending on traffic, terrain, and when it happens, give us an **altitude** and a **heading**. "*Continue runway heading, climb 3000 feet*". We'll tell you if we need something different. A heading is the most helpful form of lateral navigation, because we just twist the dial and engage heading mode. Don't give us a direct-to point (heads down in FMS takes time). Don't send us off to hold somewhere, just yet. **Heading, heading, heading**.
- **SILENCE**. The less you talk to us, the more it helps. That MAYDAY call we make is just a small part of the **procedure** we're trying to run. Getting that procedure done correctly requires both pilots to pay full attention, so stopping to talk to ATC is something we'd prefer to avoid.
- **The pilots will be having an essential conversation to** check the state of the aircraft, anlayse the issue, and decide on the appropriate action. A common workflow is *Power, Performance, Analysis, Action*: **Power:** Check Thrust, ATS engaged, set correct TOGA/CLB **Performance:** Flaps Up, Gear Up, Min Speed, Max Speed **Analysis:** MFDU Indication, OHP, Situation, Time Check, Priorities **Action:** [PNF] Memeory Items, MFDU, QRH, OMB, OMB Ch7, ILS minima conditions, MEL [PF] ATC call, Select approach considering situation, inform Cabin. For any engine issue, at the very least we will be retarding the throttle on the "bad engine". Pilot 1: "Confirm thrust lever 1"; Pilot 2: (points to Thrust lever 1) .. "Thrust lever 1,

idle". If it's a failure, we might shut it down: ""Confirm fuel lever 1" – "Fuel lever 1, Shut". If it's a fire, "Confirm fire handle 1" – "Pull, discharge" – "Fire bottle 1 discharged" (Start timing) … **That's a lot, right!** So, until we've done all that, we can't really tell you much about our plans, we don't know yet. We just need the space to work through all that.

- **We don't want to land right way.** In 49 cases out of 50, even with an engine failure, even a fire, we're not going to want to enter a downwind or make a 180 to land immediately. That's not in our training. We take any immediate action needed, but then sit on our hands, run the process, assess, analsyse, run some checklists, talk to the cabin, and form a plan. So the **best thing you can do is give us vectors**, keep us near the airport (within 15 miles, say).
- **Don't ask us for souls and fuel** in the first five minutes. Our brains are engaged in problem solving, and distraction make that difficult. Save that for later, if at all (more on that below!)

Question: What else should we add in here? What else is on our ATC wishlist?

More to come! But, please comment below on what we have so far …

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13 things we learned this Winter

OPSGROUP Team
9 May, 2023

More specifically, 13 things we learned about GRF.

What is GRF? This is the Global Reporting Format for runway surface conditions. It came in back in Nov 2021, and if you have flown anywhere wintery since then, chances are you have encountered it.

The aim of GRF? To have one worldwide standard for how runway surface conditions are reported – to help make things a bit safer and reduce runway excursions.

In Feb 2023, EASA held a webinar which involved a load of updates for various wintery airports on how GRF

was going.

We listened in to the webinar. Here are the 13 things we learned...

1. SPWR means Specially Prepared Winter Runway

And it seems to be quite EU specific (we haven't seen it in ICAO docs).

What it means: An airport where the temperature is **-15 degrees C or below, and which is covered in compacted snow or ice can be treated** *(usually with sand)* to improve the friction characteristics *(how well you'll decelerate)*. When it is done properly *(and checked and approved)* then authorities will designate it an SPWR and it will be **rated RWYCC 4** (or possibly 3, but 4 is probably what you need in order to land on it).

CC stands for condition code, 4 stands for a pilot braking action of good to medium, and **an observed braking deceleration or directional control of good to medium** on the runway condition assessment matrix.

2. Norway approved a bunch of airports for SPWR

It wasn't easy, but they did it. The approvals were only temporary (most expire at the end of the Winter season in April/May 2023), but still, well done Norway.

What it means: You can expect more and more SPWR spots in winter zones.

A6225/22 – THE AIRPORT OPERATOR HAS OBTAINED TEMPORARY APPROVAL FROM CAA FOR REPORTING OF RWYCC 4 SPECIALLY PREPARED WINTER RUNWAY. FINAL APPROVAL WILL BE ISSUED ONCE THE VALIDATION PROCESS BASED ON ACTUAL AIRCRAFT DATA IS COMPLETE. A REPORTED RWYCC 4 SPECIALLY PREPARED WINTER RUNWAY MAY BE USED FOR DISPATCH AND LDTA CALCULATIONS WITHOUT RESTRICTIONS. FOR THE DURATION OF THE VALIDATION PROCESS, OPERATORS SHALL CONSIDER ADDING EXTRA MARGIN, FOR INSTANCE BY INCLUDING A RWY SHORTENING AS APPLICABLE. 05 OCT 04:32 2022 UNTIL 01 MAY 12:00 2023 ESTIMATED. CREATED: 05 OCT 04:38 2022

3. The ATIS reports at airports giving GRFs can be really, really long.

What it means: If a runway was contaminated and then becomes Dry or Wet (so not contaminated anymore), they don't necessarily cancel out the earlier report, which means all the info is going to be on the ATIS and that makes it really long (that's what Norway said).

They are working on it. Trouble is, the other options are SNOWTAMs (these work, but how do you get an up-to-date one when you need it?) or ATC (clogs up the radio).

So for now, if you head somewhere wintery you can probably **expect a pretty lengthy ATIS.**

That was the top 3 things we learned. Here's some more...

4. It isn't easy for airports to be approved for SPWRs.

To get approval you need data, and to get data you need folk to be landing on the runway. But to land on the runway while it is treated you need approval…

What it means: You might still find yourself flying to airports next winter which don't have their approval

fully sorted. They issue temporary approvals, but until the data is in **there may be some *'uncertainty'*** about the braking and directional control characteristics. But Norway got some done this year. Folk landed on them. It all went ok.

If you aren't sure, talk to the airport authority to find out what they have, what they will report and what it means for you.

5. There is an airport in Norway called ENHV/Hooningsvåg

And it gets real wintery there.

What it means: 50% of landings in winter are on a contaminated runway, and the other 50% are on an SPWR. Oh, and their 'winter season' can be 50% of the year long. The same actually goes for a lot of airports in the upper latitudes so be prepared for winter ops and GRF if you head up there.

5. They are 95% confident in their GRFings.

What it means: GRF works, even on SPWRs. Which is lucky because, according to Ronny Anderson:

OK, let's see what folk outside of Norway have to say…

7: Switzerland also have a lot of runways using GRF.

19 in fact.

What it means: Well, they probably have long ATIS-es too. But also, GRF is supposed to be Global but we seem to be seeing it used predominantly at winter airports. Hmm…

8. Spain use it too!

They have 46 airports, and only experience what they call 'soft' winters – basically snow and ice isn't that common, and actually **rain is the biggest issue.** In fact, only 20 of their aerodromes even have a snow plan.

What it means: They are probably pretty unfamiliar with handling snow and ice when it does occur… but

also that GRF should be used anywhere you find runway contamination, which can mean rain too!

9. According to Spain, GRF doesn't actually work very well for rain.

What it means: It means they discovered a bit of an issue with GRF when it comes to watery measurements… If there is **3mm or less of water then it is considered wet and the RWYCC is 5**, but add just 1 more mm of water and you are in the standing water category and now the RWYCC drops to a 2.

Which is a problem? They think so, because **measuring to that level of precision is difficult**, detecting big changes quickly is difficult, and when they try it generally messes with their runway capacity because, presumably, guys are having to go and wade about the runway trying to measure a 1mm change in water level.

What that means: There is no solution right now that is entirely excellent, so there is a level of 'subjective' in the GRF you might experience when flying into wet runways anywhere in the world in fact (and you don't want to be the first to discover that code 5 is actually a code 2 so be careful when hearing ATIS-es that talk about standing water).

Let's hear something positive again…

10. Germany consider their GRF implementation a total success.

We say Germany, actually we're talking about EDDL/Dusseldorf.

What it means: Well done them! We shall expect perfect runway condition reports whenever we operate there.

What are operators saying?

11. Crews need to understand the GRF works in runway thirds.

That means you use the lowest of the RWYCCs, you should check how much of the first third of the runway is 'flared' over, and should shorten the runway by a third if there is an RWYCC outlier (but always use an outlier crosswind).

What it means: Well, trying to **calculate takeoff performance using GRF is not always easy** because we don't tend to work in runway thirds for it, and it isn't necessarily clear how much 'conservatism' should be applied.

And then there is the fact you might only get an updated report just prior to takeoff which means trying to rework all your calculations under pressure.

What that means: There is probably **some training to do with your crew** if they aren't totally familiar with GRF, and you should make sure what you put in your company manuals is clear and answers all these questions so they aren't rolling down the runway thinking *"Is this actually ok?"*

12. Because GRF considers braking deceleration and directional control, it isn't just the contaminant or surface condition that impacts this.

Downgrade and upgrade criteria need to be defined to include things like wind speed, precipitation, temperatures, various vehicle behaviours, etc etc.

Which means: If you operate in somewhere you need to really **do your part reporting back.** This has been in for a couple of years, but there are still some creases (ice ridges if you like) that need ironing out.

And don't assume it is all spot on and a runway excursion will no longer be a possibility at a GRF using

airport. This is a tool for improving safety only.

The 13th thing we learned about GRF:

We need to read up on it a bit more. If you do too, then here are some links:

- An old post we wrote on it
- A link to a PDF EASA made about it
- EASA's actual page on it, complete with the regulations and a whole load of other presentations
- ICAO's page on it (because it is global, not just European)

Ops in Indonesia: Is it safe?

OPSGROUP Team
9 May, 2023

We last took a closer look at Indonesia back in 2021 and said *"It's fine at the big airports, but watch out on the ground at the smaller ones."*

Nearly two years on and we thought it might be a good time to take another look and see if the situation has changed…

What's happened in two years?

The security situation in the Papua region of Indonesia has worsened, with numerous reports of ground incidents at smaller, rural airports in the area.

- **11 March 2023:** An armed group targeted a passenger airport operating at WAVD/Dekai airport, wounding one passenger as it took off. Several operators have suspended operations to this airport since then.
- **8 March 2023:** An armed group opened fired at WAYB/Bilorai airport. One plane on the ground was hit and another diverted.
- **March 2023:** A landing aircraft at WAJO/Oksibil was shot at, a cargo aircraft was set alight on the ground in a separate incident.
- **February 2023:** A foreign pilot flying for Susi Air was kidnapped.
- **June 2022:** An armed group shot at an aircraft as it landed into Kenyam Airport.

On top of these security incidents we have heard of protests over fuel shortages and many, many volcano issues.

What are the official warnings?

IFALPA issued a security alert for commercial operations in the Papua region in March 2023. The alert advises that the Papua region is considered a **'high security risk area',** and that operations over mountainous and rural regions are strongly cautioned against.

The Indonesian Government has declared the entire region high risk, and **armed groups have shown continued interest in targeting aviation interests.** The official advice is a security assessment for each flight, along with limiting time spent on the ground.

A full briefing on the political and security situation on the ground in Indonesia, particularly with regards the Papua region conflict, can be found here. **The majority of Indonesia is considered low risk** – increased volatility is primarily in the Papua region only.

What is our warning level?

While there are security concerns on the ground, there are no active airspace warnings or cautions.

From an **overflight and operational perspective, the major airports remain safe with good security.** Crew security on the ground, if travelling beyond the airpots and cities, should be reviewed.

See Safeairspace.net for further information.

Checking for **Ashtams and Volcano warnings** is important because these do kick off fairy regularly, potentially impacting overflight and airport operations.

The ones to really look out for are:

- **Karangetang** – WAMO/Siau
- **Mount Merapi** – WAHS/Semarang and WAHH/Yogyakarta
- **Mount Semeru** – WARR/Surabaya, WADD/Denpasar and WARA/Malang.

Tell me more about Indonesia!

- Our earlier post about Indonesia's practice of intercepting aircraft outside their airspace can be found here.
- We also did one specifically focusing on Bali because we know a lot of folk like it there.

Get ready for more North Korean missiles

OPSGROUP Team
9 May, 2023

Exercise “Freedom Shield” is happening now – which means that **more North Korean missile tests are likely in the coming days.**

What is Freedom Shield?

Freedom Shield is a **joint US-South Korean military exercise**. They run joint exercises every year, but this one is the largest in a long while and so is likely to cause more ‘retaliatory responses’ from North Korea. Particularly as South Korea is specifically **simulating responses to potential North Korean threats.**

The exercises run for **11 days from March 12th.**

It is not clear where the exercises will take place, but the general advice is stick to flight plan routes, maintain a very good listening watch on the radio, follow ATC instructions and keep a good look out.

What is the risk?

North Korea tend to respond to these exercises with **significant missile activity**, which they never announce. This exercise is likely to see similar levels of response, if their ‘announcement’ is anything to go by…

Pyongyong is resolved to respond with **“overwhelming powerful forces”** to so-called military manoeuvres by the **“the US imperialists and the South Korean puppet forces”**. So probably a lot of missile launches.

The missiles rarely have any impact, generally falling into the East Sea (Sea of Japan) outside the EEZ. However, they do pose a threat within the Pyongyang FIR, and a higher level of activity is expected this year.

Here is an earlier post covering this is more detail.

While North Korea do not announce missiles, South Korea do release notams (although generally after the event).

As of March 14, they have fired:

- Two strategic **cruise missiles,** from a submarine off the east coast of North Korea
- Two short-range **ballistic missiles** fired towards the East Sea, from Jangyon
- They ran their own military exercises in Feb 2023, firing several long range cruise missiles
- At the end of 2022, **180 North Korean ‘warplanes**‘ were detected in North Korea, but did not infringe on South Korean airspace
- **5 North Korean drones** entered South Korean airspace in December 2022

In other North Korean news…

Not a lot.

They have been **trialling ADS-B** in their airspace since 2009, according to Notam A0050/09

For full updates on the airspace risk in North Korea, as well as Japan and South Korean, visit Safeairspace.

The 45.5T Elephant in the Security Room

OPSGROUP Team
9 May, 2023

What do 9 African elephants and a G700 have in common?

They both weigh over 45,500 kilograms.

And that's the weight threshold you need to know about if you're planning on heading to the UK anytime soon…

Why?

There are some rules about security screening for heavy jets! Here's how it works:

- **Any outbound public transport (charter, scheduled or commercial) flight on an aircraft over 10 tonnes (22,000 lbs) MTOW needs to be security screened**
- **All aircraft (including private flights) with a MTOW over 45.5 tonnes needs screening.**

And remember – the MTOW is what it says in your aircraft manual. We ain't talking the weight on the day.

What does 'Security Screening' mean?

Here is a link to the EU regulation.

Yep, it's an EU regulation but this is basically what still applies in the UK as well.

Why do they have this regulation? It is all about making sure people and their stuff are protected.

So "*acts of unlawful interference with civil aircraft that jeopardise the security of civil aviation should be prevented by establishing common rules for safeguarding civil aviation. This objective should be achieved*

by setting common rules and common basic standards on aviation security as well as mechanisms for monitoring compliance."

The common rules it speaks of are the screening of luggage, people, checking nothing is hidden on the aircraft, etc.

Why MTOW?

And why that particular MTOW? Why not something like number of seats?

No one knows (i.e. someone probably knows, but we don't know).

If YOU know then email us at news@ops.group We can't stop wondering now.

Why are we talking about it?

Well, there has been some confusion at some UK airports, particularly for **Part 91 folk**. And there has been some disruption at some UK airports with **operators experiencing lengthy delays.**

One member reported having to adjust their departure date and time by nearly 4 days...

There are actually two *things* worth highlighting:

First of all, specifically in the UK, there are **continuing staff shortages** and this can mean delays in security screening availability. **Airline operators are always prioritised** which means you might experience delays, and you might even find flights cannot be accommodated.

The solution?

- **Book in advance and use a handling agent** – preferably the main FBO for an airport. They are generally very helpful folk who want to help as much as possible (and can help deal with the airport authorities).
- **Don't make last minute schedule changes** and expect them to be able to leap in and immediately do a security screening for you.
- **Head to dedicated BA/GA airports** when you can. Somewhere like EGLF/Farnborough is going to be able to accommodate you more easily than the likes of EGLL/Heathrow (although even EGLF told us requests with less than 4 hours would be difficult on busy days).
- **Avoid operating into larger airports at peak times** (when the scheduled folk are heading in and out).
- **Have a backup plan airport** – if your agent is telling you it is going to be tough to accommodate you and you know you cannot delay your departure, then fly somewhere else that can!

UK rules aren't exactly the same as US.

In the US the **regulation applies to Part 121, 135** etc. Not necessarily part 91 though. In the UK it applies to anyone and everyone. If your MTOW is over 45.5 tonnes (100,309 lbs) then you're going to need a security screening.

Here is a link to the NBAA's handy article about the US side of things.

Anything else?

Here is a link to the UK Gov travel guide site.

You can find things on all topics from hand luggage restrictions to everything else on here so a good spot to head to if you want more info on the specifics (although we reckon just ask a handling agent at the airport you are heading to!).

Your 2023 Airshow Calendar

OPSGROUP Team
9 May, 2023

When we started this post, we didn't realise quite how many airshows there are out there in the world. So consider this more of a *'some of the big airshows that you might want to see (but that might also cause issues at airports you are likely to fly into)'* calendar. And let us know if you think you've spotted one to add!

The UK

The UK has loads of airshows planned for 2023. Go here for a full (but possibly not exhaustive) list. Most of these take place at smaller (and non-international) airports. So they might cause some airspace restrictions in their general vicinity, but we won't sit and tell you about them all in turn.

- **We will mention the Bournemouth Airshow though.**

Make that an 'Air Festival' actually. And not just air – land and sea too! This is a major airshow which takes place August 31- September 3. It will probably take **EGHH/Bournemouth** out as an alternate option for the days it is on, and you can expect some airspace *things* to be aware of in the general, just below London, sort of area.

- We will also point out the **Royal Air Tattoo.**

This is the largest military airshow in the UK, held on the July 15-16 at **EGVA/RAF Fairford.** This can have some impact on flights into London, and around the southwest region of the UK with aircraft heading in from all over the UK and beyond.

- The next **Farnborough Airshow is in 2024** so no comment on that today.
- **The Coronation of King Charles** is likely to involve an Air Show, with some airspace restrictions.

It takes place on May 6. You can also expect higher traffic into the UK around this period, probably some strict security and airspace restrictions around London during it.

Europe

From the **19th-25th June** what is probably the biggest air show and aviation exhibition event in the world will take place – **the Paris Airshow.** The skies of Paris will be thrumming with the sound of all sort of airplane engines, and all the airports will be fairly hideously busy.

- **LFPB/Le Bourget** will be off limits for all but those actually ‘at’ the show.
- **LFPG/Paris Charles de Gaulle** is right next door but this is a major international airport and unlikely to have all that much additional space to accommodate you.
- **LFPO/Paris Orly** is the ‘other’ international airport. Also busy, but less busy the de Gaulle.

- **LFPT/Paris Pontoise-Cormeilles** Airport is up the road and worth looking into for parking. They do not have customs there though so it would be an entry somewhere else then park here job.
- Slightly further afield **LFOB/Paris Beauvais-Tille** Airport offers customs.
- **LFOK/Paris-Vatry (Chalons)** Airport is also in the vicinity. This is mostly used for cargo.

Europe is of course quite big, and each country likes to hold an Airshow now and then. Many are smaller ones and to keep the length down, I have decided to only post ones that I have heard of, which take place at big international airports (or close enough to them to impact them).

So, for a more detailed list of airshows in Europe in 2023, check here.

Middle East

Dubai's big (trying, and might even succeed in being bigger than Paris) airshow takes place in November. Specifically November 13-17.

The airshow takes places at OMDW/Dubai World, also known Al Maktoum, which takes that out as an option for getting into the UAE, and parking your aircraft unless you've asked early enough. But worry not, one thing the UAE does well (and in quantity) is airports.

You have a whole bunch of options nearby:

- **OMDB/Dubai International**
- **OMAD/Al Bateen executive (Abu Dhabi)**
- **OMSJ/Sharjah**
- **OMAA/Abu Dhabi**
- **OMAL/Al Ain**

There are usually a fair few airspace restrictions and things to know nearer the time so keep an eye out for those.

North America

OK, we thought the UK had a lot. Turns out (unsurprisingly, given something like 50% of the worlds airports are in the US) that they win on the airshow quantity.

We found this rather handy site listing a whole load of them. It's a good resource for checking airshow dates at some of the smaller airports you might be heading into.

- We figured it would be worth highlighting Oshkosh

This takes place at **KOSH/Wittman regiona**l airport on **July 24-30.**

- One of the biggest airshow events in the US is the Miramar Air Show which takes place over 3 days (suggested to be September 23-25 this year).

It is held in **San Diego at KNKX/Marine Corps Air Station Miramar,** and sees a huge amount of military traffic heading into the area. You can expect some restrictions at KSAN/San Diego and its airspace during this time.

- Canada's main Airshow, the Abbortsford Air Show, takes place at **CYXX/Abbotsford** on August 11-13.

Again, not at an airport you might be heading directly to, but likely to result in some airspace restrictions in the area so keep a look out.

Around the Pacific and Asia sort of areas

- The Pacific Airshow takes place in the Gold Coast, Australia between **August 18-20.**

This is originally a US (Huntingdon Beach) based event. In true Australia style, it takes place over a beach, but the main airport used is **YBCG/Gold Coast**. There can be impact to the airspace for **YBBN/Brisbane** as well (and you probably don't want to plan YBCG as your alternate).

- You also have the Malaysia hosted LIMA 2023 Langkawi exhibition **May 23-27**.

This isn't just an airshow. It is actually a massive conference sort of thing, but they do a lot of air displays at it (military and civilian) and these may well impact **WMKK/Kuala Lumpur and WMSA/Sultan Abdul Aziz Shah** airports.

- The Seoul ADEX (Seoul International Aerospace and Defense Exhibition) 2023 event takes place between **October 17-22.**

Although not exactly just an air show either, it does involve some large amounts of air showing so we figured we would add it in here.

- The Singapore Air Show isn't due until **February 20-25 2024** so we'll mention that more another time.

It isn't just Air Shows...

Of course, it isn't just Air Shows specifically which limit capacity at airports and cause disruption. **Major sporting events** tend to cause them to fill up fast, busy aviation conferences see higher traffic numbers heading in, while big political stuff sees higher levels of security and often flight restrictions...

But my fingers hurt so we'll post about all of that another time

Nicaragua's Silly New System For Overflight Permits

David Mumford
9 May, 2023

Nicaragua's CAA has recently implemented a silly new system for overflight permit requests.

They talk about the changes in AIC numbers 89-93. But even when translated into English, the docs are **bamboozling, and it's not really clear exactly what has changed.**

So we called on the help of Consorcio Aviation — a flight support company in the region, and our old pals — for help to understand all this, and how overflight permit requests now work.

So, how does it work?

Before, the process would go as follows: you would make one request with all the flights you wanted to do in a month, and the CAA would reply with one unique permit number for the entire list that was requested.

The new system is different. **Now each flight must have its own permit number, and it is sent in the format of a QR code.**

QR codes? Yuck.

Yep. You scan the QR code, and a webpage opens with your permit number – **the one that you add to your FPL.**

Is that it?

No, it gets worse. To make things more confusing, the QR codes are not all sent at once, but in partial batches of five, two or sometimes even one at a time, depending on how many flights you're doing, further increasing the need for **constant follow-up.**

What do these hideous QR codes look like?

Here's a sample. The QR code there is fake for confidentiality reasons, but if you scan a real one you get just a text with the permit number.

INSTITUTO NICARAGÜENSE DE AERONAUTICA CIVIL
INAC

Unidad de Atención a la Aviación General Internacional
y Vuelos Oficiales

Aprobación Solicitud de Sobrevuelo

Fecha: lunes, 01 mayo 2023
Trámite: 01234
Operador: OPERATOR NAME

Código IAC

Fecha de Vuelo: 02/05/2023

TIPO	MATRICULA	ORIGEN	DESTINO	AEROVIA	MOTIVO
B733 FLIGHT	TAIL NO.	ORIGIN	DESTINATION	UB767	TYPE OF

Esta Autorización es valida para la ida y el retorno.

Watch out for the **TRAMITE number** on this doc. This is like an internal code for the CAA – it's not the permit number. If you have inquiries and need to get to the authorities, they will ask you this TRAMITE number, not the permit number itself.

Is this QR code / permit system online?

No, they don't have an online system for the requirements. **You need to request it directly from the authorities – and easier to do this through an agent.** Although some of the authorities' staff understand English, it's easier to communicate in Spanish in case they request more information or something is not very clear to them.

What about Nav fees? How do these get paid?

At the end of every month they send the billings to all the operators/companies that requested permits. In our case for example we usually give the options to our clients to pay directly or we pay for them. Usually they choose the second option for the reasons stated above.

Who are you, Consorcio?

Consorcio Aviation is a leading Flight Support Company headquartered in Paraguay, with a global footprint. It provides full-service ground handling to the main airports in Latin America and the Caribbean, for both cargo and passenger flights. With over 40 years of experience in the aviation industry, Consorcio Aviation is a suitable partner to assist ground operations with world-class standards. Email us at fltops@consorcioaviation.com

Sounds swish. Got any pics?

Yep. Here we are.


YOU MUST PLAN TO WIN,
CONSORCIO
Holding

New FAA Airspace Warning: Mali

Chris Shieff
9 May, 2023

On Feb 23, the US FAA re-issued its warning for overflights of Mali, with one essential difference:

It is now dangerous to overly Mali's airspace at all levels, not just below FL260.

Here is what the new KICZ Notam says:

KICZ A0001/23 NOTAM SECURITY.. SECURITY..UNITED STATES OF AMERICA ADVISORY FOR MALI

THOSE PERSONS DESCRIBED IN PARAGRAPH A (APPLICABILITY) BELOW SHOULD EXERCISE CAUTION WHEN FLYING INTO, OUT OF, WITHIN, OR OVER THE TERRITORY AND AIRSPACE OF MALI AT ALL ALTITUDES DUE TO A WORSENING SECURITY SITUATION, INCLUDING ONGOING FIGHTING, EXTREMIST/MILITANT ACTIVITY, AN EXPANDING FOREIGN PRIVATE MILITARY PRESENCE, AND THE INTRODUCTION OF AN ADVANCED AIR DEFENSE SYSTEM.

A. APPLICABILITY. THIS NOTAM APPLIES TO: ALL U.S. AIR CARRIERS AND COMMERCIAL OPERATORS; ALL PERSONS EXERCISING THE PRIVILEGES OF AN AIRMAN CERTIFICATE ISSUED BY THE FAA, EXCEPT SUCH PERSONS OPERATING U.S.-REGISTERED AIRCRAFT FOR A FOREIGN AIR CARRIER; AND ALL OPERATORS OF CIVIL AIRCRAFT REGISTERED IN THE UNITED STATES, EXCEPT WHERE THE OPERATOR OF SUCH AIRCRAFT IS A FOREIGN AIR CARRIER.

B. PLANNING. THOSE PERSONS DESCRIBED IN PARAGRAPH A (APPLICABILITY) PLANNING TO FLY INTO, OUT OF, WITHIN, OR OVER THE ABOVE-NAMED AREA ARE STRONGLY REMINDED TO REVIEW CURRENT SECURITY/THREAT INFORMATION AND NOTAMS; COMPLY WITH ALL APPLICABLE FAA REGULATIONS, OPERATIONS SPECIFICATIONS, MANAGEMENT SPECIFICATIONS, AND LETTERS OF AUTHORIZATION, INCLUDING UPDATING B450; AND, TO THE MAXIMUM EXTENT POSSIBLE, PROVIDE AT LEAST 72-HOUR ADVANCE NOTICE OF PLANNED FLIGHTS TO THE FAA AT FAA-WATCH@FAA.GOV WITH SPECIFIC FLIGHT DETAILS.

C. OPERATIONS. WEAPONS COULD POSE A POTENTIAL RISK TO AIRCRAFT AT ALL ALTITUDES, INCLUDING DURING OVERFLIGHT, THE ARRIVAL AND DEPARTURE PHASES OF FLIGHT, AND/OR AIRPORTS AND AIRCRAFT ON THE GROUND. THOSE PERSONS DESCRIBED IN PARAGRAPH A (APPLICABILITY) MUST REPORT SAFETY AND/OR SECURITY INCIDENTS TO THE FAA AT +1 202-267-3333.

ADDITIONAL INFORMATION IS PROVIDED AT: HTTPS://WWW.FAA.GOV/AIR_TRAFFIC/PUBLICATIONS/US_RESTRICTIONS/

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o what's changed there, and why is the FAA so concerned?

The Stage

Mali is a large land locked country in Central Western Africa and borders several states including Niger, Algeria, Mauritania, Guinea and Burkina Faso.

Several major **high altitude airways** run through the country facilitating traffic both north and south, and east and west. They are major thoroughfares through the heart of Africa, which is why this new warning is significant.

In the past three years Mali has suffered from continuous **political instability** after two armed coups – the first in 2020, and then again in 2021. This has been compounded by delays in holding an election.

It was dropped from ECOWAS (Economic Community Of West African States) as a result, and has faced several international sanctions.

It has a long history of **insurgent militant activity** who oppose the government, along with the intervention of foreign military to try and restore peace and stability.

Despite best efforts, insurgent militia have continued to spread and strengthen in Mali allowing well funded groups such as Al Qaeda to increase their presence there. Military operations and terrorist attacks have become more frequent.

Of special concern is the fragmented tri-border region that divides Mali, Burkina Faso and Niger. It is a hotspot for fighting that targets both the existing government, along with the foreign military presence.

What has changed?

Hot on the heels of the new KICZ Notam, the FAA has published a new information note which raises **major red flags** to anyone considering overflights.

Historically the concern to aviation in Mali has been from militant use of MANPADs (man portable air defence system) to target low and slow flying aircraft **up to FL250.**

However as the transitional government continues to fight against insurgent militia, their emphasis has moved from the support of foreign peacekeeping forces to the use of private military. **One in particular is of major concern – the Wagner Group.**

In Spring last year, this Russian backed paramilitary group has deployed over one thousand troops in Mali near Bamako, along with an **advanced radar guided air defence system** capable of targeting aircraft as high as **FL490**. A similar system was used to shoot down MH17 in 2014.

While there may be no specific intent to target civilian traffic, the FAA suggests the Wagner Group have a sordid history of **unprofessional and heavy handed air defence activity**. This was previously evident in Libya, where US operators have been completely banned for some time.

What we're now seeing in Mali is that civilian aircraft may be at far greater risk of advanced anti-aircraft fire through **mistaken identity or mis-targeting**, which can likely reach higher than you can fly.

The risk is now two-fold.

The existing risks are still present – militant groups continue to be active with MANPADS. They are likely to target foreign and local military forces which are often located close to international airports including **GABS/Bamako.**

At higher levels, aircraft are now at risk from radar guided air defence systems that may be used with little verification that their target is correct.

It is a dangerous brew.

Why the FAA has only cautioned US operators, rather than ban them as is the case in Syria, Libya and Iran among others where similar weapons are also present is a question we don't have an answer for yet.

We are actively seeking more information.

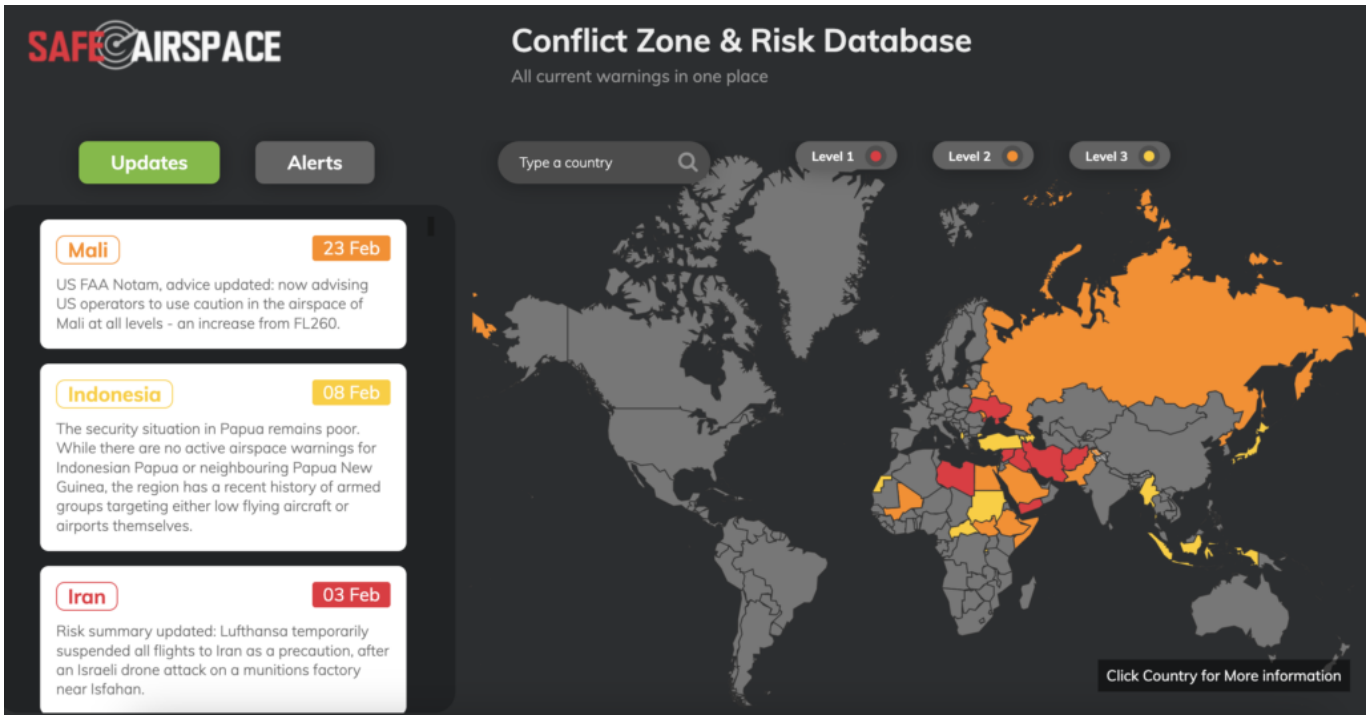
I still want to overfly. Can I?

Yes you can, but it's dangerous at all levels. Once again, the new Notam is a **precaution**, not a ban. The new KICZ Notam allows room for you to do so, provided you:

- Take into account all current security and airspace warnings and perform your own risk assessment.
- Comply with and update your OPSPEC/LOA B450 approval to operate in internationally sensitive ares.
- Where possible, provide the FAA with at least 72 hours notice via FAA-WATCH@FAA.GOV
- Report any safety or security issues ASAP to the FAA on +1 202-267-3333.

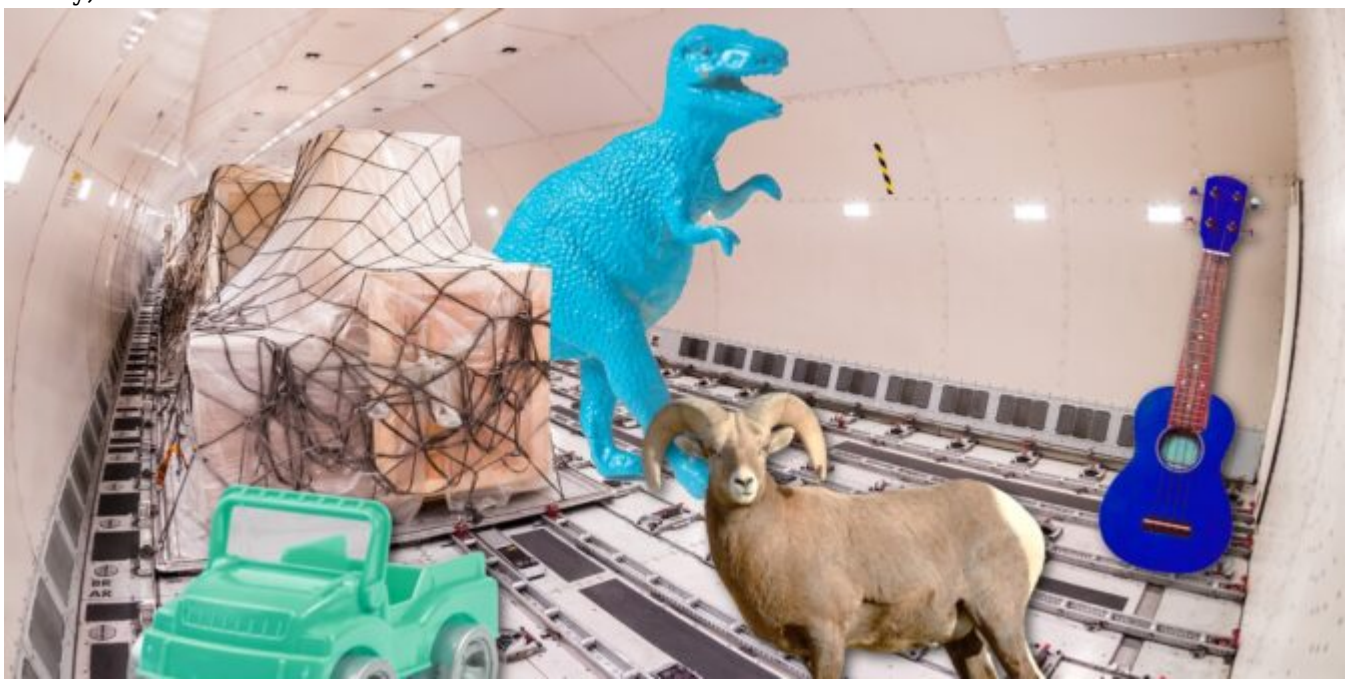
Where to from here?

We will report on any new FAA information on the situation in Mali as it becomes available, along with any other security or risk alerts. These will be published on OPSGROUP, along with safeairspace.net – our free risk and conflict zone database.



Mexico City says no to cargo

OPSGROUP Team
9 May, 2023



The Mexican government hinted at it in December 2022, and IATA got involved and said *"please don't do that"*, but then the government decided to do it anyway.

So here is a little summary on the *Cargo Conundrum* at MMMX/Mexico City for all those who fly cargo into Mexico. And also for anyone who flies into Mexico because we have added some other handy things in for you too.

The Cargo Ban

MMMX/Mexico City will no longer allow cargo operations. This means scheduled and Ad-hoc cargo only ops.

This doesn't apply to belly cargo on passenger flights. You are still fine to head in.

The Presidential order came out **sometime around 18 February**, and gave airlines 90 days to shift their operations. It was then extended to 107 days because folk pointed out that 90 days would be a bit tight.

Anyway, by sometime in May/June you won't be able to operate cargo flights into MMMX/Mexico City.

Good news though – right up the road (literally about 40km) is **MMSM/Felipe Ángeles International Airport**, and they would love to handle your cargo.

No-one likes MMSM though...

OK, that isn't entirely true. The problem is, according to IATA, that **it lacks the infrastructure** and getting the entire cargo chain to up sticks and move in 90 (or even 107) days is problematic and challenging.

Here is what IATA said about it all.

Why do we care if we don't fly cargo?

Well, on the one hand it might be good news for you because it will mean **more capacity at MMMX/Mexico City**, and that is something it is definitely lacking.

On the other hand, it might cause issues for operators who carry belly cargo in on passengers flights in large quantities, because **cargo handling companies might not want (or be able) to maintain the capacity and standards** to handle it across both airports, and the cargo only airport is going to get priority.

For operators who fly both dedicated freighters and cargo on passenger flights it also means one more airport now having to be operated into, with all the **support, contacts, coordination** and what have you to worry about.

There are questions over whether MMMX/Mexico City will accept diversions from MMSM/Felipe Ángeles. We haven't heard no so will assume it is a yes, but it is worth considering where you will go.

No-one likes MMSM…

It is not that they don't like it, but the airport has issues. Or at least it did.

The main issue is to do with its proximity to MMMX/Mexico City (only about 40km away). Back in 2022 this led to a fairly severe near miss between aircraft operating into the two airports.

That's all in here if you want a read.

They do want your cargo though

They say on their website that they are –

"Equipped with the most advanced security technology for the transport of national and international merchandise, this terminal has 22 bonded areas and 8 MARS positions (Multi-Aircraft Remote Stands), in an area of 345,881 m2. Its purpose is to meet the need for infrastructure for handling foreign stuff things blah exciting something about a gate nose and containers 12 meters long."

Wonderful stuff.

We also noticed two things about the website:

- **There is no FBO contact.** We can't find any contacts except for their social media email. If you have any contact info for FBO, cargo handling or anything other useful airport contact please share it because we can't find it anywhere.
- **They are really proud of their themed toilets.** Two of the home page slide show pictures are of toilets and they have a dedicated section discussing them (fourth on the corporate Airport Services list in fact). Check out the photos!

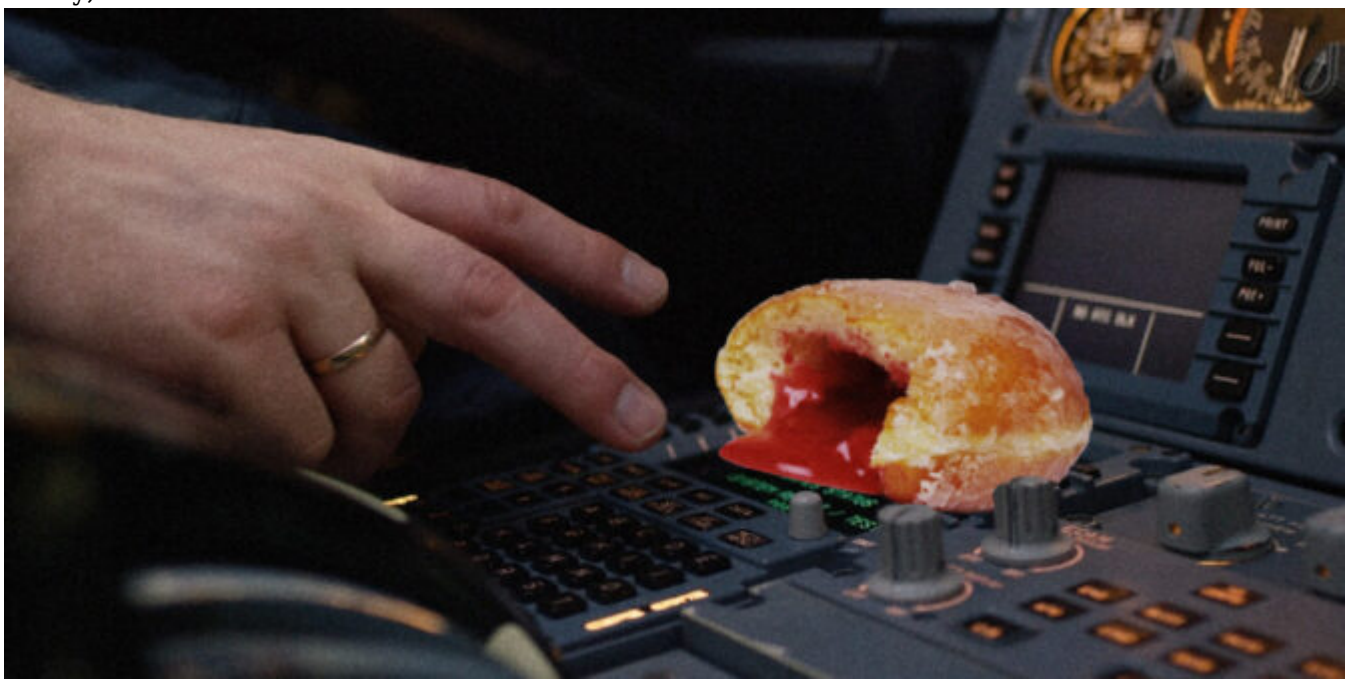
So, in summary

- **Don't plan on flying cargo** into MMMX/Mexico City from Mayish time.
- **Do let us know** if you have any contacts for MMSM/Felipe Ángeles.

- Do send us Airport Spy reports on both (all) Mexican airports so other pilots and operators can see what horrors/joys befell you and can plan for them.

GPS Jamming (again)

OPSGROUP Team
9 May, 2023



This whole GPS jamming thing is really starting to G-PS us off! Unfortunately, it isn't something that can be resolved at the source anytime soon.

While they can't fix it, EASA have come along with a nice new SIB to help us deal with it though.

What's the (new) story?

There isn't really anything new, but there is a slightly updated list of places where you can most expect to 'get jammed'.

SIB 2022-02R1 was issued on Feb 17, and you can read it here.

It lists the most common spots that pilots are reporting jamming occurring:

- **The Black Sea area:**
  - FIR Istanbul LTBB, FIR Ankara LTAA
  - Eastern part of FIR Bucuresti LRBB, FIR Sofia LBSR
  - FIR Tbilisi UGGG, FIR Yerevan UDDD, FIR Baku UBBA

- **The southeastern Mediterranean area, Middle East:**
    - FIR Nicosia LCCC, FIR Beirut OLBB, FIR Damascus OSTT, FIR Telaviv LLLL, FIR Amman OJAC northeastern part of FIR Cairo HECC
    - Northern part of FIR Baghdad ORBB, northwestern part of FIR Tehran OIIX
    - Northern part of FIR Tripoli HLLL
- **The Baltic Sea area (FIRs surrounding FIR Kaliningrad UMKK):**
    - Western part of FIR Vilnius EYVL, northeastern part of FIR Warszawa EPWW, southwestern part of FIR Riga EVRR
- **Arctic area:**
    - Northern part of FIR Helsinki EFIN, northern part of FIR Polaris ENOR

We made a map:

This map is quite possibly not 'anatomically' correct. It is just a 'sort of around there' map. Also, I definitely think that bit of land between Poland and Lithuania gets its fair share of jamming.

Anyway, the SIB also contains some really handy information on what to look out for **(signs you've been a-jammed)**, and what to do about it if you think you have. We aren't going to list all of that though, you're better off checking out the SIB.

There is also a new poster

Here is it:

DON'T GET JAMMED

REPORT, RISK ASSESS, TAKE ACTION

Reporting

- Report any observed interruption or degraded performance of GNSS equipment or related avionics via a special air report (AIREP) to air traffic control (ATC).
- Once you land, report full details of what happened through your organisation's occurrence reporting system.

Risk Assess

- Depending on your route and level of reliance on GNSS based systems, asses the risk jamming might pose to your flight.
- Consider the availability of alternative, conventional arrival and approach procedures.
- Think about the impact that any operational limitations caused by dispatch the aircraft with inoperative radio navigation systems in accordance with the Minimum Equipment List.

Take Action

- Be aware of possible GNSS jamming and/or spoofing.
- Verify the aircraft position by means of conventional navigation aids when flights are operated in proximity to the affected areas.
- Check that the navigation aids critical to the operation for the intended route and approach are available and;
- Be ready to revert to a conventional arrival procedure where appropriate and inform air traffic controllers if such a situation arises.

EASA
European Union Aviation Safety Agency

together 4safety

We like it a lot. Of the man who made it, you might say that 'EASA' great sense of humour

We liked it so much, we wanted to make our own one too…

So here it is:

Yes, we did take it way too far and realise that now.

We have mentioned GPS jamming before.

That we have. You can find the previous posts here:

- GPS Jamming: All the wrong signals
- GPS Outages: The hotspots

Filled with lots of juicy, jammy information so help you become a ‘Jammin Dodger’:

Ops in Europe vs USA: The Differences

OPSGROUP Team
9 May, 2023

Someone asked us what pilots can expect if they fly their plane to Europe compared to what they can expect in the US, and we suddenly thought to ourselves *"Good question! What are the differences?"*

So here's a quick rundown of some of the main ones.

Altimeter Stuff

Both countries use altimeters, and they use them in feet. *Here's a question for you – why are they not called Altifeeters?* Anyway, they work the same, except for one key difference…

Europe uses millibars, which are hectopascals, sort of. They give QNH's which sound like ***"one zero one three"*** and that is in mb (or hPa, because 1 of one is the same as the other one). The US however does it in Inches of Mercury (inHg) which means theirs sounds more like ***"two niner daysimal niner two".*** So plenty of room right there to set wrong thing and for things to go wrong…

Europe also doesn't use standard transition altitudes and levels. They change them all over the place, and sometimes they are really low. Which means there is room (or rather no room) for things to go wrong here too, and they do. Particularly in **EINN/Shannon** which we mentioned on behalf of Shannon airport right here.

CPDLC Stuff

CPDLC in the US is **FANS 1/A**, as it is across the NAT HLA and even into the UK. But leave those green and frosty pastures for the European Mainland and you will find yourself in a land of **ATN B1** fun.

It isn't that fun actually because your FANS equipment won't work, and there are also a lot of rules about who needs CPDLC and at what levels. You can read about it all here, and if you click on the map in the post (or here) then you will get transported straight to an **implementation table** which is very handy.

There is also a thing called a **Logon List** in Europe, which used to be called the White List, which you need to fill out in order to **register to use CPDLC in Switzerland, Germany, and Maastricht-UAC**.

The US has CPDLC but has not really mandated it. They are running trials on it though, which some BizAv aircraft might be able to join in on. We recommend reading this to find out more about that.

Flight Planning

In the US, the FAA has different codes and we aren't sure when they will become codes for using in Europe too. So your flight plan filings might be a little different.

The codes mainly apply to new RNP type stuff and they go in Item 18 of your FPL.

EU-LISA

No Comment.

Fine, EU-LISA

The currently delayed EU-LISA thing is sort of like the **ESTA visa waiver stuff in the US**. It is a system to allow for better monitoring and recording of people heading into Europe.

And that is all we are going say on it.

ADS-B

ADS-B privacy is a bit of a question anywhere, but in the US (in their territorial bit) you can sign up for certain stuff to make yourself less *conspicuous* – the LADD system, PIA etc. **These won't work in Europe.**

Both the US and Europe have **ADS-B mandates**, although they apply at different levels.

MAYDAY calls

That's right, even these differ. Sort of.

In Europe you really need to say *"MAYDAY, MAYDAY!"* and when you do everyone still generally shush up, although ATC will start asking your intentions and trying to help you. You can tell them to standby if you want to.

In the US you might find you need to say *"We are declaring an emergency"* and might get a whole lot of questions straight after. They of course use ICAO calls (you can find the whole FAA info on that here) but occasionally (so we're told) that this is something *confirmed* as well.

You can listen to an example here.

Europe also uses '**Minimum Fuel'**, which you should let ATC know about if you find yourself getting low on it (but are still fine so long as nothing else changes). They'll help if they can, but will only properly be able to jump you in the queue if you call 'Mayday Fuel'.

Strikes

I mean they have these both sides of the Atlantic, but they happen fairly regularly in Europe, particularly in **France and Italy.** If it is an airport workers type strike then your best point of call is going to be your local agent.

If it is an **ATC strike** then the Eurocontrol Network Operations Portal is going to have the info on it.

While we are talking about France and ATC, it is worth noting that **they generally speak French** here, especially at LFPG/Paris, and it can make things confusing at times.

Strikes tend to happen over major holidays so summer is a time to watch, Christmas and Easter coming in

close second and third.

Airspace Issues

First up, Europe is the continent and **the UK is still part of Europe.** As, actually, is Russia and also Turkey, although since they border other continents they are often thought of as part of them.

EASA is the main authority for EU countries, which means the UK is not covered by them but by the UK CAA. **So where you get your permits from is different.** Emissions schemes are also separate.

Eurocontrol is the main *airspace manager* for want of a better title. Turkey and Ukraine are both member states, Israel and Morocco are sort of semi members. That doesn't mean you are going to get the same level of **ATC standards** across them all though.

Turkey has a lot of issues with **GPS jamming**, and it borders certain countries with major conflicts meaning areas of the southern border and border with Iraq are not always risk free. They also have *disputes* with Greece over certain bits of airspace which is worth knowing about because it makes the **communication and radio work more complex.**

Ukraine's airspace is currently closed due to the ongoing conflict with Russia. Moldova is mostly out of bounds. Poland has some safety concerns in the regions bordering Ukraine.

As far as we know, the US airspace is all considered fairly safe although there are some **local procedures** and airspaces to look out for – New York and the Florida metroplex area are two which spring to mind *(although there are probably others? Let us know!).*

Europe, because it is loads of countries not one big one, tends to see a fair old number of **military airspaces activated** so Notam and AIP SUP checks are important for info on those. Major military exercises in Europe are published through the NOP. The US of course has TFRs and other restricted and danger areas which are published here.

Ramp Checks (and MELs because they sort of fit into it as well)

Ramp Checks are rife in Europe. We recently received intel on the main issue items in French ramp checks, but these probably apply everywhere.

One big area of difference it the **MEL vs MMEL thing**. In Europe an MMEL is not usually accepted – they want an MEL specific for your aircraft. That said, there are some exemptions.

General 'vocab'

This might just be something only I struggle with, but I once had a humiliating experience flying into **KIAD/Washington Dulles** international where ATC asked if we *"have Dulles insight?"* I (pompously) informed him that no, we did not have 'Dallas' in sight, because we were heading for Washington.

Not used to being asked if visual, and not used to referring to airports by name got me good on that one.

And accents, 'colloquialisms' and of course actual differences in clearances can catch you out. **There are differences in things like your arrival and descent clearances even.**

In the US, in airports like KLAX/Los Angelas *(an example I am familiar with)* then often clear you *(and there is a chance I am getting this wrong now)* on the arrival which includes the descent clearance as per the arrival as well. I want to say *"descend via"* or maybe *'cleared via'* (it's a while since I've been there…)

Anyway, the clearance is for you to descend down to the lowest altitude on the arrival, but in Europe we

don’t tend to do so without **explicitly hearing the altitude.**

Low Vis Stuff

OK, someone asked me to add this and I have to go get the old manuals out and look it up. In the meantime – watch out because we do stuff like RVR differently. And TERPS.

Fuel Tax, Curfews and other random things

Fuel tax is a thing in Europe, but also a thing you can attempt to claim back. In some places anyway.

A lot of European airports have curfews. It is worth knowing which countries have them so you don’t get caught out.

What’s Suriname?

OPSGROUP Team
9 May, 2023

Hello Suriname. Tell us about yourself.

Who are you?

Ik ben een klein land*... Translating Translating...* I am a small land in norther South America, bordering the Atlantic Ocean, and sandwich between Guyana, French Guiana and Brazil.

Tell us an interesting fact about yourself

I am the only country outside of Europe where Dutch is the main language.

Wow, cool, so why are we interviewing you today?

Well, folk flying over from Europe and Africa probably overfly me if they are **routing to the western side of South America**.

And I have had two big 'issues' recently that might impact them..

Uh oh, that doesn't sound good...

No, it hasn't been.

On February 17, 2023 a load of my **ATS staff were not available** so we had to **close the airspace in SMPM/Paramaribo.** It was only from 1800z to 0100z on Feb 18, but it means contingency routes and levels were in place, and we had to coordinate with adjacent centers for everyone trying to get in and out of SMJP/Paramaribo.

We did issue a Notam on it – **A0024/23**

Well done on the Notam. Tell us about this other issue?

Well, as it it turns out, people aren't very happy. Actually, this might have been where all my ATS staff were.

On February 17 there was a lot of **civil unrest in the capital Paramaribo**. Folk were storming about and a state of emergency was declared.

The US embassy issued a warning on **security concerns**, and advised there could be a suspension of ops at SMJP/Paramaribo if it happens again.

What can folk do who are heading to the area?

Keep an eye out for Notams and news related to:

- **More ATC zero** events (and contingencies)
- **Suspension or disruption** at SMJP/Paramaribo (Johan Adolf Pendel) airport
- Think about **security on the ground** if you do head in
- Contact **SMJP tower** – 00597325176 / 00597325313 – if you have queries
- *Share your contact for handling agents on the ground there if you have*

Give us some last handy tips

Alright.

If you do want to head in or overfly then **you'll need a permit** (a permit for everything!)

You need to give **three days notice** and apply direct to the authorities. *Dionne Paskald* is very helpful in the CAA. Send a fax with all of the documents, then send those same in an email. If landing you will need to provide copies of **vaccination certs for yellow fever** with the permit application for all crew members. You should also **send passenger and crew manifest** when applying for a landing permit.

The CAA of Suriname contact info is: +597 498 901 / +597 498 901 / d.paskald@cadsur.sr /

dca@cadsur.sr / airtran@cadsur.sr

We told a story about Suriname in 2021

They had an ATC zero event back in 2021 as well, and we wrote about it here with much more info on the contingency procedures (in case you need them again in the future).

Someone told us a story about SMJP/Paramaribo ages ago (2015)

"We arrived on a flight from Sao Paulo Guarulhos (SBGR) from UL776. We were cleared from our last enroute fix to the Paramaribo FIR boundary fix Tirios (TIR) NDB. Communications with Amazonica Control became broken at best and unreadable most of the time. We tried contacting Paramaribo Control without handoff as we approached TIR but all the frequencies on the Hi en route chart did not work. After numerous tries back to Amazonica on last assigned frequency we finally picked up 133.3 as a good frequency for Paramaribo. We were instructed by Paramaribo to fly 080 degree heading out of TIR to intercept the YZ (VOR) 200 degree radial to YZ. Out of 6000"

If you have a new one, file it at Airport Spy.

Here is some other info we dug up:

- SMJP/Paramaribo airport has **one runway (11/29)** which is 11,417′ (3480m) and has an ILS for 11 and an RNP for 29
- There us another international airport, for GA – **SMZO/Zorg en Hoop** – but its runway is only 750m long so probably not one you want to plan on using
- **SOCA/Cayenne**, French Guiana is the closest alternate (173nm)
- **SYCJ/Georgetown**, Guyana is the next closest (194nm)