

Operation Orion: French Airspace Closures

OPSGROUP Team

12 January, 2023



France are worried about "*the deterioration of the international context*". Basically, they are worried about the state of the world. So, they have decided to run a fairly major crisis management readiness, preparedness sort of a thing over a 3 year period.

As they put it, it will "*consider the hypothesis of a major engagement of high intensity as possible*" and help the armed forces prepare for it by practicing a whole bunch of exercise.

Or as we put it - "**a great big load of military mayhem in French airspace to look out for**".

Sounds big?

It will be. **The biggest in 30 years** in fact, involving a whole load of NATO members. But the main impact is going to be within French airspace.

Orion is the first of the 3 exercises which are planned over the next 3 years. It consists of 4 phases, expected to take place on the following dates:

- Phase 1 & 3 (computer assisted exercises, so no impact to ops)
- **Phase 2: from 21 Feb to 10 March** (taking place in the southern part of France)
- **Phase 4: from 17 April to 5 May** (taking place in the north-eastern part of France)

What does that mean for flight ops?

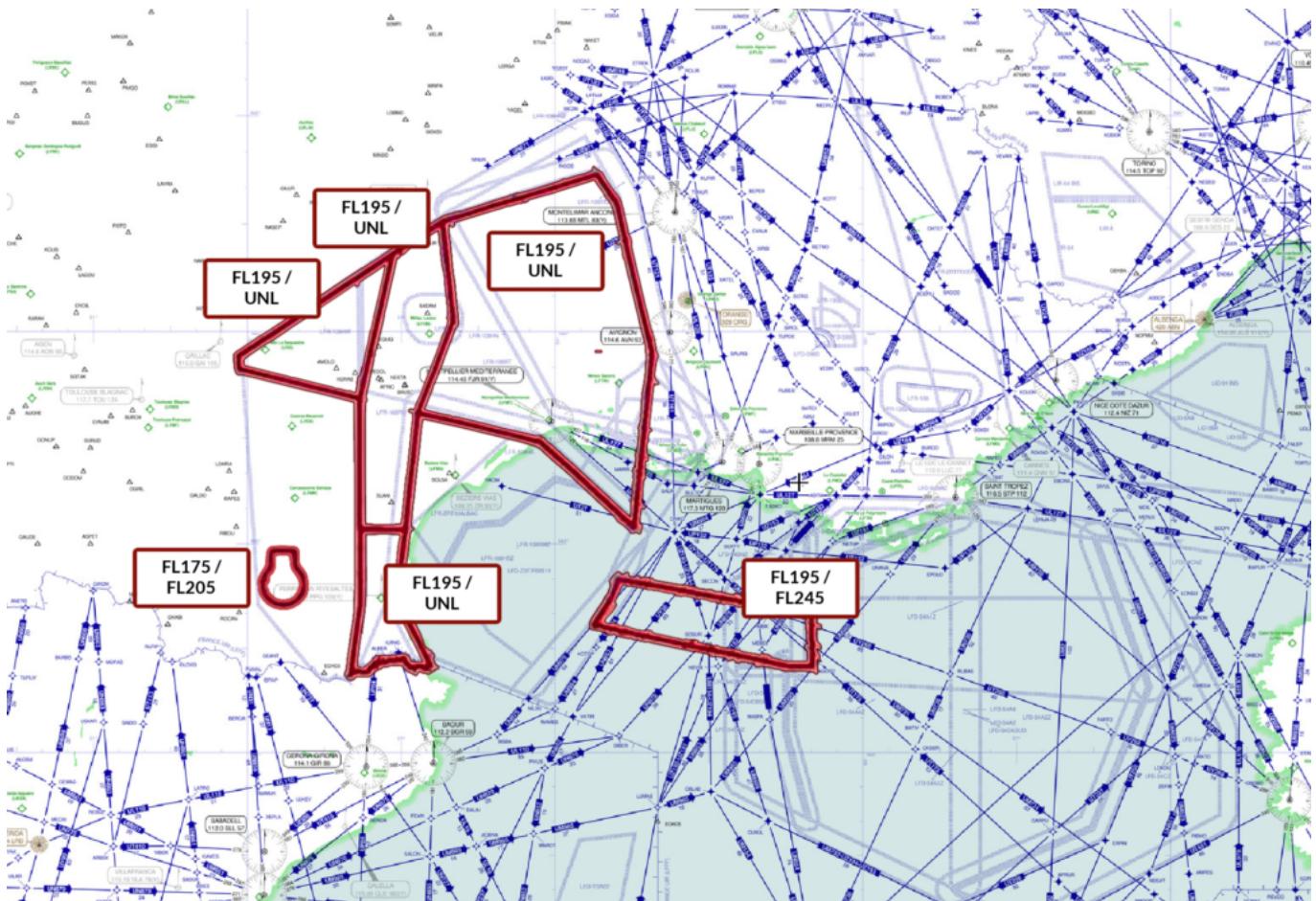
We heard someone say it will have a "**huge impact on the network**" with numerous flights impacted through re-routes, delays and probably cancellations because of airspace capacity reductions.

So, what do we need to worry about?

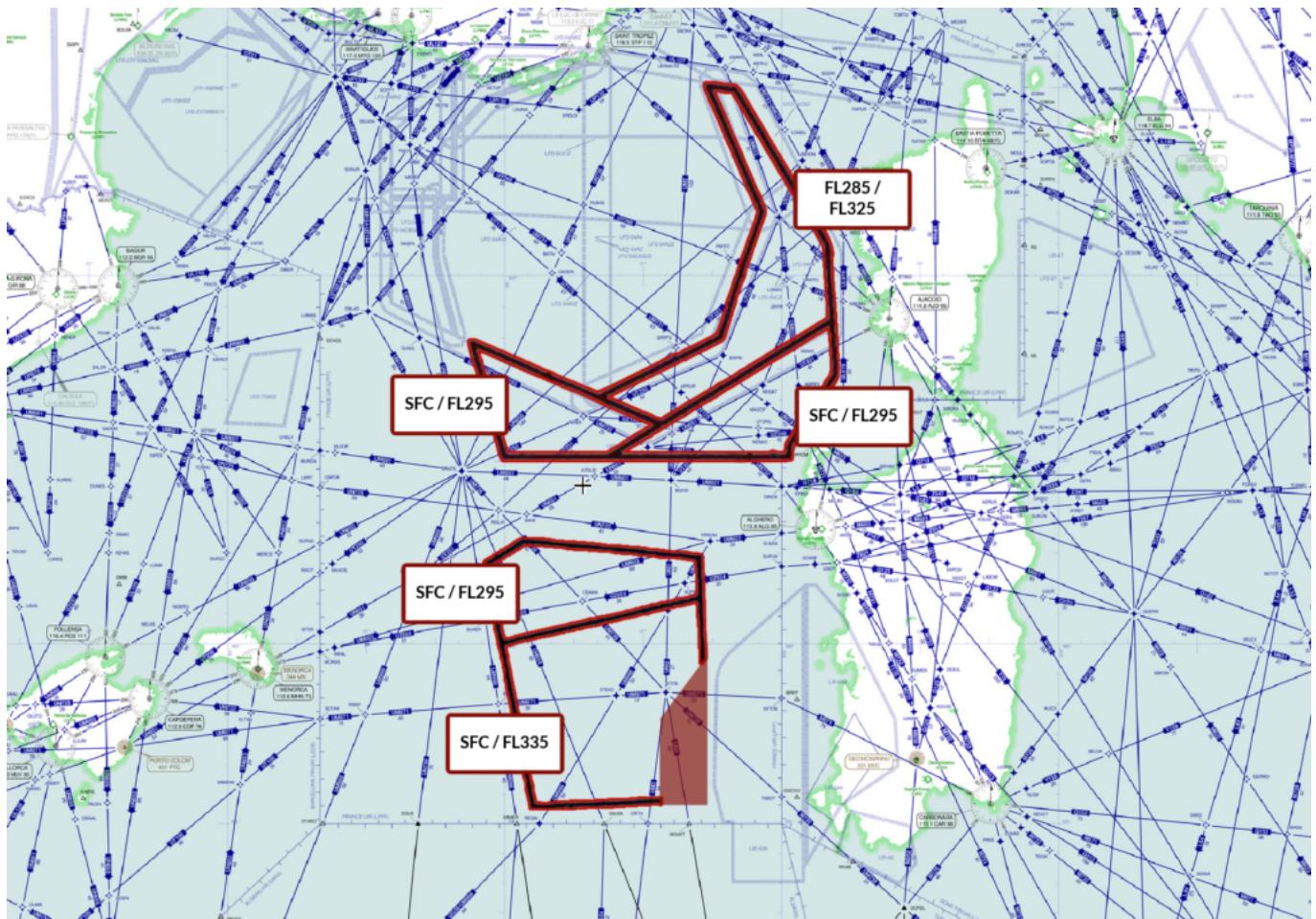
Phases 1 and 3 are computer assisted, but phase 2 involves real people and real military stuff including real military airplanes in **real bits of airspace we normally really like to fly in.**

The ramp up for this will start on **Feb 16** so you can expect disruption from them, through to **March 10** when the phase finishes.

The maps aren't the best quality but you can view them in the document here. We have recreated the two main upper level ones for you below.



France upper level overlay.



Mediterranean upper level overlay.

Because there are various different areas scattered across the region, flights may be disrupted in the areas between resulting in significant re-routes for overflights, with the impact felt across France and into UK airspace with NATS managing the routings that end.

A summary of possible threats:

- Re-routes and inflight delays
- Congested airspace resulting in slots and disruption, possibly cancellations
- Reduced diversion options in France during exercises
- Military traffic to watch out for
- Complex danger and prohibited areas across multiple levels and regions to be aware of

There will be more information though right?

Yes, plenty hopefully:

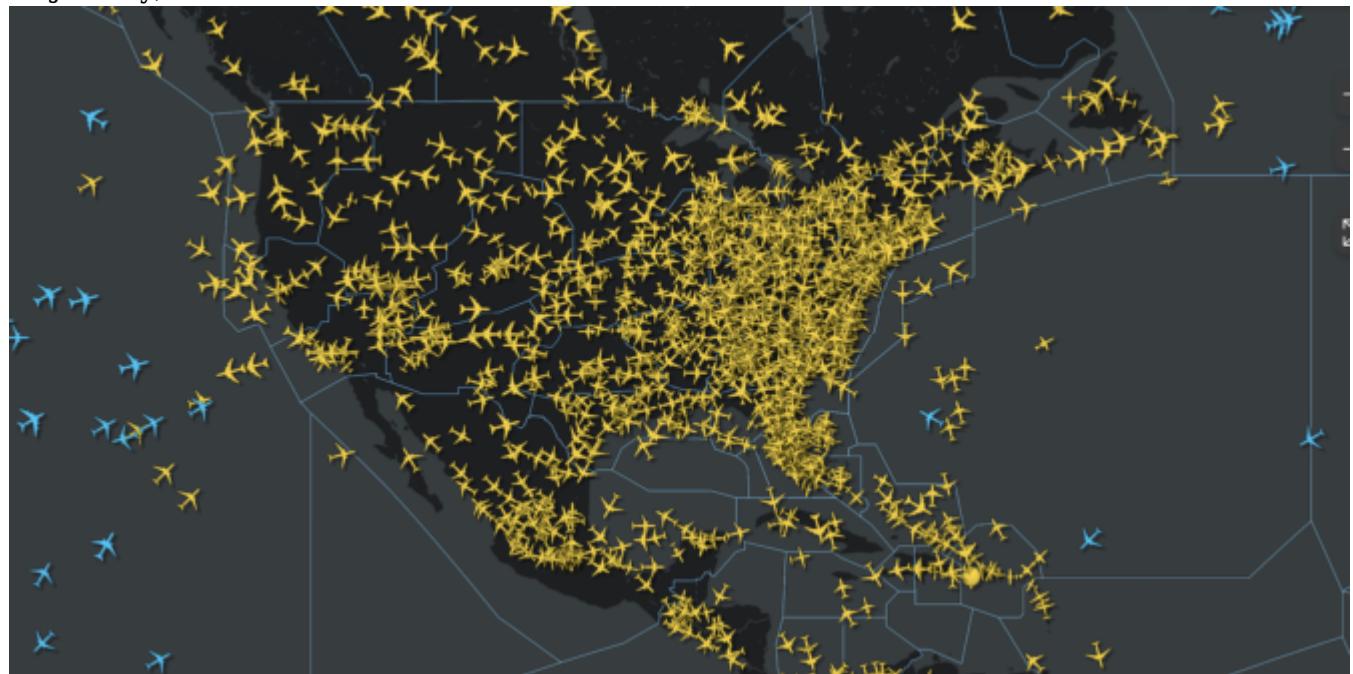
- AIP SUP is due out imminently.
- Eurocontrol are expected to run some conferences on this which will be announced by their Network Operations Portal here.
- The specific danger and prohibited areas will have notams issued closer to the dates.

You can find a *calendar* of NATO planned exercises here to give a heads-up on future plans (and AIPs and Notams to look out for).

So, watch this space and be prepared for some frustrating planning and routing disruptions through Feb and March, and again in April.

US Grounds All Flights After NOTAM System Failure

David Mumford
12 January, 2023



Update 12Jan 1100z:

The *Misery Map* of flight delays in the US isn't looking too bad today, following yesterday's Notam system meltdown that resulted in a nationwide ground stop and the cancellation of more than 10,000 flights according to FlightAware. The FAA has said the Notam system "continues to remain operational and stable" today. For ops to/within the US today, keep an eye on the latest FAA Advisories here.

The US grounded all flights on the morning of Jan 11, due to a glitch with the Notam system.

Here's the ATCSCC advisory giving the order:

ATCSCC Advisory

ATCSCC ADVZY 028 DCC 01/11/2023 NATIONWIDE GROUND STOP

MESSAGE: EVENT TIME: 11/1220 - 1430
GROUND STOP ALL FLIGHTS / ALL DESTINATIONS EXCLUDES MILITARY AC AND
MEDEVAC FLIGHTS
DESTINATION AIRPORT; ALL
FACILITIES INCLUDED: ALL
GROUND STOP PERIOD: UNTIL 1430Z
REASON: EQUIPMENT OUTAGE
REMARKS: US NOTAMS SYSTEM DOWN

EFFECTIVE TIME: 111221 - 111500

SIGNATURE: 23/01/11 12:21

The Notam system failed at 2028 UTC on Jan 10, after which time no new Notams or amendments were processed.

The FAA lifted the ground stop shortly before 9am EST on Jan 11, saying that “normal air traffic operations are resuming gradually”. Later that night, they announced that the outage was **likely due to a software issue**.

Update 6: We are continuing a thorough review to determine the root cause of the Notice to Air Missions (NOTAM) system outage. Our preliminary work has traced the outage to a damaged database file. At this time, there is no evidence of a cyber attack. (1/2)

— The FAA ✈ (@FAANews) January 11, 2023

Springer's Final Thought

We all hate Notams.

Let's qualify that. *A significant number of pilots and dispatchers have told us that they are concerned about Notams, and would like to see an improved system.*

The FAA has said last week's meltdown was due to a damaged database file. Our focus has never really been on the software on the back-end of the Notam system, but on the impact of Notams on pilots and operators.

We've been campaigning for changes to the current Notam system for a long time - **not because the system might crash, but because of the daily impact to pilots who are forced to use an archaic briefing system from the 1920's that causes critical flight information to be missed.**

If you've read the news today about this mysterious “Notam system” causing widespread travel misery, and you want to learn more about this ongoing issue, you can start your adventure here.

North Korean Drones Over Seoul

Chris Shieff

12 January, 2023



On Dec 26, several North Korean drones entered South Korean airspace. Ops at both **RKSI/Seoul** and **RKSS/Gimpo** were disrupted while military jets were dispatched to intercept them.

While it's no secret that North and South Korea don't get along, this is the first drone incursion in the **RKRR/Incheon FIR** in half a decade. And it didn't go down well. So much so that there is now talk of ending a military pact that has stood since 2018 - especially if there is another incursion.

From an aviation standpoint, this has potential to spell trouble as it **threatens the status of a military no-fly zone** that buffers the two countries. In which case, the risk to aircraft in the skies of South Korea could deteriorate quickly - especially anywhere near its northern border.

In the **absence of any active airspace warnings**, here's what you need to know.

The Dec 26 Incident

At around 10:30am local time, at least five North Korean drones entered South Korean airspace over the Military Demarcation Line near the city of Gimpo - just northeast of Seoul.

It appeared to have caught South Korean military by surprise, who temporarily suspended ops at RKSI/Seoul and RKSS/Gimpo to scramble military jets to intercept them. They fired at least **one hundred rounds** at the drones supposedly as warning shots.

There are no reports that any of the drones were shot down. One returned to North Korea, while the status of the other four isn't known.

This has attracted some negative shade in the media, where some felt that the military's response was inadequate.



In the days that followed, South Korea responded by sending **surveillance aircraft into the ZKKP/Pyongyang FIR**. The South Korean president has also said that the drone incident could cast serious doubt on a military pact between the two countries – the one that protects border airspace from military incursions.

North Korea's recent ballistic missile tests haven't helped either – in recent weeks several unannounced launches have taken place with scant regard to civil aviation. The past twelve months have seen a **huge upswing** in these types of incidents, at one point triggering a ground stop on the US West Coast. And they send a very clear message to South Korea.

Political Posturing

So, are we about to see an outright conflict? Probably not, but 'quid pro quo' can be dangerous, **especially where airspace is being used as the stage**.

Add to that the potential for increased posturing on the border and civil aviation needs to take note. **Mistaken identity and mis-targeting is a very real threat**. This will escalate should the agreement which upholds the demilitarised buffer zone between them get dismantled.

Previous Airspace Warnings

The FAA has previously had warnings in place for the RKRR/Incheon FIR, but they have long since **expired**.

The first related to unannounced North Korean missile tests and regional instability. The second was a Notam on **GPS interference** that was cancelled back in 2019. It was purely advisory – that caution should be taken near the border as the signal may be interfered with.

Since then, things have been quiet. But it is worth keeping in mind that operations in and out of Seoul particularly, are only 30nm away from the demilitarised zone. And beyond it lies the ZKKP/Pyongyang FIR, where US operators are currently **banned at all levels**.

You can check [Safearspace.net](https://www.safearspace.net) for a summary of the airspace risk, including warnings issued by each country.

North Korea

Risk Level: Two - Danger exists

[[about risk levels](#)]

The **primary risk** is from debris from missile re-entries striking aircraft overflying the oceanic part of the ZKKP/Pyongyang FIR over the Sea of Japan. North Korea regularly conducts unannounced missile tests in this area. Consider rerouting to remain over the Japanese landmass or east of it.

The US prohibits flights across all North Korean airspace, including the oceanic part of the ZKKP/Pyongyang FIR over the Sea of Japan. Several other countries have airspace warnings in place which advise caution due to the risk posed by unannounced rocket launches.

Major events:

Oct 2022: North Korea fired a ballistic missile directly over Japan - the first to incur on Japanese airspace since 2017. 2017: North Korea launched two intercontinental ballistic missiles. Both of these landed in the Sea of Japan, well inside the Fukuoka Flight Information Region (Japanese airspace), and significantly, at least one did not re-enter the atmosphere intact - meaning that a debris field of missile fragments passed through the airspace, not just one complete missile.

2015: North Korea gradually stopped notifying ICAO of missile launches, so that aircraft could avoid the launch and splashdown areas.

Read: [North Korea Missile Threat, Oct 2022 \(OPSGROUP article\)](#)



What does the South Korean AIP say?

Essentially, don't stray north.

There is a large area of **prohibited airspace** which runs along the military demarcation line - a strip of land around 2.5 miles wide which acts as a buffer between North and South Korea more or less defined by the 38th parallel.

No aircraft can enter the area at any level, 24 hours per day. As it is **just north of RKS/Seoul**, operators there are advised to give it a wide berth. So much so there is a note to exercise extreme caution in a sector of airspace north of the field. **You don't want to bust it.**

Notifications

[SUBSCRIBE](#)

to receive Conflict Zone & Risk warnings.

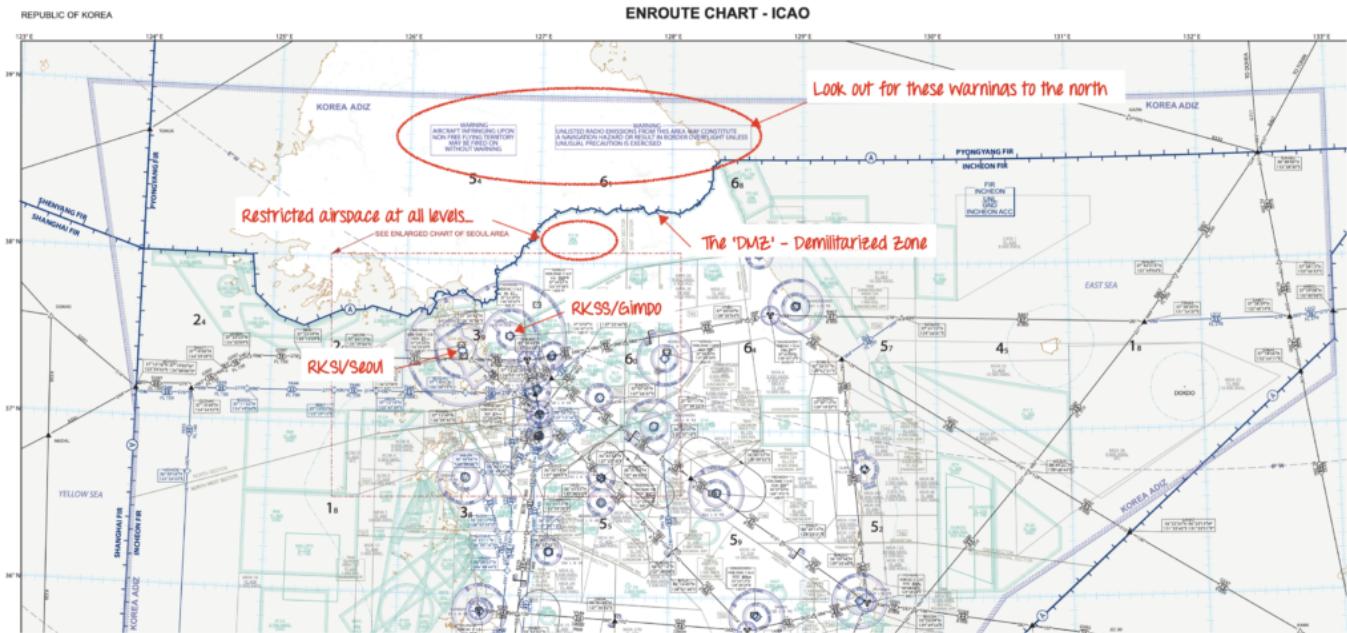
We will alert you when there are significant changes, and send you updated summaries when they are published.

Live Risk Briefing

[GENERATE PDF](#)



You can [generate](#) a free live risk briefing as a PDF, which will show all current information for each country, pulled live from the Conflict Zone & Risk Database.



As a general rule, the military can impact civil aviation operations without prior notice. This is precisely what went down on December 26.

Where to from here?

We watch and wait. Tension on the Korean Peninsula isn't new – but the December 26 incident is a reminder of just how volatile things can be at short notice. Should the military pact between the two countries genuinely implode, the risk to civil aviation could change overnight.

Mayhem in Mexico: Airports Closed Amid Cartel Violence

OPSGROUP Team
12 January, 2023



There were violent clashes between cartel members and security forces in Culiacan on Jan 5, after the arrest of a son of notorious drug kingpin "El Chapo". Further clashes were reported throughout Sinaloa state in response - cartel members set up road blocks, set fire to vehicles and **attacked a local airport, where two planes were hit by gunfire.**

Airport closures

Several airports in the region were forced to close:

MMCL/Culiacan - during the clashes on Jan 5, an Aeroméxico E190 was hit by gunfire on departure here, resulting in an aborted takeoff. One bullet hit the tail of the aircraft.



Elsewhere in Sinaloa, other airports remain closed on Jan 6 - **MMMZ/Mazatlan, MMCN/Ciudad Obregon, and MMLM/Los Michos.**



All airports have now re-opened, but operators should continue to be cautious. It is recommended to pre-arrange transportation and hotels, and check that routes are not affected by any airspace closures.

Mexico overview

Up until now safety and security issues have been relatively few and far between for Mexico.

The following alerts are currently active (**Jan 2023**):

- **MMUN/Cancun** If you are a GA operator heading to Cancun then keep an eye on notams restricting when you can operate there. A0064/23 and A0065/22 are currently active, with restrictions on Jan 7 and 8. **Issued Jan 04, 2023**
- **MMTO/Toluca** There's a new form that all passengers and crew of international flights need to fill out before arrival at MMTO/Toluca. It's fairly standard stuff - just health screening. **Issued Jan 02, 2023**
- **MMZZ/Mexico** Local agents have reported that operators should expect increased ramp checks at Mexican airports through to Jan 20. Check our article for a list of everything you should carry on board for trips to Mexico in case you get ramp checked. **Issued Dec 22 2022**
- **MMZZ/Mexico** Mexico has scrapped daylight saving time (DST) in most parts of the country, which means that clocks won't change come April. Standard time will apply all year round, apart from in the municipalities that border the US - these will continue to observe it. **Issued Dec 06, 2022**
- **MMZZ/Mexico** Fifteen Mexican airports have changed their fuel from Jet A1 to Jet A (actually it happened back in March but we didn't spot it until now). The list includes some big international airports - MMMY/Monterrey, MMPR/Puerto Vallarta, MMCL/Culiacan, and a few more. The main difference is the freezing point (minus 40 degC for Jet A). So check what you're filling up with. **Issued Oct 20, 2022**
- **MMMX/Mexico City** A near-miss and last minute go-around at the airport on May 7 follows a series of other events which have caused concerns over safety standards at the airport. Many of these are attributed to the recent opening MMSM/Felipe Angeles airport leading to increased airspace complexity. The government plan to reduce capacity at MMMX/Mexico City over the next few months to improve the situation. **Issued May 11, 2022**

Do you have any further information?

Please contact us at team@ops.group if you have any more information on the current situation in Mexico.

We Want to Talk to Lebanon

OPSGROUP Team
12 January, 2023



We want to talk to Lebanon, more specifically, someone in the Lebanese Aviation Authority (the DGCA).

But since they probably won't speak to us, we'll talk to you instead... with a little warning about operating there.

What is this all about?

It is all about a tradition in Lebanon where **they fire guns about willy nilly**, often into the air, when they celebrate.

They do it at graduations, birthdays, weddings, and even funerals or when a political leader just talks on television (*although that one happens less now because a lot of folk there aren't so happy with the government*).

There was renewed attention from authorities in 2016, but reports of it occurring across Lebanon are still common despite the practice having been outlawed since then.

Reports suggest **OLBA/Beirut airport** sees an average of **7-8 incidents** involving indiscriminate gunfire per year.

New Year's Eve 2022 saw reports that **two MEA A320s** parked at OLBA/Beirut were **damaged by bullets** during the celebrations. A passenger was also almost hit as he left the terminal.

On Nov 10, 2022, a **stray bullet hit a commercial jet on the approach** to OLBA/Beirut.

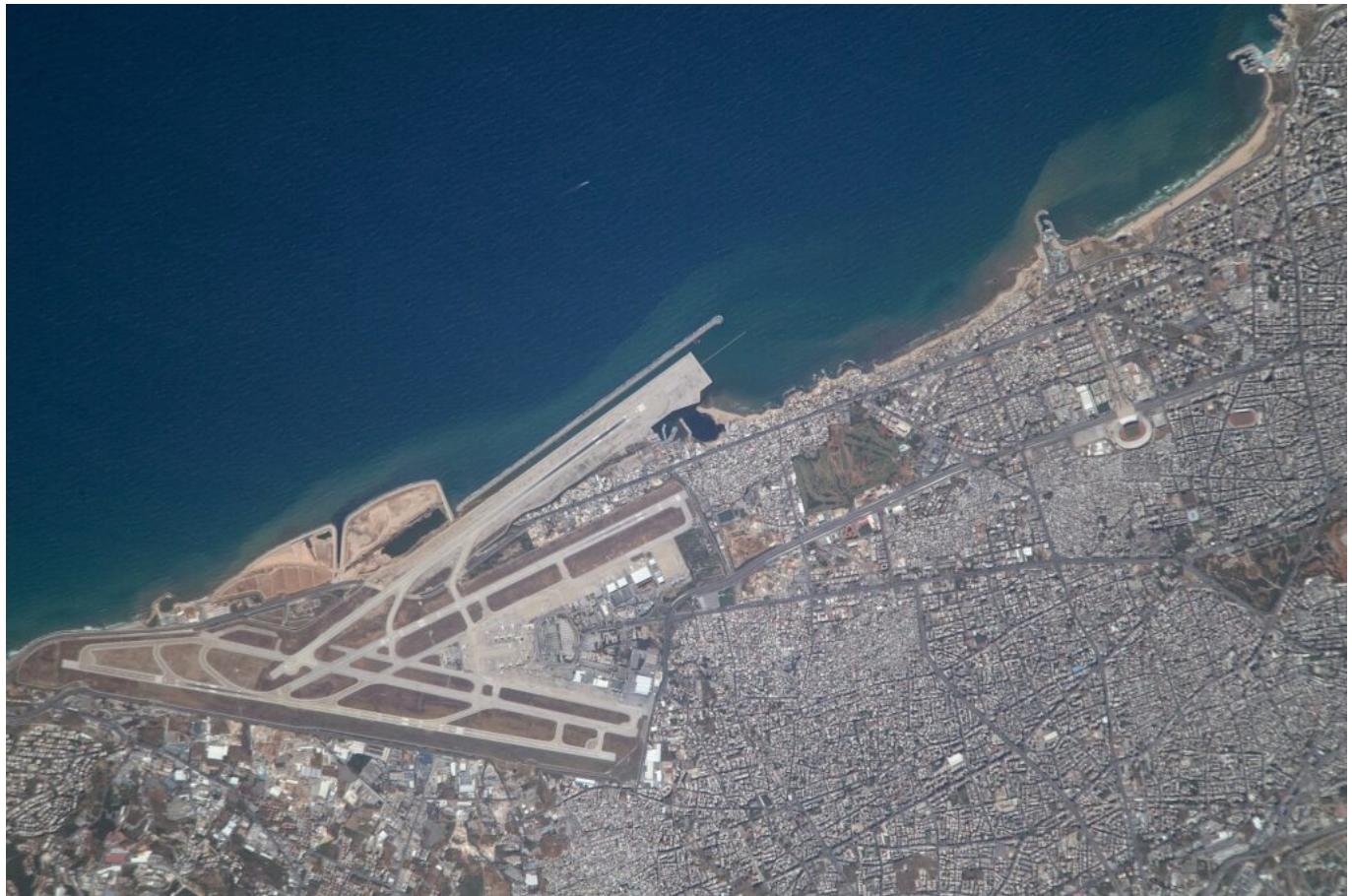
Two Middle East Airlines Airbus A321neos damaged by bullets fired during the New Year's celebrations while parked at Beirut International Airport. <https://t.co/8VotXyDDIK> pic.twitter.com/Rw200f1wwz

— Breaking Aviation News & Videos (@aviationbrk) January 1, 2023

Why is there no security?

Actually, the reason Beirut airport seems to be at higher risk is as much to do with the fact it is the main international airport, as with the airport's positioning to the city and populated areas.

OLBA/Beirut's approaches both cross densely populated areas, and there is little separation between the airport area and land side areas. The final approach to runway 03 also passes over hotels along the coast where celebrations are often held.



What can you do about it?

Unfortunately, *person-with-gun spotting* on short finals probably isn't an ideal plan. There is **limited mitigation** for this without support of the authorities to improve security and safety.

- If you do spot anything then **report it immediately** to ATC
- **Be aware of the risk**, particularly if operating during holiday periods
- **Do not hold at low level** over populated areas of Lebanon (unlikely you will, but a reminder)
- **Consider climb performance** on departure (get up as quick as possible!)

Does this happen anywhere else?

Risk of low level weapons fire is usually associated with conflict zones. Here are a few, there are no doubt more (*and if you know of any, let us know. We'll add to the list so other operators have a heads-up too.*)

- **OPPS/Peshawar** The airport in Pakistan lies in close proximity to the mountainous region

which borders Afghanistan. The mountains are a known region for rebel groups. Crew are advised not to hold or overfly the area due to the risk of gunfire. More info

- **ORER/Erbil** The Iraqi airport is the main airport for Erbil, the capital of the Kurdistan region of Iraq. There is currently ongoing conflict in this region. The approach to Runway 18 / departure from Runway 36 both cross a region of high terrain where there have been multiple reports of gunfire risk. Crew are advised to avoid descending or holding, or crossing this region until they have reached a suitable altitude. More info
- In Sep 2022, a man was hit inside an aircraft flying at 3500', routing to **VYKL/Loikaw airport in Myanmar**. The bullet source was unconfirmed, but linked to conflict between rebel and government groups in the area. More info

Turkey and the Philippines also (sporadically) see a similar tradition occurring.

It's not the only threat in Lebanon

Lebanon has seen a period of **growing instability and unrest** because of political and economic turmoil. Riots and protests are a particular security concern in Beirut.

Lebanon's relationship with neighbour Israel has had its ups and downs. Lebanon has not yet followed in the footsteps of other countries in the region to improve ties (and airspace access) with Israel. **Saudi Arabia and the UAE have both entered a 'normalisation' agreement**, also known the Abraham Accords Peace Agreement, which opened up (some possibilities) for using Israel's airspace.

The country also sees increasing **spillover risk from the Syrian conflict**. The conflict often results in **Israeli fighter jets transiting their airspace with no clearance**. It is repeatedly a persistent issue, and raises concerns over airspace risk and safety in the border areas of Lebanon. The Israeli airforce sometimes target Syria from this region resulting in missile **attacks and airstrikes close to OLBA/Beirut**.

The primary risk in Lebanon's airspace (the OLBB/Beirut FIR) from the Syrian conflict is that **civil aircraft may be targeted in error**, or caught in crossfire during ongoing air attacks involving Israel, Russia, Iran. Missiles may erroneously lock on to civil aircraft. There is a risk to civil aircraft operating on **airways UL620, UW74, UR18, and UP62**.

Several countries have issued **airspace warnings for Syria**, banning operators from entering the OSTT/Damascus FIR. Many of these warnings include include the note that there is a potential risk to aircraft within **200nm of the Damascus FIR which includes the OLBB/Beirut FIR**. There is also risk of GPS interference and communication jamming.

For a full briefing and information on current warnings visit Safeairspace:

- Lebanon
- Syria
- Israel

Back to our call to the DGCA

The risk of indiscriminate gunfire impacting flight operations is a growing concern and the DGCA need to put measures into place to better protect aircraft operating into the country, particularly at OLBA/Beirut International.

So, here is our call to them to do something.

New US Rule for China Arrivals

Chris Shieff

12 January, 2023



There's mixed news from China.

On the one hand, it is finally about to get rid of quarantine on arrival. On the other, Covid is surging badly. Which means that nations around the world are beginning to introduce new rules for people who have been there - including the US.

News from the US is that from Jan 5, all passengers will need to provide a negative Covid test, or proof of recovery, to board a flight to the US.

Here's everything you need to know.

What's going on in China?

Its zero-covid strategy is being abandoned amidst sky-rocketing case numbers. So much so that it is estimated that up to forty percent of its 1.4 billion have had it.

It's not panic stations yet though, as the same path has been well-trodden by other countries in the past twelve months. But there is international concern over the accuracy of the statistics being reported, and more importantly the tests that identify new or potentially dangerous strains of the virus that might emerge.

Which is why we're seeing new rules again for passengers who have been there.

Ironically there has also just been a big announcement that anyone headed to China **no longer has to quarantine** from Jan 8. Which means **demand for travel back to the US for those who return is**

about to soar.

Enough of that. What's the impact?

From 00:01z on January 5, anyone allowing a passenger to board a flight from China to the US will need to see **proof of a negative Covid test** taken within two days of departure, or certified proof of recovery that is less than 90 days old.

The rule will apply to all flights from mainland **China, Hong Kong** and **Macau** including GA/BA flights.

It will apply to all passengers, including US citizens, regardless of vaccination status.

You can check the official announcement of all this from the US here.

What type of tests will be accepted?

Viral tests that have been **approved by the CDC**.

Self-tests (including rapid antigen) are allowed, but must include at least a tele-health service to oversee the test, and certify the results along with the traveller's identity.

I've just had Covid. Do I need to test?

A certified proof of recovery is also acceptable, provided it meets two requirements – it has to be more than ten days old, but no more than 90.

I've only transited through China, do I still need to test?

No, provided passengers have stayed airside, they do not need to meet the new requirement.

What about crew?

Good news, you will be **exempt**. But you'll need to be either operating, or positioning on the aircraft. It's recommended you travel with a letter (paper or electronic) from your employer certifying you meet the requirements of the exemption. Another option for deadheading crew is that they are included on the gendec.

If you're commuting, travelling for training (such as sims) or flying for other business reasons, bad luck. You will need to meet the same requirements as passengers.

Another gotcha.

The rule is also extended to passengers who have been in China, Hong Kong or Macau in the past ten days, and are arriving on flights from **RKSI/Seoul, CYYZ/Toronto** or **CYVR/Vancouver**.

What is the rest of the world doing?

It is likely we'll see similar testing rules introduced globally, at least in the short term.

Several countries have already announced similar restrictions to the US: **Canada, UK, France, Italy, Spain, Australia, India, Japan, Malaysia, Taiwan, South Korea, Morocco**.

The good news is that there doesn't appear to be any suggestion of **quarantine or entry bans** being added back to the mix. Just typical uncertainty of a pandemic-weary world. But we'll continue to report on major changes that might affect you operationally as we see them.

If you're headed to China, we recommend calling ahead.

Especially for **crew**.

China has had some of the most **confusing and inconsistent** entry rules since the start of the pandemic. They seem to vary from port-to-port. With the promise that crew no longer need to quarantine on a widespread scale, we'd love to hear from you if you're headed there - especially if you encounter something you weren't expecting.

The Day After Tomorrow is Now...

OPSGROUP Team

12 January, 2023



Pilots and operators are definitely not the ones hoping for a white Christmas because it means **horrible weather, delays and disruption**.

Unfortunately for all, weather news sites are calling **a 'storm of epic proportions' is heading towards North America**. It might already have reached you even...

So here is the update on the weather forecast, and a hopefully handy refresher on some of the challenges this might mean for aviation. (*So you know we care and are thinking about you while we sit cosy in our warm houses drinking Eggnog*).

The Forecast.

On a scale of 1 to bad, they are calling this a 'once in a generation' weather event, a 'looming winter storm of historic proportions'. Not quite A Day After Tomorrow level weather phenomena, but not far off...

The weather is being caused by a **severe low pressure system** known colloquially as a 'bomb cyclone' because of the **rapid and significant pressure drop** that occurs - around 24 millibars in 24 hours (and that right there is one thing to be cautious about).

The arctic storm is expected to fully impact the **east coast of the US and Canada** later on December 23, and the following warnings are in place:

- Powerful winter storm bringing sharp cold front and severe snowfall from **Midwest to Ohio Valley: Dec 23 onwards**
- Powerful winter storm bringing sharp cold front and severe snowfall through **Great Lakes and interior Northeast: Weekend Dec 24-25 onwards**
- Extreme cold and high gusts over **central and eastern US: Dec 23 onwards**
- Flooding in the **Northeast: Weekend Dec 24 onwards**
- **States of emergency** declared across New York, Kentucky, North Carolina, West Virginia, Georgia and Oklahoma. An 'energy emergency' in Wisconsin.

What is the impact for aviation?

Here is a general 'things to look out for' list:

- Airports are likely to see **significant disruption, cancellations and closures** leading to limited alternate options. En-route airspace will be more congested with diversions and detours taking place
- Significant **ground delays for de-icing/anti-icing**, and during periods of extreme weather operations will be grounded leading to significant backlogs, parking issues and congestion
- **Power outages** are likely in the Midwest and Canada which may have a knock on effect for airports
- **Staff shortages** may occur if folk are unable to commute to airports
- **Oil prices** are leaping up. Check the costs for fuel.

You can find the **National Weather Service** page on the storm warnings here. They post regular updates via their Twitter page as well.

You can monitor the current US **National Airspace System Status** here.

Is there anything you can prepare for?

The weather conditions are severe, they are saying things like "*life-threatening wind chills*" so think about that before sending your poor First Officer out, unless you want a fingerless icicle trying to fly with you. It really is going to get nasty in places.

Here is our list of **Winter Chillers & Thrillers** to look out for:

- **Conditions might really get too severe** so *don't push it* if they do. Look after yourselves!
- There are going to be **significant delays in the air and on the ground**. Take fuel and make a plan B (preferably before you need it).
- **HOTs are going to be hard to manage:** Anyone who has ever operated out of JFK on a winter's day and has waited 7+ hours for de-icing knows what I am talking about. With queues of traffic and bad weather there is a good chance you'll go out of your HOT so keep an eye on

the clock.

- **The Global Reporting Format** is great but if it is saying things like 1/1/1 then you might find you can't stop so well, so check that performance. Some operators don't allow takeoff on icy runways unless treated, for example.
- Ice pellets, hail etc, and severe icing ain't great. Check them SigWx charts too.
- Refresh on **Cold Weather operations procedures**. We found some that might or might not be helpful:
 - IFALPA put this guidance out on Finland airport operations (but it is applicable to anywhere cold)
 - The FAA published this (which is geared to GA but still has some handy info in it)
 - AOPA published this and it looks pretty helpful
- **Look after your batteries** - they have minimum temperature limits and you might need to take them off if you're parking up outside.
- **Watch the fuel temperatures** - JET A1 freezes at -47°C, Jet A at -40°C.
- **Check your altitudes** - apply those cold temperature corrections
- Snow and blizzards bring **LVPs**

We have a few posts which you might find handy for swotting up on all things chilling:

- Fuel Facts: Let's get to the (freezing) point
- De-ice De-ice Baby

Be careful!

Not much more to say than that. Stay warm and safe.

UK Airport Border Force Strikes

Chris Shieff
12 January, 2023



Border Force workers are planning to strike at several major UK airports from December 23 – 31. In some cases the impacts are expected to be **major**, and will affect GA/BA operations along with scheduled airlines.

Here's a rundown of everything we know so far.

What's happening?

The UK's Border Force union has announced one thousand workers will strike over the holiday period amidst an ongoing dispute over pay and conditions.

It goes without saying it is a busy time of year – ten thousand flights, and hundreds of thousands of passengers, are set to be directly affected. The Government has rushed to bring in **military staff, civil servants and other volunteers** to temporarily try and take up some of the slack.

Which airports are affected?

Six big ones:

- EGLL/Heathrow (Terminals 2 – 5)
- EGKK/Gatwick
- EGBB/Birmingham
- EGFF/Cardiff
- EGPF/Glasgow
- EGCC/Manchester

Signature FBO advise that impacts will be felt at all airports, but **EGLL/Heathrow** looks set to be the most heavily affected.

Dates and Times

The strike action will be **24 hours a day**, with the exception of December 26 and 31, where it will end at 7am.

What will the impact be?

Passengers are likely to experience **extensive delays** through passport control. For FBOs, it is important to **advise them of your planned arrival as early as possible** so they can make arrangements. They may struggle to find available staff to attend to you and your passengers.

Inbound aircraft may also be hit with traffic jams leading to **extended holding and possible diversions**.

On December 22, the UK CAA published the following Notam:

B3204/22 NOTAMN Q) EGXX/QAFXX/IV/NBO/E
/000/999/5504N00500W999 A) EGTT EGTX B) 2212220001 C)
2212312359 E) UK BORDER FORCE ARE DUE TO STRIKE AT
BIRMINGHAM (EGBB), CARDIFF (EGFF), LONDON GATWICK (EGKK),
GLASGOW (EGPF), MANCHESTER (EGCC) AND LONDON HEATHROW
(EGLL). DURING STRIKE PERIODS DELAYS MAY BE EXPECTED FOR
DEPARTURES/ARRIVALS INCLUDING HOLDING AND POSSIBLE
DIVERSIONS. CONSEQUENTIAL IMPACTS MAY ALSO BE EXPERIENCED
AT OTHER AIRPORTS DUE TO THESE STRIKES. AIRLINES AND CREWS
SHOULD FUEL PLAN ACCORDINGLY FOR THE DURATION OF ANY
STRIKE ACTION, INCLUDING POSSIBLE DISRUPTION BEFORE AND
AFTER THE STRIKE PERIODS AND DELAYS IN OBTAINING DIVERSION
CLEARANCE. SOME AIRPORTS MAY DECLINE ROUTINE DIVERSION
REQUESTS DUE TO HANDLING CAPACITY BUT WILL ACCEPT
AIRCRAFT DECLARING AN EMERGENCY SITUATION. FLIGHT CREW
ARE REMINDED TO USE CORRECT TERMINOLOGY REGARDING FUEL
STATUS WITH ATC WHEN FACING DELAY OR DIVERSION SITUATION AS
DESCRIBED IN UK CIVIL AVIATION AUTHORITY SAFETY NOTICE SN-
2019/002, UK AIC W084/2022 AND EUROPEAN UNION AVIATION
SAFETY AGENCY SAFETY INFORMATION BULLETIN 2018-08. 2022-
12-0227/AS4.

The moral of the story seems to be to **take more fuel**.

If you do find yourself in a queue and low on gas, they want you to be familiar with the **correct terminology with ATC** to get the message across. The Notam above references the following three docs:

UK CAA Safety Notice - Protecting Final Reserve Fuel and The Minimum Fuel Declaration.

UK AIC W084/2022 - Diversion Requests in UK Airspace.

EASA Safety Bulletin 2018-08 - In Flight Fuel Management.

I don't have time for that. Just give it to me straight.

The docs all deal with **unanticipated delays** and give a reminder that it is up to the crew to monitor fuel in flight and advise ATC if they will be landing with minimum legal reserves, or less.

There are two ways to do it:

Say ‘minimum fuel.’ This isn’t an emergency, but you’re already landing close to final reserve fuel. You cannot accept any further delays without chewing into your FRSV.

Declare an emergency, ‘Mayday, mayday, mayday fuel....’ The rule is pretty clear cut on this one. If you will be landing at the nearest suitable aerodrome with less than your planned reserve fuel, you must declare an emergency.

There is also some guidance on **how to request a diversion**. In a nutshell, ask for it early. The CAA advise it takes ATC 5-10 minutes to grant a request, sometimes longer. Behind the scenes, there are phone calls to be made.

It is also not uncommon in the UK for a **requested diversion to be refused** – it is at the aerodrome operator’s discretion. Stand availability, handling and other factors all come into play. They recommend operators pre-arrange their options for diversion.

Bear in mind the weather is also a challenge at the moment and may compound the situation!

More Information About the Strikes

The UK FCO has the official word. You can find it [here](#).

We’ll Keep You Updated

We’ll update this article, along with any operational impacts, as more info comes to hand. If you experience disruptions yourself, we’d love to hear from you. You can reach us on news@ops.group

2022 Flight Ops Changes: The Big Ones

David Mumford
12 January, 2023



Dear Santa...

We do hope we've been good little boys and girls this year. Last Christmas we received no presents from you at all, which was disappointing.

We did get one from ICAO that got lost in the post and then turned up in January - an update to the NAT Doc 007. *Truth be told, Santa, we didn't actually like that very much.*

It's been another busy year of international flight ops changes, Santa!

We thought you probably missed most of it, hunkered down in your Arctic grotto, beavering away on all the presents you must be making for us this year. **So we've written you a little list** - just the big stuff that's happened this year.

If you don't want to read it all, that's okay, we know you're busy! You can get nearly all the same info by playing our **Snakes On A Plane & Ladders game** that we made! ☺ ☺

We designed it in bright **RED** and **YELLOW** colours to make it easier for you to play in the dim pre-dawn light as you're zipping around the skies on Christmas Eve! ☺

You can **download a PDF of the game** here, or just click on the picture!

In fact, before we get to the long-version list of stuff that's happened...

Our Christmas Wishlist

- *No more hurricanes, volcanic eruptions, floods, domestic conflicts, international invasions, drone and missile attacks, or global pandemics please.* We've put this one at the top, because this is the one we **really want the most.**
- **An EU-LISA teddy bear.** The one where you press its tummy and it tells you a nice clear definition of what a "carrier" is.
- **A set of walkie-talkies.** We'll keep one and give the other to North Korea, so they can use it to tell us when they're launching test missiles.
- **A big pair of scissors.** So when we're doing flights over Greece or Turkey we can snip out all the pages of whiney, irrelevant Notams they publish about each other.
- **Some earplugs.** We'll use them in January when the postman knocks on the door with ICAO's annual NAT Doc 007 present, late again.

Ok, Santa, on to the good stuff - *here's the long-version list of stuff that's happened...*

January

- The US went into a **ground stop** at their west coast airports after North Korea launched a missile. Read
- The US delayed their **5G roll out** because of concerns at airports. Read
- Honduras got **new airport** - MHPR/Palmerola. Read
- UAAA/Almaty airport, **Kazakhstan closed** (and later reopened) due to violent protests and unrest across the country. Read

- The Yemen conflict reached the UAE when several **ballistic missiles** targeted Abu Dhabi. Read
- NFTF/Fua'amotu airport in Tonga closed after the **eruption of Hunga-Tonga-Hunga-Ha'apai**, and the ash also disrupted some overflights in the South Pacific. Read

February

- Airlines started to avoid Ukrainian airspace after Russia's invasion, and **insurance companies started cancelling cover** for flights in Ukraine. Read
- Singapore mandated **RNP4 and RNP10** on some of its main oceanic airway from FL290 and above. Read
- **NAT Tracks were abolished** from FL330 and below. Read

March

- As the Russia-Ukraine conflict escalated, Russia brought in "**tit for tat" flight bans**", including bans on all US operators, and operators had to start finding new routes avoiding Ukraine and Russia. Read
- **Spillover into Europe** from the conflict and "traffic jams" in other airspace started occurring. Read
- We first heard mention of EASA's new dreaded **EU-LISA (EES/ETIAS) system**. Read
- Iran kicked off against Iraq again, sending **missiles towards ORER/Erbil** region. Read
- In the US, the military ran tests on **GPS interference** and it jammed civilian aircraft. Read
- **Fuel shortages in Nigeria** and bandits at the airport raised concerns. Read
- Ethiopia announced a **ceasefire** between fighting factions in the Tigray region. Read

April

- **EASA's new fuel policy** was announced and it was really hard to read. Read
- A new airport opened in **Mexico City** (MMSM/Santa Lucia) and everyone said don't use it. Read
- **Fuel prices started rising** due to sanctions particularly on US east coast; and in other countries they started to announce shortages, particularly across Africa. Read
- FAA announced **new flight planning codes** for advanced capabilities. Read
- Iceland became completely **covered with ADS-B**. Read
- The **mass ATC walkout in Poland** was narrowly avoided. Read

May

- Reports of **flights being tracked** for nefarious reasons started to concern BizAv folk. Read

- We talked about **EMAS** because no-one seemed to know what it was. Read
- **ATC returned to Somalia** with Class A reinstated above FL245 during the day. Read
- We took a look at some common **NAT Conundrums!** Read
- US eased rules for **flights to Cuba**. Read

June

- Everyone was still **confused by EU-LISA**, who still couldn't make it clear which operators need to register to use the new system (i.e. who counted as a "carrier"). Read
- The **South China Sea dispute** got worse with China building islands and putting weapons on them and running lots of military drills. Read
- Sri Lanka completely **ran out of fuel** Read
- Bahamas delayed their **Click2Clear** because no-one understood it. Read
- Antigua brought in **new Nav/ATC fees** that they want in advance if you're overflying up to FL245. Read
- Saudi Arabia risk level was reduced as **Houthi attacks drop off**. Read
- We published a book on **European Slot Rules**. Read
- **Kathmandu got RNP** (and you should use it). Read
- The **5G rollout was delayed** in US. Read

July

- We decided **Safety used to be far more sexy** and tried to bring it back again. Read
- Flights to/from Israel got easier as **Israel got friendlier** with their neighbours. Read
- EASA published **new All Weather Operations** stuff and we were all confused by it. Read
- **EU-LISA is postponed** (thank goodness!). Read
- **VHHH/Hong Kong's new runway** finally opened. Read
- ICAO **expanded SELCAL** to include new codes. Read
- The FAA postponed the final phase of **Northeast Corridor Atlantic routes** project until April 2023. Read
- We made a picture book to help people understand the new **EASA fuel rules**. Read

August

- Qatar finally got the go-ahead from ICAO to set up their **own airspace**. Read
- China got angry with Taiwan and held massive drills that **shut Taiwan** because they effectively surrounded it with prohibited areas. Read
- Canada delayed their **ADS-B mandate** until Aug 2023 to give folk time to install equipment.

Read

- **NAT 006** is updated, and we're proud of our James Bond pun which no-one else got. Read
- **EIDW/Dublin** opened a new runway. Read
- We put together on the **London Airport options**, made with help from the London Underground tube map publishers, circa 1962. Read
- EASA updated their RIM and we posted a reminder of all the things people keep getting into trouble with during **ramp checks!** Read

September

- The **hurricane season** was in full force with Earl closing Bermuda, Kay closing La Paz in Mexico and then the massive Fiona reaching Canada, and Ian devastating parts of Florida.
- A big military exercise threatened to close a chunk of **EGGX/Shanwick** impacting the NAT, but then it didn't. Read
- EASA delayed their **ELT mandate** by 2 years. Read
- **Azerbaijan and Armenia** kicked off again and the border airspace closed, then quickly reopened. Read
- CYYZ/Toronto **capped slots for GA/BA** flights. Read
- African ATC went on a **mega strike!** They brought in fake ATC and we put out a big safety alert over it. Read
- The **FAA extended** their Iran and Iraq warnings for another 2 years. Read

October

- North Korea sent a **missile directly over Japan** causing them to issue a public warning. Read
- **Major airways** in Iraq are in close proximity to areas of airspace with high risk from drones and missiles. Read
- Florida airports reopened after **Hurricane Ian** raged through.
- We discovered more info on the **CPDLC trial** in the US and how BizAv are (or aren't) involved. Read
- The FAA published new **winter holdover times**. Read
- Everyone started planning for the **Qatar world cup** because Doha is small and no-one was sure where to park. Read

November

- A **cyber attack** brought down a fair few Jeppesen planning products. Read
- **ADS-B privacy issues** reared its head again with more groups questioning the privacy and security. Read
- Shannon published info on **level busts** and US BizAv are to blame for a lot of them! Read

- **KTEB/Teterboro** added new waypoints to help with the challenging circle for RWY 01. Read
- Canada published a **safety watchlist** that applies to everyone, everywhere really. Read
- The Russia-Ukraine spillover impacted more countries, with a **wayward missile** hitting Poland and concerns about UAS. Read
- Saudi Arabia got **CPDLC from FL150 up**. Read
- We started to **worry about Turkey** – they are fighting with Syria and Iraq and their southern region is higher risk. Read
- Germany issued a warning against low level **flights in Myanmar**. Read
- An Emirates aircraft might have been **hijacked**. Read

December

- Possibly because of power outage issues, but **South Africa lost CPDLC** and FAOR/Johannesburg Oceanic airspace turned into one big IFBP area for a day or so. Read
- **Ski season started** in Europe with parking restrictions and PPR requirements aplenty. A lot of folks also head off to the **Caribbean** this time of year. We made our own pirate map. Read
- **Auckland** got bad fuel. Not ideal for long haul flights (so any flight trying to get to Auckland). Read
- Someone asked us about weird **Mexican timezone changes** and we realised that in April 2023 most of Mexico will stop using DST but some places along the border won't. Highly bamboozling. Read
- **France banned domestic airline flights** under 2.5 hours. Read
- **KPHL/Philadelphia** decided they didn't want international GA flights heading in there anymore. More

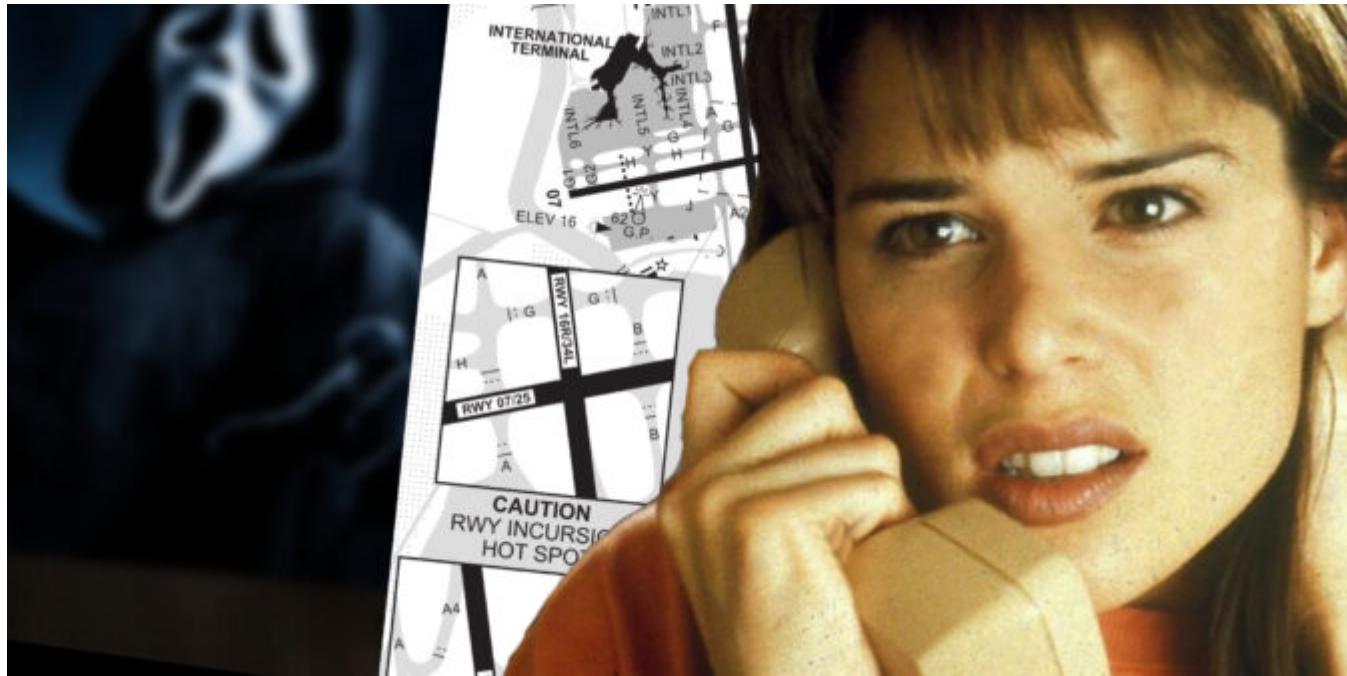
Fare-thee-well, 2022

And that brings us bang up to date, Santa, if you're still reading.

If not, we hope this whirlwind of flight ops bulletpoints has been of interest to someone out there. **Maybe a few of you weary aviation folk** who have stuck with us throughout the year ☺

Sydney Near Miss!

Chris Shieff
12 January, 2023



On November 14, a **major runway incursion** was narrowly avoided involving an Airbus A380 and Boeing 737. It sounds like the incident may have been caused by an ATC error – although an ATSB investigation is still underway.

Despite millions being spent in recent years to improve runway safety at the airport, this incident is a timely reminder that incursions can and will continue to happen in Sydney.

Here's a look at why, and what you can do about it.

The Layout.

Sydney's runway layout is complex. There are three runways – two parallel ones (16/34 LR) and another runway that runs perpendicular to them (07/25). The airport itself sits perched on the edge of Botany Bay, with the parallel runways extending well out over water. And all terminals and FBOs are found clustered together on the northern side of the airport, near the 16R threshold.

Which means taxis to/from all the other runways are **lengthy and potentially confusing**. And during those taxis, **almost every aircraft will need to cross a runway**. Often twice.

That's a lot of crossing traffic when you consider that the airport processes up to eighty movements an hour at peak times - it is literally Australia's busiest.



Mistakes Happen.

Authorities are well aware of the risk of runway incursions at Sydney airport. So much so that they have spent a commendable amount of time and money to improve runway safety.

Possibly the best advancement in recent years has been the installation of **stop bar lighting** at every single runway holding point, along with improved signage and markings.

And yet mistakes keep happening. The November incident is a great example – here's what went down.

The November 14 Incident.

- In CAVOK conditions, a Boeing 737-800 was **cleared to land on Runway 25**. With their clearance they were informed that an Airbus A380 was holding position on Runway 34 waiting to depart.
- When the 737 had cleared the intersection of the two runways, the A380 was **cleared for take-off and began to roll**.
- After landing the 737 received its taxi clearance from ground which instructed them to **cross runway 34L** on Golf back to the domestic terminal.
- As the 737 crew approached the active runway, they were surprised to see it was **still occupied with the departing A380**. They queried the clearance with ATC who immediately told them to hold short.

- The closest the two aircraft came to each other was **300m** (just shy of 1000') thanks in part to the vigilance of the 737 crew. While not a particularly close shave, there was potential for this to have become a major accident. Which is why the ATSB are asking questions they are.

Here's a simple animation of the incident with a bird's eye view:

What can we learn from this?

Future incursions, although rare, will happen. But there are **steps that all crew can take** to help reduce those statistics and stay safe.

A good place to start is this. **To cross a runway in Sydney always remember the 'hat-trick.'** You know all about cricket right? Well if you're headed to Australia, this phrase can also be used to impress Aussies at the bar over a cold Fosters (disclaimer: no one drinks it there, and whatever you do never call a prawn a shrimp). It means three successes of the same kind. Or in other words: **a set of three good things.**

So, there are three things that you'll need:

- **A clearance from ATC**
- **Confirmation that the stop bar is out**
- **Runway is visually clear out both sides**

If any of them are missing (or uncertain), **do not enter the runway.**

The crew of the 737 above **captured a potential accident** because at least one of their hat-trick was missing.

The stop bars themselves are worth a mention too. What's more obvious than a big row of blazing hot red lights to make you get on the brakes, right? They work really well, but in their simplicity, there can be **confusion.**

A while back, IFALPA released some pretty good stuff that is still relevant today. You can read it here, but there are a few scenarios to take away:

The stop bar's out, but we haven't been cleared...

Stop. An extinguished stop bar on its own is not an indication you are cleared to cross. It may have been turned off in error, or for a preceding aircraft.

We're cleared, but the stop bar is still lit...

Yep you guessed it, stop. And this happens really often. You'll need to ask ATC to turn it off. Never, ever cross a lit stop bar.

Help from ICAO

Did you know they have a whole manual dedicated to helping controllers and pilots alike **avoid runway incursions?** You can download it [here](#).

Have some stories of your own to share?

We'd love to hear from you. They don't need to be from Sydney, **but we can all learn from them**. You can reach our team completely anonymously at news@ops.group.

MOT for aircraft? It's actually a tax

OPSGROUP Team

12 January, 2023



We had a question sent in about "MOT" and three things crossed my mind.

One – I need to get my car's MOT booked, it is due really soon, thanks for reminding me (*possibly something only UK folk will get*).

Two – Do aircraft have to have MOTs? I don't think they do.

Three – Ah, they mean Mineral Oil Tax... of course... I've definitely heard of that...

What is MOT, and why do you need to know about it?

So, MOT (in aviation) stands for **Mineral Oil Tax**, which basically means a big tax on your fuel.

It also goes by the names TIPP, TICPE, fuel tax, excise tax, excise duty, fuel duty tax, oil tax... you get the idea.

It is usually added to the fuel price so you're paying it without knowing you're paying it. The MOT can be as much as **43% of your fuel bill**, so if you don't know about it you might want to.

Good news though – you might be able to reclaim some of it.

Can I reclaim it?

The rules seem to be that if you are one of the following then yes, you probably can:

- A private air charter company
- An executive airplane-leasing company
- A business who owns its own private jet which is used for business purposes only

Some countries specify that you must be a 'non-established aircraft operator'.

Great, I'm one of those. So where can I reclaim it?

Here is a handy table to give you some idea of where you might be able to:

I don't see a 43% in there, but a fair few in the 20% region. So some big savings to be had, if this does apply to you.

If I should be exempt can I just not pay it?

You can't reclaim it everywhere - some places just don't have an exemption at all, and in some places you can't reclaim after paying, so you have to make sure it is taken off the bill before you pay.

So make sure:

- Your crew know about it, and to ask about it.
- Make sure your AOC is available for crew to show to fuelers to confirm they are exempt.
- Make sure the fueling company and customs have the right info on your flight so everyone knows you're exempt.

Tell me more about all this.

Well, that is actually all we really know on it.

The cost, as we said, is often added in at the fuel truck, and the rules for reclaiming it seem to be a little 'uncoordinated' (messy!) This is particularly the case, it seems, for France, Germany and Austria.

So much so that the EBAA wrote this very thorough guide on the legal impact of the 'European Energy Taxation Directive on Business Aviation in Germany, France and Austria'.

In case the word 'thorough' put you off reading it, here's our little, much less thorough summary of it:

- It is an analysis of the legal impact of the European Energy Taxation Directive on Business Aviation in **Germany, France and Austria**.
- It says that states can exempt aviation fuel from excise duties (tax), provided aircraft are used for purposes other than **private pleasure flying**.
- **But it isn't always consistently applied or understood**, and operators have to provide a whole load of info which is often very annoying, verging on impossible.
- **It also takes ages to get the money back**, so folk are missing out on interest which doesn't

seem very fair.

There is a lot of info in the guide (we won't try and re-write it all out) but it is definitely worth a read if you are running into difficulties reclaiming your MOT in any of these three spots.

The main issue in France

France won't let you reclaim it if the **passenger is also (directly or indirectly) the owner of the aircraft** carrying them, but of course it isn't that simple. What they define as 'commercial' is often confusing, and it gets even messier for charters.

The main issue in Germany

No-one is entirely sure how it is all applied in Germany, it seems to be **really inconsistent and dependent on where you file** your reclaim. It is also very complicated when it comes to corporate flights.

And it hasn't been decided whether to apply it to training flights, maintenance flights or positioning flights...

The main issue in Austria

Austria apparently have **the worst 'burden of proof' on the operator** of any country.

Basically you have to disclose loads of information, including stuff about your passengers, which could breach any NDAs you have. So it might be worth highlighting this to them and saying "*if we try and get you money off the fuel, we're going to have to share loads of info about you, is that ok?*"

OK, I know enough. How do I reclaim it?

You need to make sure you have your AOC to hand (to move you are worthy of exemption) along with the purchase invoice (showing the MOT levied) and fuel delivery notes (showing the correct aircraft registration, signed etc).

Some but not all countries allow for retrospective refunds which is why not paying it where possible is a better option. For those that do, you have to **submit your claim to the local customs office** (there isn't a centralised claims office), and there are deadlines for this.

Gimme some links

We shall. We discovered **VATIT** who have the title of "*world leading expert in aviation tax*" (self-titled). We got a lot of this info, including that rather handy table, off their site so reckon **they might be the folk to talk to**. Here's their website, and here is a very useful post they wrote on **Canadian Excise Duties on Fuel Bills** if that's something you want to find out about as well.

The EBAA posted the legal guide we mentioned above so also worth getting in touch with them if you have some specific questions or concerns.

New Zealand Fuel Supply Issue

OPSGROUP Team
12 January, 2023



Update 19 Dec: The fuel shortage at NZAA/Auckland due the contaminated batch has been resolved now (they got more fuel delivered).

New Zealand is facing a (hopefully brief) jet fuel shortage after receiving a batch which failed quality control testing.

What is the current situation?

On December 7, a fuel shipment into the main import terminal on New Zealand's north island **failed a quality check**. The fuel was bound for NZAA/Auckland, the country's main international airport.

The next fuel shipment is expected on December 18 and will hopefully resolve the temporary shortage.

How short is the shortage?

Airlines have been told to **expect rationing at NZAA/Auckland**. Initial reports suggest uplifts will be limited to **75% of an operator's usual allotment**.

However, it is not clear if other airports will receive reduced fuel supplies, with some diverted to support NZAA/Auckland or if the only airport affected is the main international one.

Air Centre One FBO at NZAA/Auckland has told us that World Fuel Services (WFS) has **canceled all releases** due to the current fuel shortage. Uplifts are still available via the FBO's account which will be invoiced with your handling charges, but they are recommending **refueling elsewhere** if possible. WFS releases are apparently still being accepted at other major airports in New Zealand.

Here are the Notams we've spotted so far:

NZAA/Auckland B7158/22 - AIR BP, EXXON MOBIL/CHEVRON AND Z ENERGY JET A1 FUEL RATIONING IN PLACE. CHECK WITH YOUR FUEL SUPPLIER FOR AVAILABILITY.
08 DEC 01:56 2022 UNTIL 17 DEC 10:59 2022.

NZWN/Wellington B7097/22 - Z ENERGY JET A1 FUEL (WESTERN APRON) NOT AVBL.
06 DEC 02:33 2022 UNTIL PERM. CREATED: 06 DEC 02:33 2022

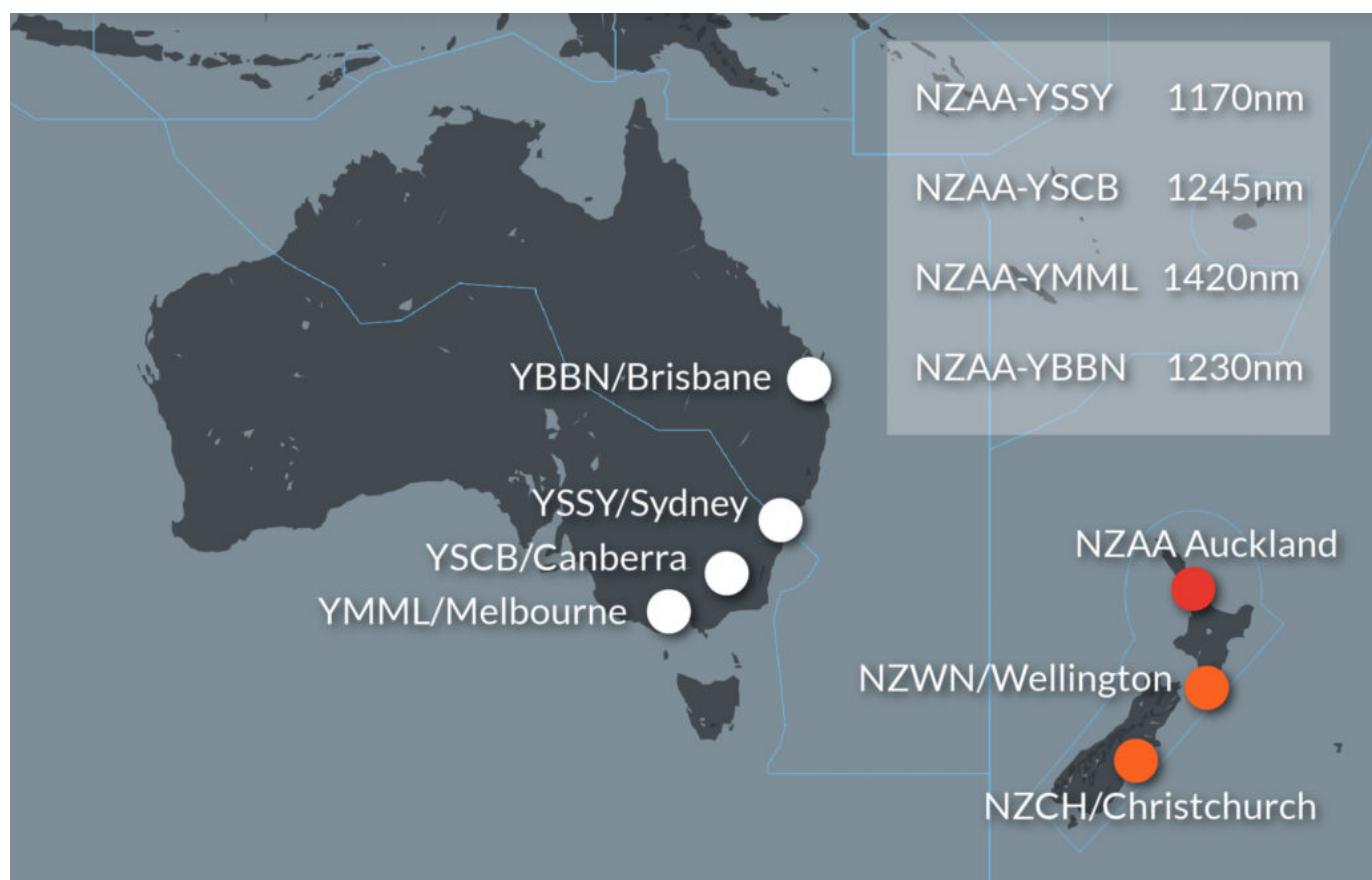
What should you do?

Speak to your agent or supplier at NZAA/Auckland and **confirm what the allocation will be** for you prior to operating in so you can plan accordingly.

Check with other New Zealand airport agents in advance if you plan to make fuel stops at them, since the **fuel availability is not currently clear**.

Look at fuel tech stop options if you are operating long haul, or consider payload adjustments to manage the reduced fuel uplift.

Tanker fuel if you are able to.



ATC radio outage in Johannesburg Oceanic

David Mumford
12 January, 2023



CPDLC has been fixed in the FAJO/Johannesburg Oceanic FIR following yesterday's outage.

That's the only thing ATC have currently got to communicate with aircraft, as their radios have been out of action since November.

The FAJO/Johannesburg Oceanic FIR covers a pretty big chunk of airspace:



Aircraft not equipped with CPDLC will have to broadcast on the emergency **In-Flight Broadcast Procedure** (IFBP) VHF frequency 126.9, and maintain a continuous listening watch on 123.45. Here's the Notam for that:

A3931/22 - TRANS AND REC U/S. PRI COM IS CPDLC. ACFT NOT CPDLC/ADS-C EQUIPPED MUST BCST AND MNT IFBP (IATA IN-FLIGHT BROADCAST PROCEDURE) ON 126.9 MHZ. 11 NOV 17:57 2022 UNTIL 31 DEC 23:59 2022 ESTIMATED. CREATED: 11 NOV 18:06 2022

You can check IATA's doc for a quick summary of IFBP here:



Operations Notice Number: 001/2019

IATA In-flight Broadcast Procedure (IFBP) AFI Region

Applicable to:	Operations in AFI region
Effective Date:	15 August 2019
Revision Date:	2 March 2022
Expiry:	31 August 2022
Authorized by:	Senior Vice President Operations, Safety and Security (OSS) IATA
Contact e-mail:	safety@iata.org

IATA In-flight Broadcast Procedure (IFBP) AFI Region

This Operations Notice replaces ON 001/2014 in total.

Background:

In many FIRs in the AFI Region, both fixed and mobile aviation communication systems have either not been implemented or operate well below the required reliability. This has an impact on the proper provision of Air Traffic Services, especially with regard to Flight Information Service (FIS). Consequently, an AFI Regional Technical Conference had determined that the IATA In-Flight Broadcast Procedure (IFBP) should be used within AFI designated FIRs as an interim measure, until such time as communications facilities affecting the FIRs in question have been improved.

Designated frequency in AFI

In the AFI Region the designated frequency for the IFBP is 126.9 MHz

Area of Application

It is recommended that the IFBP be applied in the following FIRs and airspaces:

Asmara	Lusaka
Brazzaville *	Mogadishu
Kano	Niamey *
Khartoum	N'Djamena *
Kinshasa	Tripoli **
Luanda	Dakar

1 * Brazzaville, Niamey and N'Djamena FIR provide CPDLC service, however these FIRs are maintained in IFBP area of applicability to accommodate users' requirement for linear boundaries to the extent feasible.

2 ** Tripoli FIR mandated IFBP within their entire FIR, hence IFBP region extended from North of latitude 30 N to cover entire Tripoli FIR

This Notice should be used for information only and is based on data available at the time of issuance. It is not intended to replace an operator's own assessment and evaluation, nor replace the opinions and expert advice that the operator may receive from third parties. Operators shall remain responsible at all times for their operations and any decisions related to this notice.

Operational Notice #: Error! Reference source not found.ON001_19_In-flight_Broadcast_Procedure_in_AFI_RegionPage 1 of 5

As far as we can tell, South Africa hasn't published its own Contingency Plan to help us work out what to expect when we're flying through their oceanic airspace and we can't reach ATC.

But ICAO harmonized the contingency procedures for all oceanic airspace worldwide back in 2020. The basic rule is this: **turn from the route by at least 30°, offset by 5 NM, stay at your current level or descend below FL290, then apply a cheeky little vertical offset.**

Power Outages

Power outages are an ongoing issue in South Africa. **Airports remain unaffected, directly.** However, yesterday's CPDLC outage coincided with a breakdown of several ESKOM powerplants. We aren't sure whether this was a coincidence or not.

The continued power outage crisis may lead to delays with certain services which have a knock on effect on your operation. The likelihood of civil unrest is also growing so caution on the ground in the country is recommended at this time.

What's the Time, Mr Mexico?

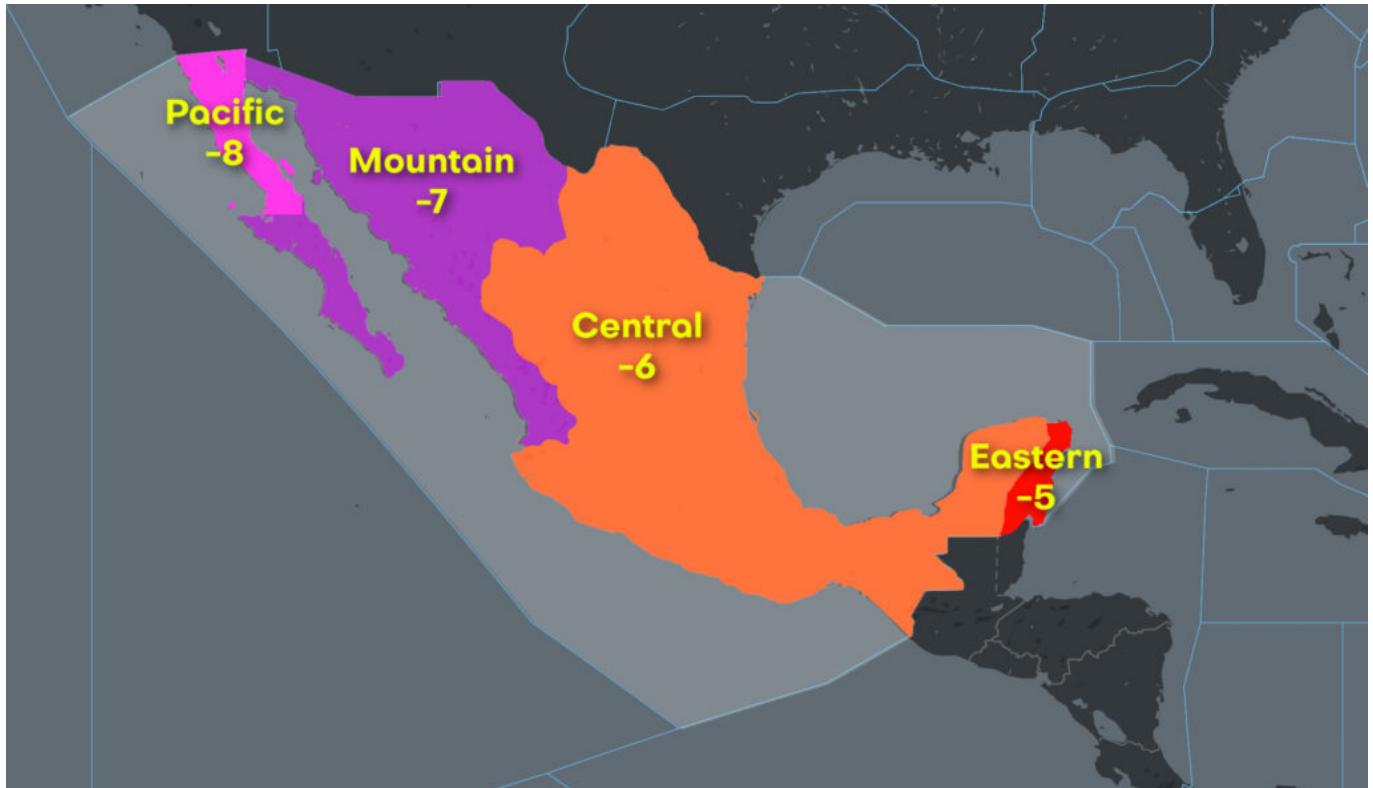
OPSGROUP Team
12 January, 2023



Mexican time is changing! They currently have 4 time zones:

- **PST** (Pacific standard time) GMT-8 (which is just Tijuana)
- **EST** (eastern) GMT-7
- **CST** (central) GMT-6
- **MST** (mountain) GMT-5

Here is a map (complete with ticking times) showing these. Or a more fixed one below if you prefer.



So what's the problem?

Daylight saving is the problem!

Most of us forget/are confused by it/just let our phones do their thing and wake up feeling slightly less/more well rested depending on which way they're moving. (Just remember: **Spring Forward, Fall Back.**)

In other words, when daylight saving starts (*in the summer which frankly is confusing because there is already more sunlight then so why is it called 'saving'*) then you wind the clock forward an hour, losing one, and you wind it back again in the fall (autumn) meaning you live the same hour twice, to help make better use of the natural daylight.

Then there is the confusion of who does it and who doesn't. Arizona, USA for example opted out of DST. Except for the Navajo Nation who opted in.

Who should we thank for this confounding thing? Some say the USA's Benjamin Franklin, some say NZ's George Hudson, some say the UK's William Willett, some say *"I have no idea who two of those three people are, tell me something useful?!"*

Back to the Mexico problem

Mexico is cancelling DST from 2023. Which isn't the worst thing ever given the confusion (see above)

The problem is... not all of Mexico is going to. **Some border towns are not going to do DST.**

Wait, now I'm confused.

The ten municipalities bordering the USA have decided to stay synched with their American neighbors, presumably to avoid confusion with border crossing.

- **Acuna**
- **Anahuac**
- **Juarez**
- **Matamoros**
- **Mexicali**
- **Nuevo Laredo**
- **Ojinaga**
- **Piedras Negras**
- **Reynosa**
- **Tijuana**

So all of these **will** still apply DST, which means it will look something like this:



When is this all happening?

Well, the no-more-DST starts in April 2023 when the rest of Mexico just won't wind their clocks forward.

The clocks will still wind forward in those 10 places though. Which, for you, might mean confusion if you're heading into any airports along the border area. Like **MMCS/Ciudad Juárez International**.

Some fun time zone facts

If asked which country has the most time zones, most probably guess the USA or Russia. Both actually "only" have 11 though. **The top spot goes to France** with a whopping 13 different zones (ok, they own random bits of land all over the world so not really a fair game).

Next up are the countries with 9, which includes **Australia, Antarctica and the UK**. Yup, the UK boast a fair few 'unattached' areas in the world too.

China is another oddity. It should have 5 time zones. It only has 1, based off what suits the Beijing sun best! ☀ ☀

France says take trains not planes



France have implemented their ban on short-haul domestic flights, with it going into effect on December 2, 2022.

So what, and who, does this apply to?

The What.

It applies to short-haul domestic flights. In France.

Basically any route that can be **reached by train within 2.5 hours** is now a no-go for flights.

There are three initial scheduled routes that meet the criteria, and they're all from LFPO/Paris Orly:

- **LFPO/Orly to LFBD/Bordeaux**
- **LFPO/Orly to LFRS/Nantes**
- **LFPO/Orly to LFLL/Lyon**

Originally there were 8 proposed routes which also included LFPG/Charles de Gaulle to LFBD/Bordeaux and LFRS/Nantes, LFPG/Charles de Gaulle to LFRS/Rennes and LFLL/Lyon, and also LFLL/Lyon to LFML/Marseille.

However, the train services aren't quite there yet in terms of frequencies and timings. As soon as they are though... **expect these to be reviewed as well.**



The Who.

The official notice? Treaty? Regulation? Amendment to a treaty? Journal of the EU... We're not actually sure what to call it, but the official *thing* says (and before we forget, here it is for you to read yourself), that the routes are **"prohibited for any carrier"**.

Which means, we guessed, all flights including BizAv. But, this is the EU, and we all remember the misery of working out what they meant by the term "carrier" for all things EU-LISA related...

And of course, there is the big question of **whether this applies to non-French registered 'carriers'** as well?

So, who else?

Well, we had a little re-read and what it actually says is this:

8. Article 145.I of the Law prohibits, on the basis of Article 20 of the Regulation, **scheduled public passenger air transport services** on all air routes within French territory for which there are **several direct rail connections per day of less than two and a half hours**.

Phew, ok, that is actually not so bad.

So, we figure it means this:

- It only applied to **scheduled services**.

- It only applies to **public** (so not your private) flights.
- It might apply to any **EU registered** (not just French registered) aircraft though.
- They have **specifically listed routes** with connections that make this ruling applicable.

So if you are heading to France (and have some cabotage deal), and want to fly internally, then chances are you are still fine to do it. If you are an EU registered aircraft then you might want to have a closer look at what it means for you on these specific routes though.

And while they do say "**scheduled public service**" if there is a sudden uptick of private services on these routes it probably won't go down very well, so perhaps don't go having a cunning plan about setting up a 'private' route.

Still fine... for now...

France has the **highest number of private aircraft movements** of any country in Europe (over 120,000 at the last proper count in 2019), and there is a plan to crackdown on this too.

What this means right now is that if you regularly fly private jets into France, have a think about how to reduce this because it is being monitored and could have a big impact in the future.

The Why.

Well, for **environmental reasons** mostly.

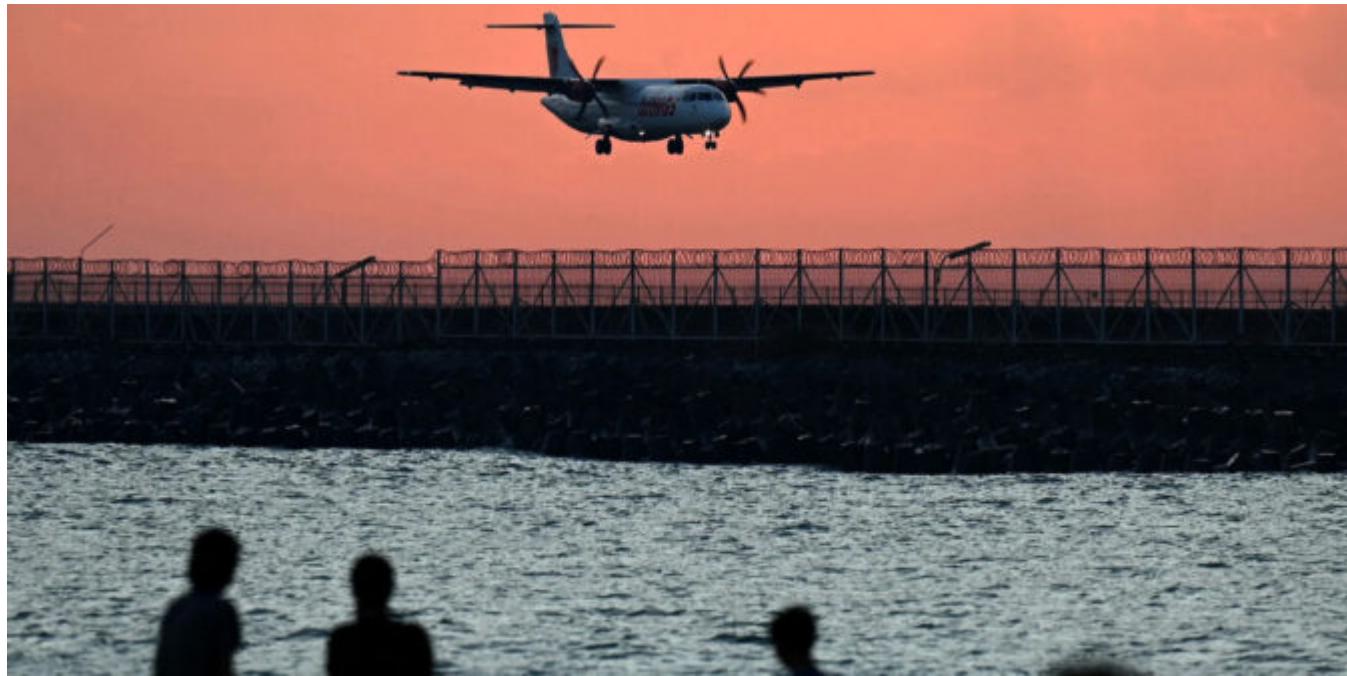
The prohibiting of these three routes alone will lead to a reduction of around 55,000 tonnes of CO2 emissions from air transport. Using more trains on them is still calculated to lead to an overall reduction of around 50% (worst case) and as high as 98% (in a really best case world).

The impact on BizAv.

The impact on BizAv is not big now. In fact, the reduction of scheduled services into LFBD/Bordeaux, LFLL/Lyon and LFRS/Nantes **might mean some additional space** for your private flights. Not so much LFPO/Orly because its a fairly busy airport and 3 routes probably won't mean much extra space. But this might also mean an **increase in charges** as the airports look to reduce the loss in revenue from having these routes cancelled.

Bali bound and no place to go...

Chris Shieff
12 January, 2023



If you're bound for Bali there are a few things you need to know, especially if it is your first time there. **Ops there often seem to get disrupted, and you'll need the option of having someplace else to go.** Figuring out where - especially at night - may be harder than you think.

Let's take a closer look.

At face value, ops at Bali seem straight forward. The runway is long, there is an instrument approach at both ends, SIDs and STARs link everything up and the place is towered 24/7.

But after years of flying in there with a scheduled operator, **the number one biggest threat** remained fuel in the tanks when it all went pear-shaped - which it sometimes did.

The airport just seems to have a habit of eroding your fuel margins. You may be carrying a healthy alternate enroute, but **beware of giving it all away** while holding once you arrive.

Delays and short notice closures.

The airport is especially vulnerable to them, and they can be unpredictable. Here's why.

1. Weather

If you're flying into Bali during rainy season (November - March), weather is likely to be a major factor. Like clockwork, towering cumulus clouds strengthen throughout the day into powerful thunderstorms in the afternoon and evening.

While the TAF may look identical day in and out, it is luck of the draw whether the airport itself will be affected. And when it is, **traffic backs up quickly**.

2. Volcanic Ash

Indonesia rests on the western portion of the Ring of Fire which renders it the **third most volcanically active region on earth**. There are no less than one hundred and forty-seven volcanoes there, seventy-six of which are currently active.

Eruptions are frequent and occur with little warning causing major disruptions to airports throughout the country - and extensive ash plumes. They can close airports like Bali for days on end, like one did in 2017.

And the situation can develop when you're already airborne.

The closest volcano to WADD/Bali airport is **less than 40nm away.**

Mount Agung erupted in 2017, closing Bali for several days. Courtesy: IBTimes UK

3. VIP Movements

Yep, someone important is inbound. And guess who has to make way? The airport often gets **closed for short periods for VIP movements.** You'll find them in the Notams from time-to-time. Take it from me - apply a healthy buffer to either side as ATC will not necessarily be able to provide you with an accurate time the airport will re-open while you're racing around that holding pattern.

4. Traffic Jams

WADD/Denpasar is Indonesia's **second busiest airport** second only to Jakarta. Which means it sees a lot of traffic. It also occupies a busy air corridor linking Europe to Oceania. Controllers manage a steady flow of both regional and international traffic from both directions.

It can be difficult to predict the effect of this ahead of time, but it is not unusual to **hold inbound** on your STAR. And you likely won't have a head's up beforehand that it is coming. **Extra fuel for traffic holding is absolutely necessary.**

5. Congested Frequencies

If you're getting low on fuel, make a decision early. **Don't wait.**

ATC has to manage large pieces of airspace here. On Ujung especially it can be challenging getting heard. **Controllers are often managing multiple frequencies** - it may seem like you're being ignored, but you may not be able to hear everyone else talking to controllers over the top of you.

The language barrier can also be an issue - English will likely not be your controller's first language, and their accents can make them hard to understand. The moral of the story is to be assertive on the radio, and speak slowly and clearly. Try and stick to **standard phraseology** such as '*minimum fuel.*' And don't take a back seat when trying to get an urgent request granted.

But where to go?

If you're heading into Bali late, you'll need to pay special attention to alternate planning. All the airports in the region still have special operating hours in place to "avoid the spread of Covid", as per their notams. At present, **WADD/Bali itself is open until 18z (02:00am local) but its closest alternatives are not.**

Lombok (WADL/Praya), 85nm. Closed each night from 12z (20:00 local). [Notam B2226/22, valid until Feb 19].

Surabaya (WARR/Juanda) , 160nm. Closed each night from 14z (22:00 local). [Notam A2938/22, valid until Feb 18, actually due to runway closure for works].

Semarang (WAHS/Semarang), 295nm. Closed each night from 12z (20:00 local). [Notam B2231/22, valid until Feb 18].

If it's late, you'll need to carry more fuel than usual to reach **WAAA/Makassar** 320nm away, or **WIII/Jakarta** 512nm away.

And finally - watch out for terrain!

There are some **big hills** out there. If you're flying into Bali, there's a good chance you may yourself under radar vectors at night or in IMC nearby. Protect your aircraft - keep a close eye on where you are relative to that terrain at all times. Especially when it's busy!

Aircraft arriving from or departing to the northwest need to be particularly wary. Sector MSA just north of the airport rises steeply to 9700'. Further west you'll find Central and East Java with grid MORAs as high as 14,000'. Also be aware of escape routes if your cabin springs a leak.

China Crew Hotel 101

OPSGROUP Team
12 January, 2023



This is one for any crew who head into China.

What happened in Urumqi?

People in China are angry.

There are currently protests across many major Chinese cities, including Beijing and Shanghai. Which is unusual because protests are very frowned upon in China, and generally lead to quite **a heavy handed police response**.

So when they do protest, you know it is over something they feel strongly about.

They are **angry over Covid lockdown rules** which saw 10 people perish in a tower block fire in Urumqi. Questions have been asked over whether residents were allowed to leave their homes, and whether the fire exits were clear.

What does this have to do with crew?

There are two things worth considering if operating into China:

- The security situation
- The hotel room safety situation

The Security Situation

Crew are not allowed out of their quarantine hotels, so the protests themselves will not impact you directly. However, **a stricter level of Covid rule compliance** might.

Currently, crew are required to don full 'anti-Covid' suits on arrival (while still on the aircraft), and are accompanied through airports, bused to hotels, and required to remain within their hotel rooms.

Member Top Tip: *"They don't generally provide big sizes. If you need an XL it might be worth getting your local agent to arrange this, or you're going to find yourself trussed up like a sausage inside an 'average'" sized suit."*

The rules have eased a little, but are still subject to change at short notice, and entry requirements for crew are not always entirely clear. **The best people to ask are your local agents at whatever airport you are heading into.**

We recommend that you:

- Follow the rules pretty strictly. Easier in the winter months when it is not baking hot (those suits are the worst in the summer). Non-compliance is likely to lead to fines, potentially banning your operator from returning to China, or you may be subject to more quarantine.
- Prepare for lengthy delays in and out of the airport and factor this into your report times.
- Do not vocally criticise in a way that might be perceived as a protest against Chinese law or the government.

But what's this about hotel room safety?

Some crew have reported that they are not only quarantined in their hotel rooms, but they are *locked inside* their hotel rooms, **unable to open the door from the inside.**

This is not safe.

If you or your operator has experienced this, please let us know at news@ops.group. We might not be able to do anything to help, but we can share the hotel info with other operators so they know about it.

You must be able to unlock your hotel room from the inside in order to **evacuate in an emergency**. Your hotel room should also be **equipped with a smoke mask**.

- **Checking with the hotel prior to operating in** and raising this is a good idea. Doing so once there may prove difficult. Bear in mind, these are generally government selected hotels for crew as well. You don't get much say in where to stay.
- On arrival, **crew should pay particular attention to how to access emergency exits** because these hotels tend to have significant 'plastic coating' on their interiors, and it may be

difficult to locate exits in an emergency.

- If in doubt over your safety, **don't remain in the room because they've told you to**. Get yourself out and safe, and worry about the repercussions of that afterwards. I'm pretty certain they'll be less serious than the consequences of staying locked inside a burning hotel!
- Make sure your crew have **contact information in case of a medical emergency** while in China.

Monitor the food situation

Folk report this is slowly improving.

If you haven't been, then here's the deal - basically your hotel is going to provide you with meals. These are usually **left in boxes at specific times outside the room**, and you're allowed to open up and take them inside.

There are two issues here:

- They are not always catering to 'Western' food preferences.
- There doesn't appear to be any way to report allergies.
- Chinese food often contains MSG, which you may have an allergy to without knowing.
- They often provide them based on Chinese meal timings, which can be tough with jet lag/sleep plans etc.

Good news is you can get in touch in advance and ensure you request food that your crew can eat, and that it is provided at times they will want to be eating at. Alternatively, recommend **crew take their own food with them**.

A little note on Customs

China readopted their Health Declaration Measures, since November 16. Make sure you submit the form and **download the QR code before** heading over. There is an APP for it that makes it handier, and the website is here for all the info you might need.

Don't say Hi to Jack!

OPSGROUP Team
12 January, 2023



Attempted hijackings of major airlines have decreased because of big advances in security and safety.

But, reports of an apparent attempt on an Emirates aircraft surfaced on November 10, so we thought we would take a look at those security procedures, ops procedures and some FAA door related news, to help you stay safe in the skies.

The 'was it a hijack attempt?' reports.

Look, we don't know, and **we aren't into speculation.**

All we've seen is a bunch of news sites saying a 777 was diverted back to Athens after taking off for New York, possibly accompanied by F-16s, possibly with reports of a possible suspect onboard, possibly under a 'Code Renegade'.

It landed safely, and there will likely be detailed reports out about it at some point so we are going to leave it there.

Hijack attempts are not common anymore, mainly because security procedures have been developed so much to help prevent them.

But we don't want to get complacent about it, because most of those procedures fall on us (the operators and the air crew).

So we figured a recap on what some of these procedures are, and what it might mean for you ops-wise could be handy.

On the ground

Security stuff starts on the ground. Actually it hopefully (if the systems work) should start and also end here.

If you're up for a lengthy read, then check out the **minutes of a major meeting** which took place 10 years after Sep 11th (in 2011, so over ten years ago now) on changes to TSA procedures and processes. Here they are. Read away.

Basically, there are A LOT of procedures and processes for ensuring only 'good' passengers get on

airplanes, and a lot of this lies in the Customs systems that are now in place.

We are going to be **super lazy here** and say 'go read this NBAA post' if you have questions on the specifics of customs and regulations stuff. It's a big old topic and all we're really trying to do here is say "**make sure you get the customs bit right**" (not actually tell you how to).

*But if you do have questions, let us know and we'll root out some answers for you.

- In general, if you're a big airline or commercial operator, a lot of this is going to be done for you at the airport
- If you're a **private or business jet operator** (*that doesn't just fly the owner around*) then you might need to do some more checks yourself (*or more stuff to ensure you're compliant with required security and document checking regulations*).

Here are some vaguely helpful links:

- The US CBP website is filled with info on all things US Customs and Border, along with a bunch of info on things to help speed up the process for pax.
- Your US pre-clearance airports are listed here, along with info on that.
- For international folk arriving into the US, you might want to look at APIS (Advance Passenger Information System Manifest) Transmissions if you don't already know what these are.
- There are fairly hefty fines for the PIC of a private aircraft if you don't follow the US regulations. If you have any questions, try these folk - GAsupport@cbp.dhs.gov
- There is some CANPASS info here for if you want to fly to Canada.
- There is some ETIAS info here for those of you planning trips to Europe.

In the air

Let's jump right in with some **regulatory stuff**:

The US, UK, Europe (and a fair few other places) have fairly strict procedures in place for who can sit in the flight deck jump seat. This doesn't just apply to aircraft registered in whichever place either. **If you are operating into their airspace you probably still need to be thinking about this.**

And we're talking about what the authorities say, not what your company says. This might be stricter (so check that out for yourself).

The basic rule for most places is that during the flight **anyone in the flight deck needs to be authorised to be in the flight deck**.

What this means can vary though.

In the UK for example, only members of the operating crew (the pilots actually flying the thing on that flight) may be in there. No supernumerary crew. No pilots who work for the company, have that type rating, but are just positioning.

There are other authorised folk too:

- Like an aviation authority air carrier inspector.

- A DOD commercial air carrier evaluator.
- An ATC person (but only if authorised by the administrator, and only so they can observe ATC procedures).

You know what, rather than us writing it all out:

- Go look here for the FAA stuff.
- You can try here for the UK CAA stuff.
- And here for EASA (Europe) regs.

Remember German Wings?

The German Wings event brought in **a bunch of big new regulations in the EU**. The main ones being:

- **Regulation 175** which requires airlines ensure all pilots receive a psychometric evaluation within 24 months of employment and before they start their line flying
- A requirement to always have more **than one person in the flight deck**

The second one was problematic. It added an extra layer of hassle when pilots needed to leave the flight deck to use the toilet, (and an added layer of embarrassment when you've had to ask for the fourth time in under an hour). This has been removed and is now just a requirement within certain operator policies, rather than a state or authority requirement.

Not letting random passengers in, in flight, is still a thing though. As is looking after the well-being and mental resilience of your crew and colleagues.

The FAA Flight deck barrier policy.

September 11th brought about a new focus on flight deck security. Namely, **folk can no longer fly with their doors open, and access must be controlled**. This applies to commercial aircraft, it may not apply to your private aircraft.

So, for those it does definitely apply to - a secured door with an access code, or a secure access procedure is required. This is covered in § 121.587 *Closing and locking of flightcrew compartment door* and says:

- (a) Except as provided in paragraph (b) of this section, a pilot in command of an airplane that has a lockable flightcrew compartment door in accordance with § 121.313 and that is carrying passengers shall ensure that the door separating the flightcrew compartment from the passenger compartment is closed and locked at all times when the aircraft is being operated.
- (b) The provisions of paragraph (a) of this section do not apply at any time when it is necessary to permit access and egress by persons authorized in accordance with § 121.547 and provided the part 119 operator complies with FAAapproved procedures regarding the opening, closing and locking of the flightdeck doors.

[Doc. No. [FAA-2001-11032](#), [67 FR 2128](#), Jan. 15, 2002]

Recently, the FAA have recently published a new thing on **flight deck door barriers**. Something the likes of ALPA have been asking for since 9/11.

The summary is that it will apply to **“certain airplanes used to conduct domestic, flag, or supplemental passenger-carrying operations”**. This won’t apply to Part 129 (which is foreign operators heading into the US, or US registered ones that only operate outside the US).

The ‘secondary barrier’ creates an extra level of security by requiring that, prior to the flight deck door being opened, this must be secured shut like a sort of cattle gate.

Knock knock. Who’s there? Jack!

If you do have a hijacker onboard then remember three things:

- Don’t open the flight deck door
- **Don’t open the flight deck door!**
- Do squawk 7500

If you don’t want ATC thinking you have a hijacker onboard:

At any point in flight, (sort of goes without saying, but we’ll say it anyway), **maintain good radio communication.**

There are a lot of ADIZ (military airspaces) out there where you must check in, in advance. There are also a lot of **conflicts** going on which mean countries are particularly cautious when it comes to aircraft not in contact with who they should be in contact with.

If you don’t want some F16s to come swooping up alongside you then:

- Don’t miss radio calls.
- Do check in (in advance) if the airspace requires you to.
- Do try other systems or get relays if you lose contact.
- Don’t accidentally stray into airspace you aren’t cleared to fly into.

And if you don’t have an attempted hijacking going on then definitely don’t do what a South African crew accidentally did in 2016, or what a 747 crew for a major US airline did in 1999. You read about those embarrassing incidents here.

What is going on in Myanmar?

OPSGROUP Team
12 January, 2023



A new airspace warning for Myanmar was issued by Germany on 23 November 2022. EDWW B1361/22 is valid through to February 2023, and looks like this:

SECURITY - HAZARDOUS SITUATION IN MYANMAR CIVIL GERMAN AIR OPERATORS ARE ADVISED TO TAKE POTENTIAL RISK INTO ACCOUNT IN THEIR RISK ASSESSMENT AND ROUTING DECISIONS WITHIN FIR YANGON (YYYF) BELOW FL160. POTENTIAL RISK FROM MILITARY OPERATIONS, SURFACE-TO-AIR FIRE AND ANTI-AVIATION WEAPONRY. CREATED: 23 Nov 2022 09:08:00 SOURCE: EUECYIYN

Take potential risk into account if planning on heading below FL160 in the YYYF/Yangon FIR.

You might not be a German operator, and as far as we know this is the only warning out there.

The UK hasn't issued one. France hasn't issued one. EASA haven't mentioned it, the FAA haven't either... but since Germany has, it is probably worth thinking about (whoever you are) if you operate in any way in the Yangon FIR.

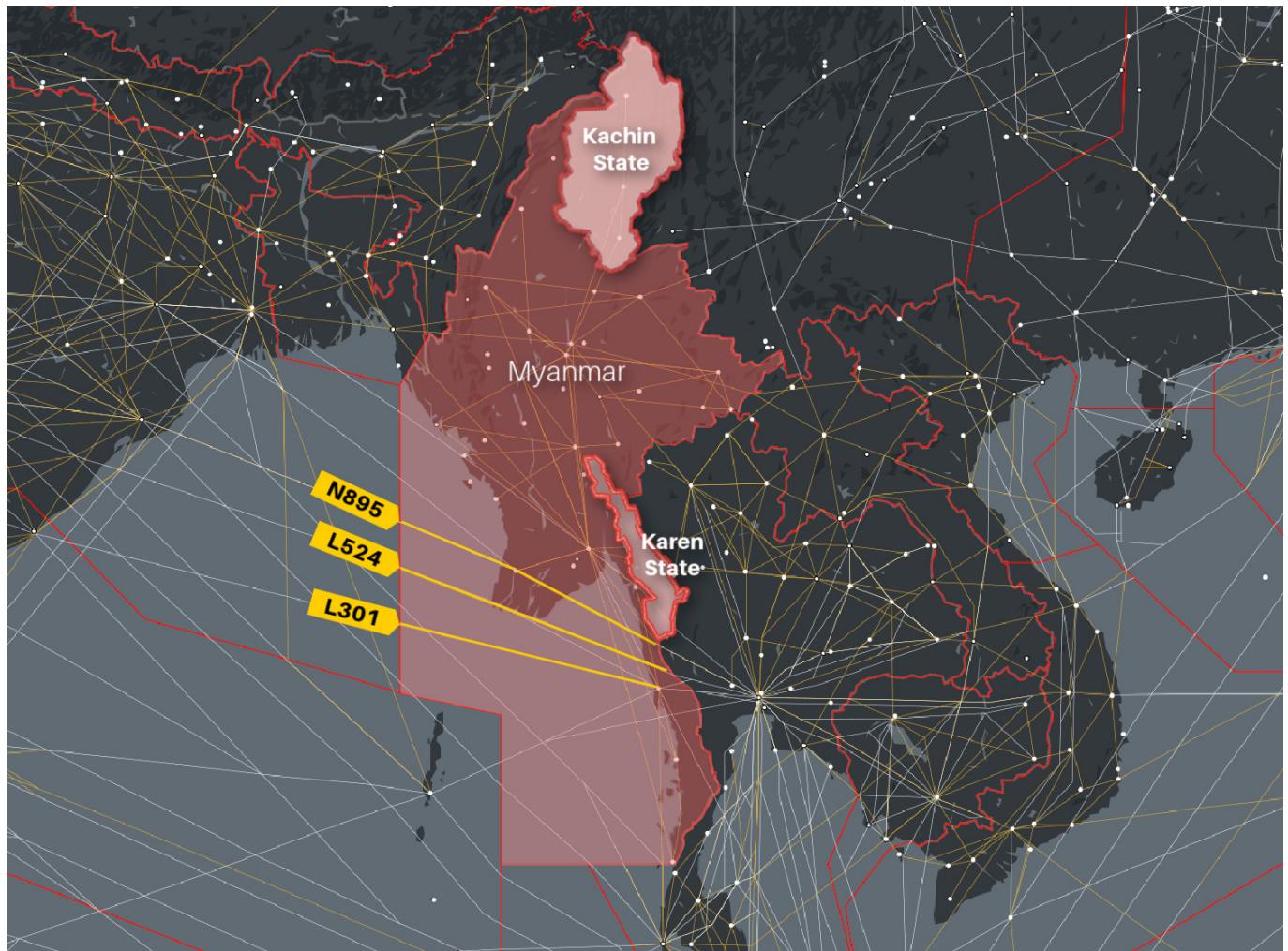
So, what is going on in Myanmar?

Myanmar had a military coup in February 2021. You might remember it because a sudden, significant lack of ATC occurred across their airspace.

We covered that here in a whole lot of detail, but in short: **the majority of ATC and AIS staff went on strike**, leading to contingency procedures (ATC zero) and very limited notams for a while. Since then, ATC and AIS services are back up and running.

But there has been **growing unrest in the country** with increasing numbers of strikes and mass protests by opposition groups. The response has been an **increase in military force resulting in clashes as well as airstrikes** on areas where militia are known to be active.

Security and safety within the country is deteriorating, and **airspace risk is increasing** because of the potential risk from military ops, surface-to-air fire and anti-aviation weaponry.



Passenger injured by bullet.

On Sep 30, 2022, a Myanmar National Airlines passenger was reportedly shot in the face as **bullets passed through the fuselage of the ATR 72 aircraft on approach to VYLK/Loikaw.**

Myanmar's military gave a statement at the time saying the aircraft came under fire at a height of approx 1,000 m about 4 miles north of Loikaw Airport, and blamed the attack on two resistance forces – the Karen National Progressive Party (KNPP) and the People's Defence Force. KNPP reportedly said that they were not involved, and avoid civilian targets.



The military are also a concern.

Cambodia recently 'disinvited' Myanmar from attending a major defense meeting involving the Southeast Asian Nations (ASEAN), as they wish to '*diplomatically isolate the military regime*'.

This isn't quite 'sanctions level' from Myanmar's neighbours, but it is an indication that the ruling government's method of controlling the situation is not one which is ensuring safety and security in the country.

There are travel warnings in place, including ones from the UK and the US, and the US Embassy issued a new warning on Nov 29 warning of a general increase in violent attacks in the country. **If you do have crew heading in, consider the information in these**, and think how it might impact your crew:

- Security and safety due military response to gatherings and protests is a concern
- Airspace risk due military traffic and airstrikes is a concern

US Sanctions?

The **FAA doesn't have an airspace warning**, but they do have something, and it can be read here (it's under the FAA prohibitions, restrictions and notices bit).

Re-issued in January 2022, this advisory is from the **OFAC (Office of Foreign Assets Control)** and it talks about the *"Risks and Considerations for Businesses and Individuals with Exposure to Entities Responsible for Undermining Democratic Processes, Facilitating Corruption, and Committing Human Rights Abuses in Burma."*

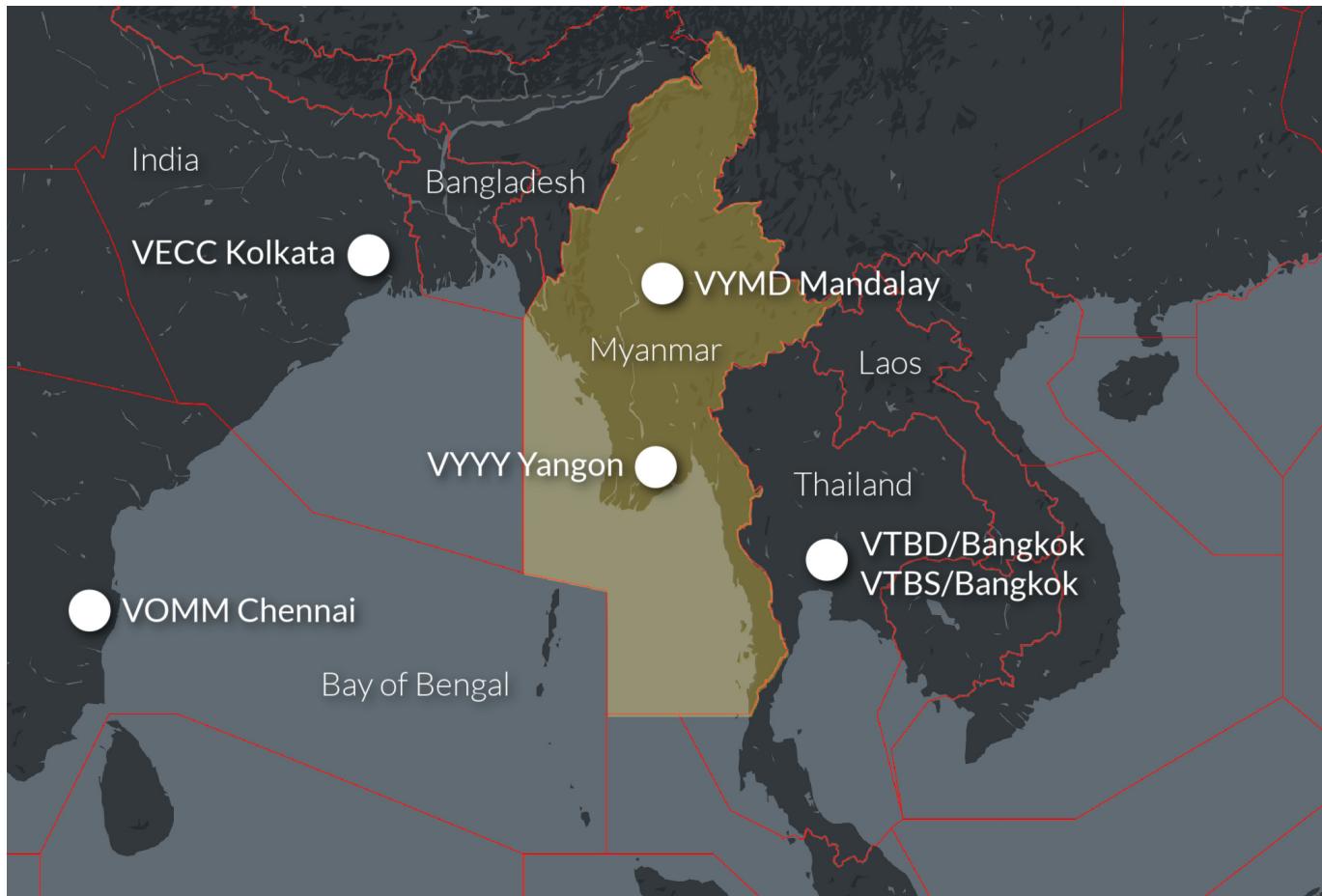
Basically, **be careful doing any sort of business** with anyone there, because if it's with Tatmadaw (that's the military folk) you could get into trouble with the US, or with Tatmadaw (because they're apparently quite corrupt).

Most goods from Myanmar cannot be imported back to the US. While other sanctions have eased off a bit, you can still **run into issues with paying for fees** (overflight permits etc) so using a 3rd party service (that has an OFAC licence) to organise these may prove easier.

Some general considerations.

Here are some general considerations and info, to help you plan:

- **VECC/Kolkata**, India, is a good diversion airport if needed to the west of Myanmar. It has 2 runways, 01/19 L/R and both are over 3000m. There are CAT II/III approaches available.
- **VOMM/Chennai**, India, is a good option if on a more southerly routing. 07/25 is over 3500m and has an ILS. 12/30 is 2800m and RNP only.
- **VTBS/Bangkok Suvarnabhumi and VTBD/Bangkok Don Meang**, Thailand, are decent options just to the east of Myanmar. VTBS has 01/19 L/R which are both over 3500m and CAT II. VTBD has 03/21 L/R, over 3000m and CAT II capable.
- More southerly routings will take you across the **Bay of Bengal** and you will only cross a thin sliver of Myanmar land, but the airspace itself continues quite far south. This may be preferable if routing towards Malaysia, Singapore or Indonesia.
 - L301 is mostly offshore, crossing the small sliver of land prior to the Thai border. M770 is offshore, routing SE.
- If routing towards Hanoi, Hong Kong and Taiwan you may find a more northerly routing which crosses central Myanmar is required.



Myanmar airspace and airport considerations.

- **VYYY/Yangon** airport has runway 03/21 which is 3414m, with an ILS CAT I.
 - **MJets are the main FBO** +951 401 590 / +95 978 639 5811 / yangon@mjets.com
 - There were reports of explosions and gunfire at an army checkpoint near VYYY/Yangon airport during protests in 2021
 - There were reports of difficulty uplifting fuel at VYYY/Yangon due to local political restrictions. While this was in 2021, ongoing concerns regarding **military airstrikes against civilians may lead to fuel sanctions** from foreign suppliers, leading to a shortage for civilian aircraft as well.
- **VYMD/Mandalay** airport is an international airport. Runway 17/35 is over 4000m, with an ILS CAT I on 17.
 - There are notams downgrading RFF to 7, and advising the AWOS is u/s.
 - The city itself has seen heavy military action and is considered a security and safety risk on the ground.
- **There is an ADIZ within the Yangon FIR.** You do need to check in in advance with them, and they do sometimes request confirmation of your ADC number.
- **There may be an increase in military traffic.** Caution with radio comms and accurate navigation is important.
- **Weather can be challenging in the entire region.** Consider it in advance in case detours

are required.

- Yangon has **CPDLC (VYYF)** but it isn't compulsory.
- M770, L301 remain offshore. L524 passes over the southern tip. N895 routes across Myanmar.

Last but not least, permits:

- You need a permit for everything here. Takeoff, landing, overflights, and regardless of whether you're private or commercial.
- **Navigation fees have to be paid in advance.** If you have time you can set up an account with the CAA and apply for your permits directly. If not you can use an agent who can pay these on your behalf (and we recommend that). You need to give **five days notice for landing and three days notice** for overfly permits. Here's a handy list from Asia Flight Services for all the prices in the region.
- DCA +95 1 533015 / dgdca@dca.gov.mm
- **Asia Flight Services** +66 2329 5938 / occ@asiaflight.aero

Member Top Tip: *"If you are planning of fly any sort of business jet into Myanmar, be prepared to have a lot of cash (USD preferred). They assume that business jets are full of wealthy individuals and 'expediting fees' are often liberally requested. This is one of those places you don't want to negotiate, just pay and get in the air as soon as possible."*

Member Top TIP: *"Paying in USD is preferred. Some pointers on condition of the notes that will be accepted:*

1. Notes have to be new ones
2. Notes have to be clean, devoid of any writing, marking, stamp, bank seal etc
3. Notes cannot be folded or with creases
4. No hole or tear allowed on the note"

PIREPs of the Caribbean

OPSGROUP Team
12 January, 2023



It is heading, at a chillingly fast pace, into winter in the northern hemisphere, which means we usually write posts on ski season spot ops. But we did that last year, so this year, we thought a nice hot weather one could be fun instead.

Which is why this is a post all about operating to the Caribbean.

**There is nothing about PIREPs in this at all, I just thought that was too good a pun to not use.*

When is peak season?

That would be now: Late November to mid April.

It is peak for two reasons:

- **One**, its still nice weather there while the northern hemisphere is generally in the midst of cold and wet misery so like winged sunflowers, or maybe moths, everyone starts heading for the sunshine.
- **Two**, there are a bunch of big holidays like Christmas and New Years and people like to go somewhere nice to celebrate.

All this means **a lot more GA traffic** which means busy airspace, delays, and parking problems if you haven't pre-planned.

What to pre-plan?

Read this very helpful post from the folk at Universal Weather. We could re-write it all out for you here but seems pointless when they've done such a good job. And all that permit parking slot stuff is dull.

So, on to more interesting stuff.

We thought we might take a look at the airports themselves instead, because there are challenges that will really *shiver yer timbers* if you don't know about them.

While looking up information, we also discovered this old pirate map in an ancient bottle of rum ☐ ☐✿

The Airports



TNCM/Princess Juliana, St. Maarten, Netherlands Antilles

Hours: 0700-2100L, O/T O/R PNR available for non-scheduled flights

Runway/Approach info: 10/28 7546'/2300m RNAV/Visual RFF9

Timber shivering stuff: You're going to need a special qualification to head in here. It has some unusual procedures because of the big old mountains near it. There is Class C airspace right above it and it all gets super congested there.



TIST/ Cyril E King, St. Thomas, Virgin Islands

Hours: 0700-2300L, US preclearance airport

Runway/Approach info: 10/28 7000'/2134m ILS 10 RFF7

Contact Info: Airport +1 340-774-5

Ahoy matey! What else can yer tell me?: Another one needing special qualification due hills. They also have noise sensitive areas, class c airspace and all the congestion that comes with it, and turbulence and wind shear to deal with.



TUPJ/Terrance B Lettsome (Roadtown), Tortola, Virgin Islands

Hours: M-F 1230-2030Z, O/T PPR

Runway/Approach Info: 07/25 is only 4646'/1416m with an RNAV to 25 RFF5

Contact Info: Airport +1 284-394-8000/ FBO: IAM jet centre +1 284-495-0303 eisops@iamjetcentre.com

Yarr! Argh! stuff: Smaller airport. It is hilly around the airport, and the short runway ends in water... There are also no VFR ops by night.



TBPB/Grantley Adams, Bridgetown, Barbados

Hours: H24

Runway/Approach Info: 09/27 11017'/3358m ILS 09/RNAV RFF 9

Contact Info: Airport +1 246-536-1302/ FBO: IAM jet centre 1 246-428-1704 aviation@iamjetcentre.com

Avast, ye scurvy threats: This big one can handle big aircraft, although there are some ground restrictions for the medium and heavy folk. There are NABT procedures too. Nice one for tech stopping and maintenance action.



MYNN/Lyndon Pindling, Nassau, Bahamas

Hours: H24R US Pre-Clearance Airport

Runway/Aroach Info: 14/32 10925'/3330m ILS 14/RNAV RFF8 and 10/28 8302'/2530m RNAV/VOR

Contact Info: Airport +1 242-702-1010 feedback@nas.bs / FBO: Jet Aviation jnas@jetaviationnassau.com +1 242 377 3355 / Odyssey Bahamas info.mynn@odysseyaviation.com +1 242 702 0200

Yo ho ho: One of the bigger. Not without its challenges though. There are prohibited and danger areas near the airport to look out for. These mean some special IFR departure procedures if heading W, SW or NW (basically anyway involving some westwardly way). Lots of traffic below 10,000' here too



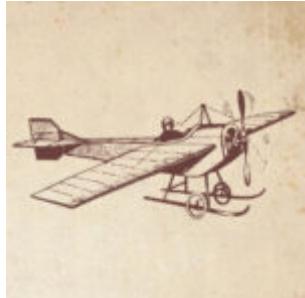
MWCR/Owen Roberts, Georgetown, Grand Cayman, Cayman Islands

Hours: Ops 0700-2100L, O/T O/R; Admin M-F 0830-1700L

Runway/Approach Info: 08/26 7867'/2398m RNAV RFF7

Contact Info: Airport +1 345-943-7070 ciaa@caymanairports.com / FBO: Island air +1 345-949-5252 2 0200

Here be treasure, matey: They don't have radar here, but they do have noise sensitive areas so navigate carefully.



TAPA/VC Bird, St.John's, Antigua

Hours: H24R

Runway/Approach Info: 07/25 9967'/3038m RNAV (GNSS) RFF8

Contact Info: Airport +1 268-484-2300 info@abairportauthority.com / FBO: Signature +1 268-462-2522 ANU@signatureflight.com

May yer compass be true: This has some skinny little taxiways that anything over 65000lbs, or with wings over 100' (30m) isn't allowed to use (and they can only use by day). This means backtracking aircraft on the runway which means you'll probably have to hold on arrival for spacing. It is quite a popular tech stop airport though.



MBPV/Providenciales, Turks and Caicos

Hours: M-F 1230-2030Z, O/T PPR

Runway/Approach Info: 10/28 9199'/2804m RNP/VOR RFF 7

Contact Info: Airport +1 649-946-2137

Wall the plank: A bigger airport, this also has a lot go GA traffic and also some parasailing hazards to add to the fun.



TQPF/Clayton J Lloyd (Wallblake), The Valley, Anguilla

House: 1200-2000z

Runway/Approach Info: 11/29 5459'/1664m RNP RFF5

Contact Info: Airport +1264-497-2384/ FBO: Lloyd Aviation +1 264-498-4141 info@lloyd-aviation.com

Scallywags: Another little one that only allows IFR by night. There are a lot of poles, antenna and also birds around the airport. So keep a good look out (probably why its IFR only at night).



MKJS/Sangster, Montego Bay, *Jamaica*

Hours: H24R

Runway/Approach Info: 07/25 8735'/2662m ILS 07/RNAV 25 RFF9

Contact Info: Airport +1 876-952-3124 Slots slotrequest@mbjairport.com/ FBO: IAM jet centre +1 876-979-3855 mbj@iamjetcentre.com

Batten down them hatches: A good tech stop spot, but look out for the mountains and the high minimas and the noise sensitive bits. Also look out for the many small airports (and traffic heading into them) which fill the airspace. They have some specific NABT procedures to look into, and it can get windsheary.



MDSD/Las Americas, Santo Domingo, *Dominican Republic*

Hours: H24

Runway/Approach Info: 17/35 11004'/3354m ILS 17/RNAV RFF9

Contact Info: Airport +1 809-947-2225 operador@aerodom.com/ FBO: Servair +1 809 549 1404 fbo@servair.com.do

Other stuff: Don't confuse San Isidro AB for MDSD. And don't head in unless you have the qualification – it's one of those because of the airbase and prohibited areas nearby. Terrain nearby is also a bit of a concern, as is FOD on the runway (not sure why, but enough to permanently mention it apparently). There are also minimum ceiling restrictions of approaches so worth familiarising yourself with the charts before heading in.



MDLR/La Romana Casa de Campo intl, *Dominican Republic*

Hours: H24

Runway/Approach Info: 11/29 9678'/2950m RNAV(GNSS) RFF8

Contact Info: Airport +1 809-813-9000 info@lrm.com.do/ FBO: Swissport Dominicana +1 809 813 9123 lrmexecutive@swissport.com.do / Universal Aviation +1 809 813 9070

Hoist the mainsail: This place requires a 180 turn and backtrack on both ends of the runway and has limited taxiway and apron space. There is a nearby restricted area and noise sensitive bits. ATC often speak in Spanish for local traffic so watch out.



TJSJ/San Juan Luis Munoz Marin, Puerto Rico

Hours:H24

Runway/Approach Info: 08/26 10400'/3170m ILS 08 / RNAV RFF8 and 10/29 8016'/2443m ILS 10 / RNAV

Contact Info: Airport +1 787-253-2329 info@aerostarairports.com/ FBO: Airport Aviation Services +1 787 791 8500/

Jet Aviation San Juan +1 787 791 7005 hector.vasquez@jetaviation.com

Pazo's fuel services +1 787-791-7005 fboservices@pazosfbopr.com

Down to Davy Jones' locker with ye: A good tech stop option. It does have some mountains nearby, and it is in primary Class C airspace.

Also don't get confused by TJIG/Fernando Luis Ribas Dominicci nearby

Where else can I get info?

Opsgroup wise: we have a library of **Airport Lowdowns** that you might find useful. If you're a member you can also head to **Airport Spy** and read a whole load of reviews from other members sharing what they experienced.

For example:

AOPA make some very handy slot guides which you can find [here](#).

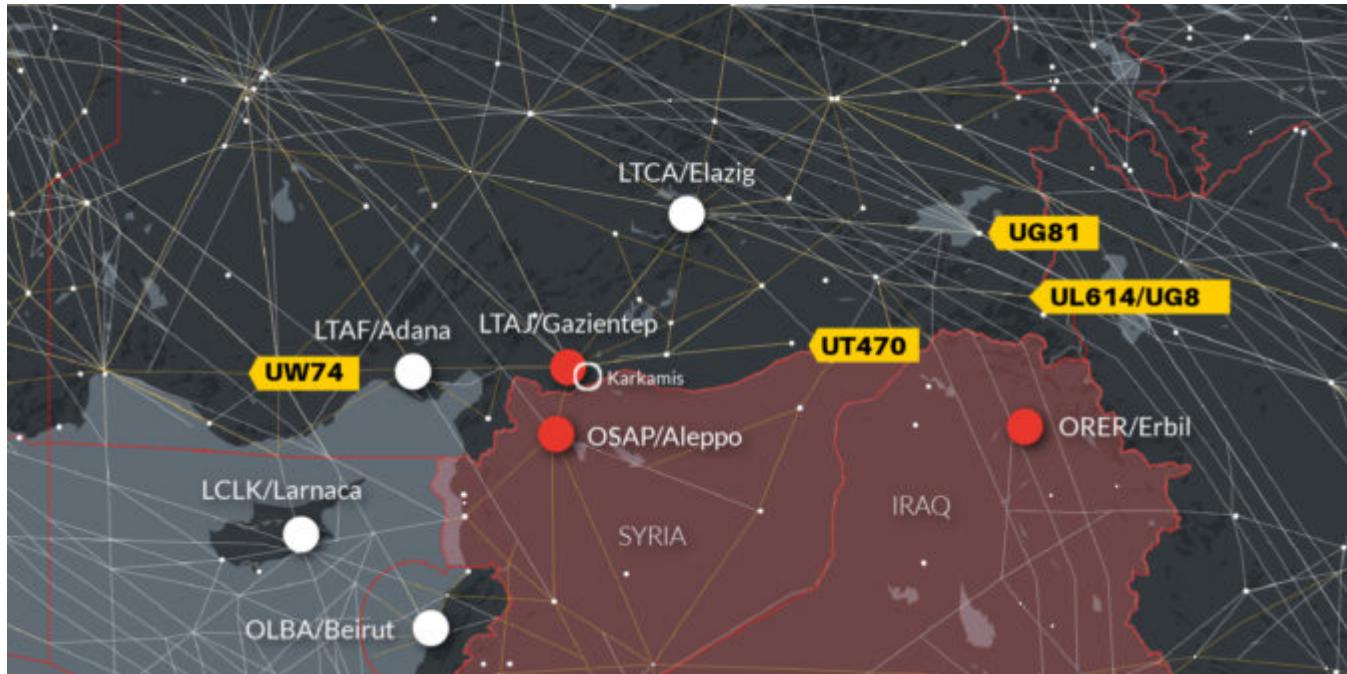
They include useful stuff like info on airports, stuff to do while you're there, and photos of pineapples.

The Caricom e-APIS site is here. You'll need this for advance information sending about passengers.

The FAA guide to the Caribbean en-route stuff can be discovered here. This is a treasure trove of information on en-route stuff, weather stuff, and all things to do with operating in the airspaces.

Turkey, Syria and Iraq: Airspace Risk

OPSGROUP Team
12 January, 2023



The airspace risk in Syria and Iraq are both discussed regularly, with numerous warnings and prohibitions from major authorities.

However, Turkey is seeing an increase in security and safety concerns along its **southern border with Syria, and the eastern region which borders Iraq**, because of the conflict and tensions in this region. And not a lot is said about it.

Why is Turkey seeing increased risk?

Keeping this as simple and non-political as possible because it is really just for context - Kurdish people are an ethnic group native to Kurdistan which is a big area spanning southeastern Turkey, northwestern Iran, northern Iraq and northern Syria.

Here's a map of it:

Turkey has an **ongoing conflict with armed Kurdish groups**, particularly one called the PKK who have fought against Turkish authorities since the 1980's, hoping to establish an independent Kurdish state.

In addition to this, Syria have their own civil war also involving their Kurdish population, as does Iraq. Turkey borders each of these countries, and spillover from these has led to more and more military action by Turkey.

Risks for aviation:

There are two main risks previously highlighted:

1. Misidentification and anti-aircraft weaponry

The primary risk is misidentification by local militia who infrequently target Turkish military aircraft with MANPADS and weaponsied drones. Operations to LTAJ/Gaziantep should be carefully reviewed given its proximity to the Syrian border.

The US FAA published a note on Turkey in 19 May 2021 referring to the threat from militia with access to anti-aircraft weaponry.

2. GPS jamming

The secondary risk is GPS Jamming. Turkey has long been an area which sees significant GPS Jamming. There are **frequent reports from crews of GPS signal interference** in Turkish airspace – with some as far away as abeam Baghdad. GPS jamming is common through the LTAA/Ankara FIR, and especially on the border between the ORBB/Baghdad and OIIX/Tehran FIRs.

Turkey Notam LTAA A6691/22, valid through to 6 January 2023 relates to GPS Jamming.

Other growing risks for air crew and air operations:

1. Security on the ground

Security in major cities, and in regions along the border, in southern Turkey is a growing concern. Crew should be aware of these and should avoid travelling close to the border regions.

Caution should be taken if visiting large public spaces and tourist areas as there is a **heightened risk of terrorism**.

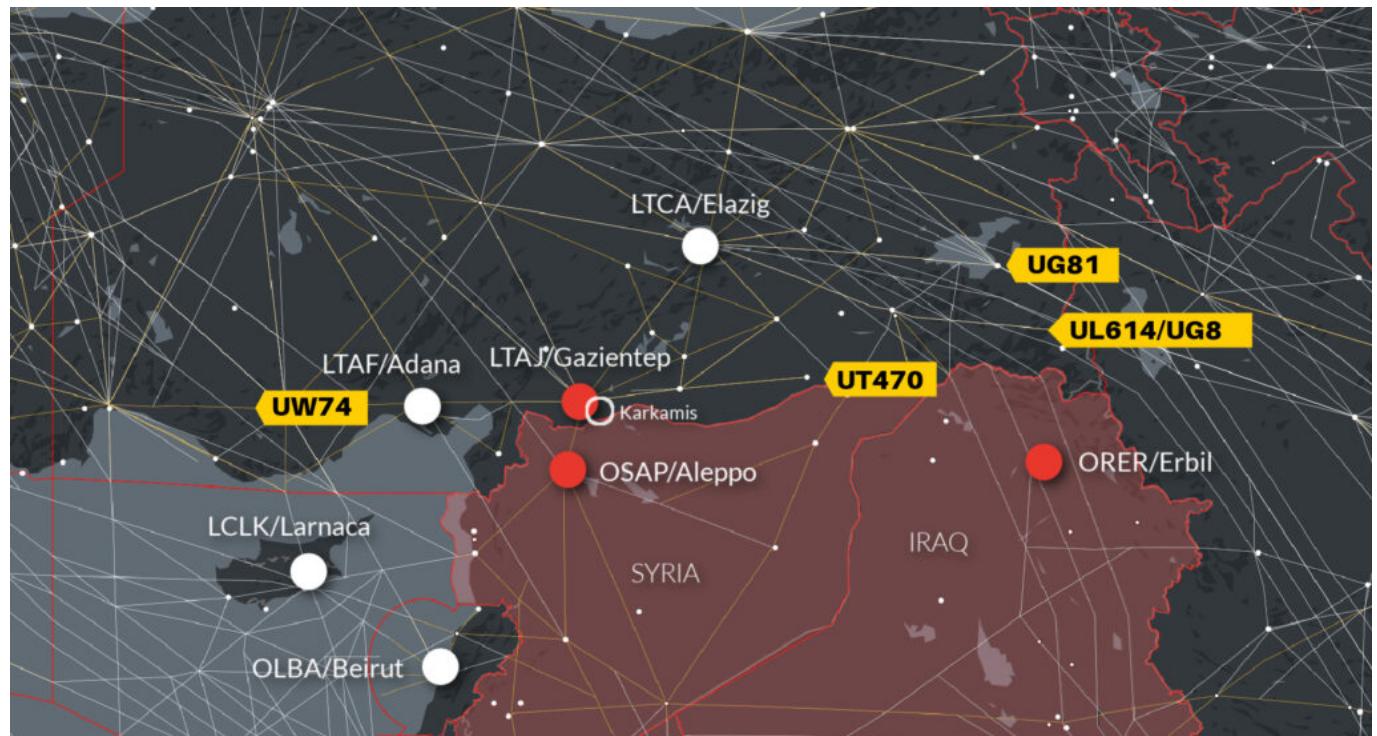
Prepare for **potential disruption and delays due heightened security** in airports.

Consider the implications of diverting to airports where you have no ground contacts, engineering or support. There may be political concerns to consider as well depending on the nationality of your crew or passengers.

2. Risk in southern Turkish airspace

Along the border with Syria and Iraq in proximity to conflict zones, there is a **higher level of airborne military traffic, UAS and the risk of proximity to airstrikes**.

Most major authorities advise operators to exercise caution when operating in the airspace within **200 NM of the Damascus FIR (OSTT)**, which should be considered to include the southern region of Turkey as well as the countries neighbouring Syria to the west.



Major events

- On Nov 21, the Turkish border town of Karkamis was hit by **artillery and rockets from across the Syrian border.**
- On Nov 13, a **bomb attack in Istanbul** attributed to the PKK resulted in Turkey carrying out airstrikes against Syria and Iraq. Operation Claw-Sword is reported to have involved **70 aircraft and drones.**
- In May 2021 an attempted drone attack by local militia on LTCC/Diyabakir airport in South Eastern Turkey.
- In Jan 2019, Turkish security forces intercepted three weaponised drones during attempted attacks against sites in southern Turkey.

A full briefing on Turkey can be found on Safeairspace.net

Syria

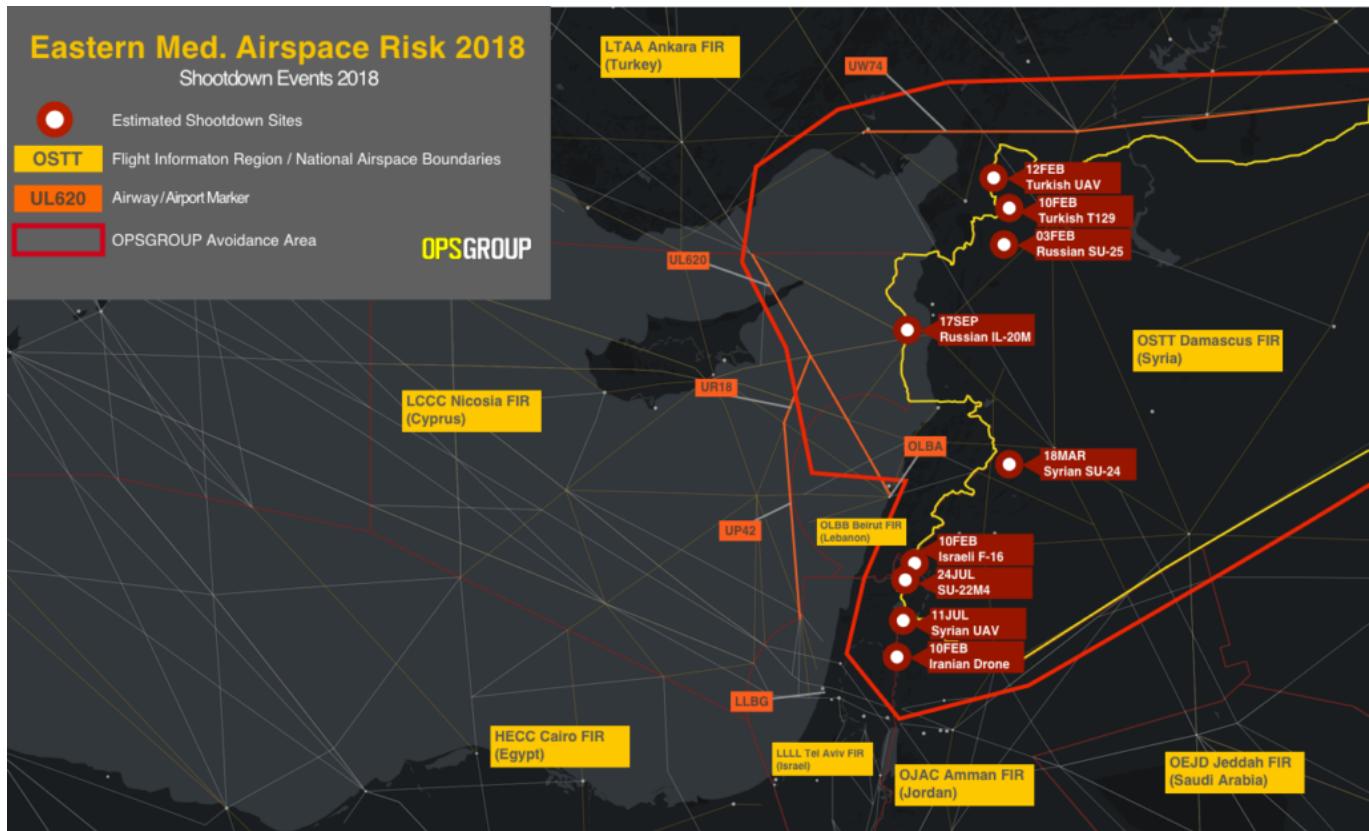
There is a high risk to civil aircraft. Syrian airspace (OSTT/Damascus FIR) should be avoided entirely. Airspace adjoining the Damascus FIR is also at risk: Cyprus, Turkey, Israel. Total flight ban for US, UK and German operators, and several other countries have issued warnings to avoid the airspace of Syria.

The primary risk is a misidentification by Syrian air defense systems. Civil aircraft may be targeted in error, or caught in crossfire during ongoing air attacks involving Israel, Russia, Iran. Missiles may erroneously lock on to civil aircraft. Israeli airstrikes on Syria are regular, and do not show any regard for civil traffic.

There is a clear risk to civil aircraft operating on airways UL620, UW74, UR18, and UP62.

The FAA information on Syria warns the threat is extended to adjacent FIRs in the Eastern Mediterranean region including the LLLL/Tel Aviv, OJAC/Amman, OLBB/Beirut and LCCC/Nicosia FIRs. Use caution if operating in the area.

A full briefing on Syria can be read [here](#).



Iraq

Most major authorities **advise against operations below FL320 in the ORBB/Baghdad FIR**. The US FAA amended their KICZ Notam from prohibiting all operations, to this in October 2021.

In Sep 2022, Iran closed a section of airspace in the north of the country along the border with Iraq, and is using the area to launch missile and drone attacks at targets near ORER/Erbil Airport. Iran are warning their own operators against flying in Iraqi airspace.

ORER/Erbil is the primary airport located in the Iraqi Kurdistan region and regular artillery, rocket and missile attacks target this region. Operations into the airports including diversions, should be avoided.

A full briefing on Iraq can be read [here](#).

Keep an eye on Shiveluch

OPSGROUP Team
12 January, 2023



Shiveluch is a 70,000 year old volcano with quite a bad temper. We thought we might introduce you to this hot headed fellow because it might have an impact on aviation in the not too distant future.

It has been reported as 'extremely active' since November 20, and an eruption is expected imminently.

Say hello to Shiveluch.

Or **Шивелуч** to give him his Russian name since he is, after all, Russian.

Shiveluch lives on the **Kamchatka Peninsula** (the far east bit of Russia that sticks out into the Pacific Ocean, and the Sea of Okhotsk). Shiveluch and Karymsky are the most active volcanoes on this bit of land.

What's the eruption history?

He's been blowing his top for about 10,000 years, but the **current eruption period started in 1999** and he's kept it up with a fair few explosions, **frequent ash cloud spitting** along with 'incandescent block avalanches, and lava dome growth' since then.

In February 2015 the ash cloud (which is really the bit we're worried about in aviation) shot up to **30,000' and crossed the Bering Sea and into Alaska.**

In June 2022 it hocked up a dense ash plume which reached about **7 km in altitude.**

Where will a big ash cloud potentially affect?

Unfortunately this is dependant on how much ash he coughs up (historically quite a lot), and **which way the wind blows:**

- **UHPP/Yelizovo Airport** (Petropavlovsk-Kamchatsky)

This airport lies south of the volcano, on the peninsula, and is **popular fuel/tech stop for BizAv aircraft** but is currently not available anyway due prohibitions against operations into Russia airspace.

- **Alaska**

Alaskan airspace was affected back in 2015 and more recently in April 2022. Ash reached 32,000' and moved across the Pacific Ocean, **impacting traffic routing over the northeast region** and the Gulf of Alaska.

PANC/Anchorage could be affected, along with smaller airports such as **PADK/Adak** and airport along the Aleutian Islands currently used as fuel/tech stops while Russian airports are unavailable.

- **North Pacific/Bering Sea**

Aircraft heading between the USA and Asia utilise routings here which may be impacted by large ash clouds.

- **Japan**

Winds don't predominantly blow this way, but ash could potentially still disrupt airports and airspace in this direction.

Keep an eye on him.

You can read his full history here. They post **regular bulletins and reports** on the ongoing action.

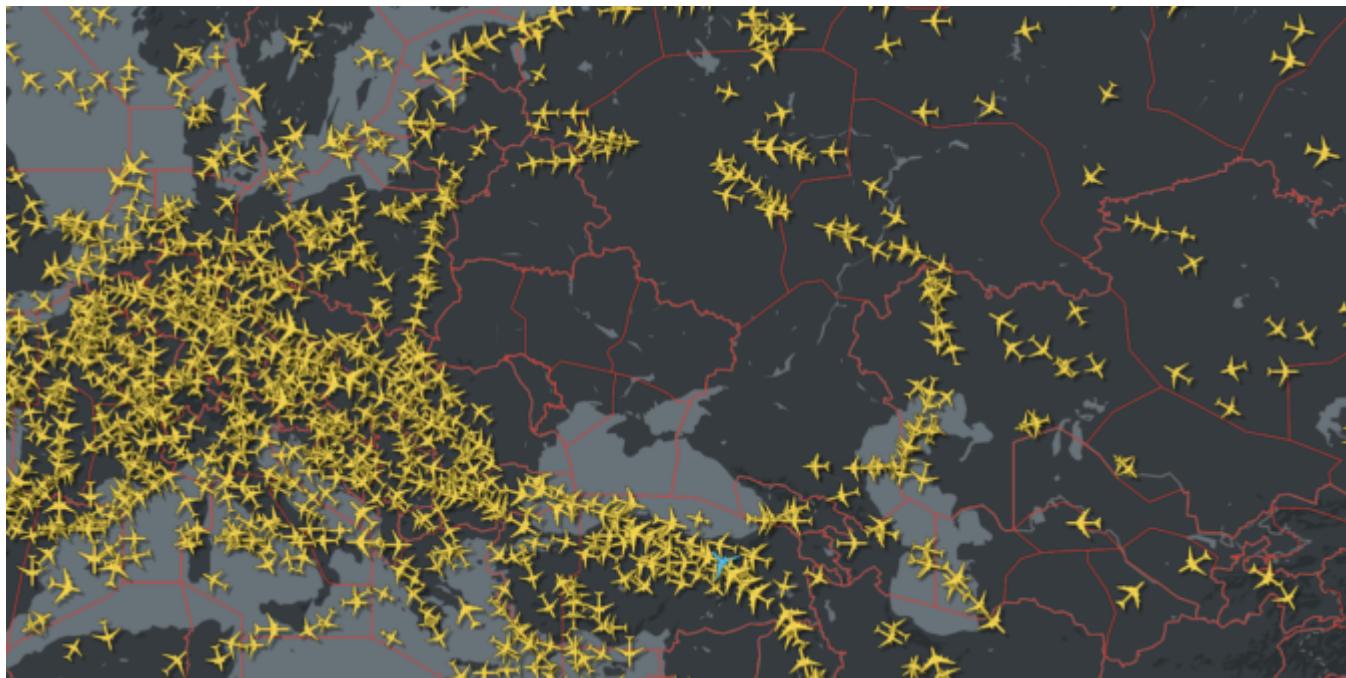
The **Tokyo and Anchorage VAACs** monitor this volcano. You can find links to their sites here.

Volcano Discovery also provides some handy info on volcanoes and their current action.

Look out for **ASHTAMs and SigWx information** for the North Pacific and Alaska region.

Ukraine-Russia Spillover Risks: Nov 2022

OPSGROUP Team
12 January, 2023



A missile involved in the Russia-Ukraine conflict fell in Poland on Nov 15, close to the border with Ukraine. There are no prohibitions or warnings for Polish airspace, however the border region is (clearly) high risk and operators should avoid flights in or over this area.

The following map shows two airways which lie in proximity to the border and which may be used by overflying aircraft. The airways routing into Ukraine, Belarus or utilised for routes into prohibited airspaces have not been highlighted.

The ongoing conflict between Russia and Ukraine continues to pose challenges and risks to international flight operations.

We covered these previously in this post which looked at:

- Ukraine, Moldova, Russia and Belarus **airspace closures**.
- Which countries have banned Russian aircraft and operators, and **which countries has Russia banned** in response?
- The differences between the **sanctions imposed on Russia** by the US, the UK, and the EU, and the nuances of how these sanctions may impact your flight.
- Considerations for operators now looking to **route around Russian airspace**.
- Information on **Humanitarian relief missions**.

What has changed?

In terms of the above, very little. Ukrainian airspace remains closed and poses a significant risk to aircraft.

All the major countries who regularly issue airspace warnings (the US, UK, Canada, France, Germany, plus several more) have issued total flight bans for Ukraine due to risk from military activity at all levels.

The primary risk is an unintended targeting of civil aircraft by military, including misidentification (as with MAS17, UIA752).

What has changed is the potential spillover risk. The FAA has released an Information Note

regarding this, which you can read here.

What does it say?

Pretty much an updated report of what we said in this post back in March 2022.

In a nutshell - *“Russia’s increased use of developmental weapons, use of weapons in nontraditional roles, and long-range missile strikes into western Ukraine increases potential spillover risk concerns for U.S. civil aviation operations in adjacent airspace.”*

In other words, the risks and hazards are not necessarily confined to the geographical borders which are used to define ‘risky airspace’ (the areas covered by current conflict-related flight prohibition NOTAMs and other warnings).

The three main points in the FAA Information Note are these:

1. **Russia periodically launches missiles targeting Ukraine which transit Moldovan airspace.**
2. **There have been reports of comms and GPS jamming outside the conflict zone, particularly over the Black Sea and Caspian Sea.**
3. **Drone/UAS activity has expanded, especially around Crimea and eastern Ukraine.**

1. Missile launches

Russia periodically launches missiles targeting Ukraine from positions in the **Black Sea and Caspian Sea**. The flight paths for these generally route across Moldovan airspace.

Moldova initially closed all their airspace, but have since opened a section on their western border with the **LRBB/Bucharesti FIR for flights to LUKK/Chisinau airport**.

On Nov 15, **a missile fell in Poland**, close to the border with western Ukraine. It is not clear whether this was launched by Russia or by Ukrainian Air Defenses, but it signifies a heightened level of risk in regions bordering the conflict zone which are **not necessarily covered in prohibitions and warnings**.

An awareness of the **proximity to significantly high risk airspace** is advised.

The FAA SFAR related to the conflict and listing the prohibited airspaces can be read [here](#).

2. GPS Jamming

This has been reported beyond the regions outlined in NOTAMs and airspace warning areas.

Civil aircraft flights who route close to the borders of the conflict zone, or which transit the southern **Black Sea or northern Caspian Sea** may experience jamming.

A member reported - *“Flew recently from the UAE over Iraq and Turkey and over the western edge of the Black Sea. Once inside Turkey, the GPS signal was lost and remained out until northwest of the of western Black Sea. Dual GPS plus a portable GPS receiver confirmed the loss of signal. Also, no satellite wifi during same period.”*

EASA has issued Safety Information Bulletin on Global Navigation Satellite System (GNSS) jamming in the Baltic Sea area which you can find [here](#).

3. Drone/UAS hazard

The use of Unmanned Aircraft Systems (UAS) has been increasing, on the Russia side.

These fly at lower altitudes (they say a max of about 16,000') and there is a **risk of 'errant activity'** ie not flying where they should fly. In June 2022, one such errant UAS was reported in eastern Turkey.

These represent a hazard to aircraft given their size, the fact they are generally weaponised, and the fact they are not always where they are supposed to be.

Other spillover risks

These are not covered in the FAA note, but we figured worth mentioning anyway:

- **Increased traffic levels:** Turkey is seeing higher traffic levels due to airspace closures, as aircraft now transit their airspace. There is also an increase in military traffic in airspace bordering the conflict zones.
- **Crew fatigue:** Longer routes, more challenges en-route, operational and planning challenges have not gone away, we are just starting to see them as the 'status quo'.
- **Ongoing fuel and energy supply issues:** These are more indirect, but the increase in costs and availability has led to some supply issues, as well as protests across many regions which means potential disruptions and security concerns.

Stay updated!

A full briefing on the airspace risks with up to date notice and NOTAM references can be found at Safeairspace.net

Please report back to us any new info you come across (be it airspace risk related, or simply sharing your experience of a recent flight) and we can help redistribute that info back out to the group so that all are aware.

You can email us at news@ops.group, or file a report of a recent trip on our **Airport Spy** page here: ops.group/blog/spyreport



Got some intel?

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The Safety Watchlist 2022

OPSGROUP Team
12 January, 2023



The Transportation Safety Board of Canada released its Watchlist for 2022, highlighting what they think the bigs and the bads to look at in the industry are. We figured it would be a lot of specifically Canadian things like grizzly bears on runways, and whether a hockey stick counts as a dangerous weapon when brought on board.

Turns out that it's all things which are *globally* big and bad. What's more, now the Covid stuff has (mostly) gone away (you might remember the whole pulling airplanes out of storage and finding bugs nesting in them fear), **these are big, bad things which we've been talking about in the industry for quite some time.**

So, because it's November 2022, which is basically December, which means the year is pretty much over, we figured we'd tell you all about it.

The Highlights

Seems an odd choice of word, theirs not ours.

So, the first one on the list was something about commercial fishing safety. We aren't sure if we have any commercial fisherfolk at Opsgroup, apologies if we do, but we don't think so, so figured we would not pause too long on this one.

Same for railway signal indications. Not so relevant to aviation. We will say that following signals as a pilot is important though. If you don't **know your interception signals**, you can swot up on them here.

Onto the Aviation highlights

There are 5. We reckon they are going to be quite familiar:

- Runway Excursions

- Runway Incursions
- Fatigue
- Safety Management Systems
- Regulatory oversight

We're going to ignore the last two, just because we don't know much about them.

Runway Excursions

The biggest one. The baddest one. **Aircraft going off the end of the runway.** It happens way too often, and the outcome is often severe.

In Canada, between January 2005 and June 2022 there were on average **9.3 runway overrun occurrences per year**, most of these during the landing phase.

Here's the TSB's graph:

Now, they do in all fairness get some '*overrun encouraging*' weather in the deep and distant north because it gets so **cold and icy** up there.

But then again this isn't limited to Canada.

You find places all over which have **strong winds** (*tailwinds, balloon inducing gusts...*), **heavy rain** (*slippery runways*), **stuff that reduces visibility on short finals** (*increases chances of getting unstabilised*), **hot and high spots** (*increases the ROD required*), **unusual terrain** (*increases the chances of becoming unstabilised*), **short runways** (*possible performance mishaps*), or just *places which are totally easy-peasy so you think it will definitely all be fine and get complacent...*

Runway excursions are a global problem that don't seem to be going away. We might have mentioned this before.

So what can we do about it?

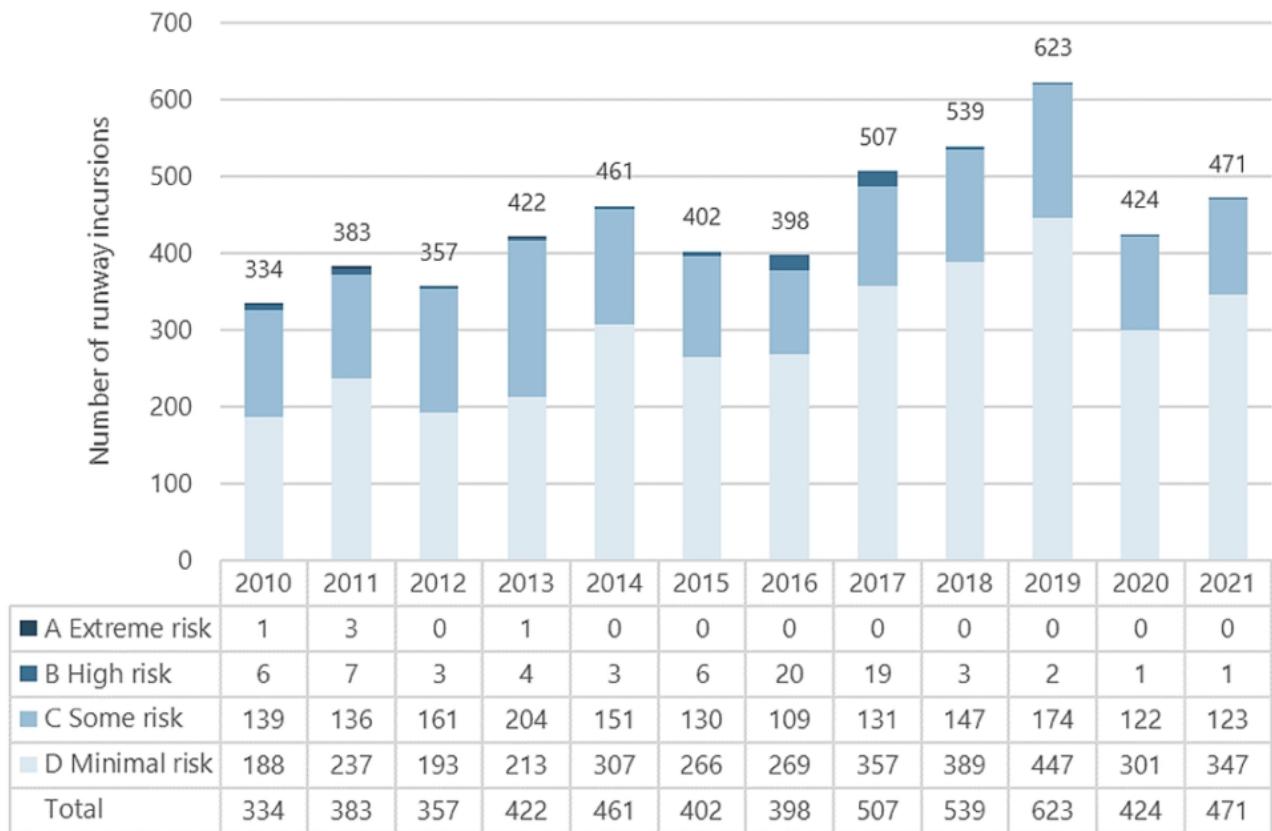
- **Know what GRF is and use it.** If you haven't heard of the (new) Global Reporting Format that came in 2021 then you can read about it [here](#)
- **Use arresting systems.** OK, pilots can't really do much about whether this is available at an airport, but knowing what it is and where it is, is important because some pilots have actively swerved to avoid it. If you're heading off a runway then that sucks but if it has EMAS then USE IT, it might save your life.
- **Fly a stabilised approach.** Or ask the question why you or your crew aren't going around.
- **Do performance calculations... properly.** Not much else to say on that.
- **Be go-around minded.** Air France learned a thing or two about this in 2005 heading into CYYZ/Toronto when the weather deteriorated and they didn't go-around. It led to a runway excursion. Read about it [here](#) if you're not familiar with this one.
- Read this. It's the full TSB rundown on runway overruns.

Runway Incursions

If the risk of heading off the end isn't enough, then there is also a big risk of heading onto the runway when we shouldn't be.

The rate has doubled in 12 years. Thankfully it hasn't resulted in a collision, but still... not ideal.

Here's another graph. because we like their graphs:



There are some big numbers on there.

What can we do about it?

- **Know your hotspot symbols.** The US have recently changed up their hotspot symbols to help with situational awareness on the taxi.
- **Brief.** Talk about the taxi, especially in poor visibility.
- **Stop!** If you ain't sure, stop taxiing. Rolling about willy-nilly never ends well.
- **Think about de-icing/anti-icing.** There have been changes to HOTs in the FAA winter manual. Taking off with ice on your wings is going to make the takeoff roll hair-raising. Don't risk it, de-ice!
- Read this. The TSB's stuff on incursions, in full.

Fatigue

Yep. Where to start. This is a big conversation which needs to be had more in the industry. Aside from FTLs and roster patterns (a can we won't open now), we do think there are some things which aren't getting

mentioned enough which can lead to fatigue:

- **Staffing issues**

“Wait,” I hear you say. “What’s that got to do with fatigue?”

Well, staffing issues in airports lead to delays, which lead to longer hours for crew, which can lead to tiredness and fatigue.

- **The Russia Ukraine conflict**

Longer routings mean more time in the air which can lead to, you guessed it, more tiredness and fatigue.

- **Strikes**

Strikes = delays and disruption = ... same old story.

Now, just identifying random things which might be increasing fatigue levels isn’t really going to fix it. Having some real, human conversations about it might.

- If you’re a pilot, don’t just think about now, think about 10 hours later.
- Get some decent controlled rest policies into your operation.
- Consider ways to improve sleep management, especially if you’re doing hideous time zone crossing flights.
- Stop using tees like “sleep science” and harping on about circadian rhythm. Start talking about how to recognise fatigue, what that means for your performance, and what to do about it.

The Full Monty

So, that is the (Canadian) Safety Watchlist 2022 and if you want to, you can read the full thing here, (including the bits on fishing).

Jeppesen Ransomware Attack Update

OPSGROUP Team
12 January, 2023



On November 3rd a ransomware attack took down the majority of **Jeppesen planning products**.

We heard that:

- **Jetplan.com** was down
- **Milplanner.com** was down
- **Jetplanner** (standalone) was not working
- **Chart viewer** products was not working (eg. Elink portal, and Icharts)
- **FliteDeck Pro** was not working
- **Foreflight** (now a Boeing company) was working but their Notam feed was not.

Find the post on this here.

Update: November 16

We asked around and it sounds like it took longer to fix than expected, and some bits still aren't working quite as they were:

- **Foreflight notams** remained down for several days
- **Ice crystal areas** are not showing
- There is an ongoing issue with **expired charts and updates being unavailable**
 - Jeppesen has advised that "*The most recent Jeppesen chart downloads are currently effective and in compliance. Any "expired" messages prior to Dec 1 do not indicate that the charts are expired from a regulatory perspective.*"
 - However, they do also have this note up. We suggest checking with them direct if unsure whether to update or not:

You can read their response to the attack here, including an explanation of whether or not you need an update.

The NBAA has also posted this:

NBAA is continuing to coordinate with Boeing in response to a recent cyber incident that has disrupted Jeppesen products and services. Here is what company representatives say you should know, and what you should do:

- The company is undertaking an incident response process working with law enforcement, regulatory authorities and cyber security experts.
- Many Jeppesen services have been restored and additional ones are coming back online on a rolling basis.
- At this time there is no reason to believe that this incident poses a threat to aircraft or flight safety.
- The current cycle of updated Jeppesen electronic charts are available for download via JDM.
- If you have questions, or need information about your flight plans, you can stay up to date and receive product alerts from Jeppesen, by registering at support.jeppesen.com.
- Jeppesen also offers a [Customer Support Portal](#) as a pilot resource.

So how big was the impact?

It was pretty big for some. The most disruptive seemingly for those reliant on the planning software.

Let us know if you were impacted (or still are).

What can you do if this happens again?

We aren't sure actually. It raised more questions for us than we have answers for:

- **Can you use old route plans?**
- **Can you use old fuel plans?**
- **Where else can you get weather, Notam and planning info from?**
- **Are there any back-ups for charts?**
- **What else haven't we thought of?**

We've asked the question to members who were impacted by this.

If you were, and have some feedback on what the impact was and what you did about it, then send us the info at team@ops.group We will keep it anonymous, but if you have anything that can help others plan for/mitigate disruption if it occurs again in the future, then we want to hear it.

Has this happened before?

Computer and software glitches have caused numerous issues in the past, but most of these have been **related to passenger booking info.**

A problem with **Aerodata**, which several major US airlines use for weight and balance, caused disruption in 2019.

In 2021, a **cyber attack on a major fuel pipeline** in the USA led to significant disruption at east coast airports due to fuel supply issues.

The cyber security threat.

You've probably had to sit through a Cyber Security training thing at your organisation. They are basically common sense: don't open random links and don't give out passwords (or information that helps people guess passwords).

Cyber criminal cunningness is increasing though. We wrote about some of it here, and it is worth upping the caution levels and making sure you ain't a weak link in security.