

Dodging Danger: The Three Routes Through the Middle East

Chris Shieff

18 November, 2024



Navigating the airspace of the **Middle East** has become a major headache for international operators.

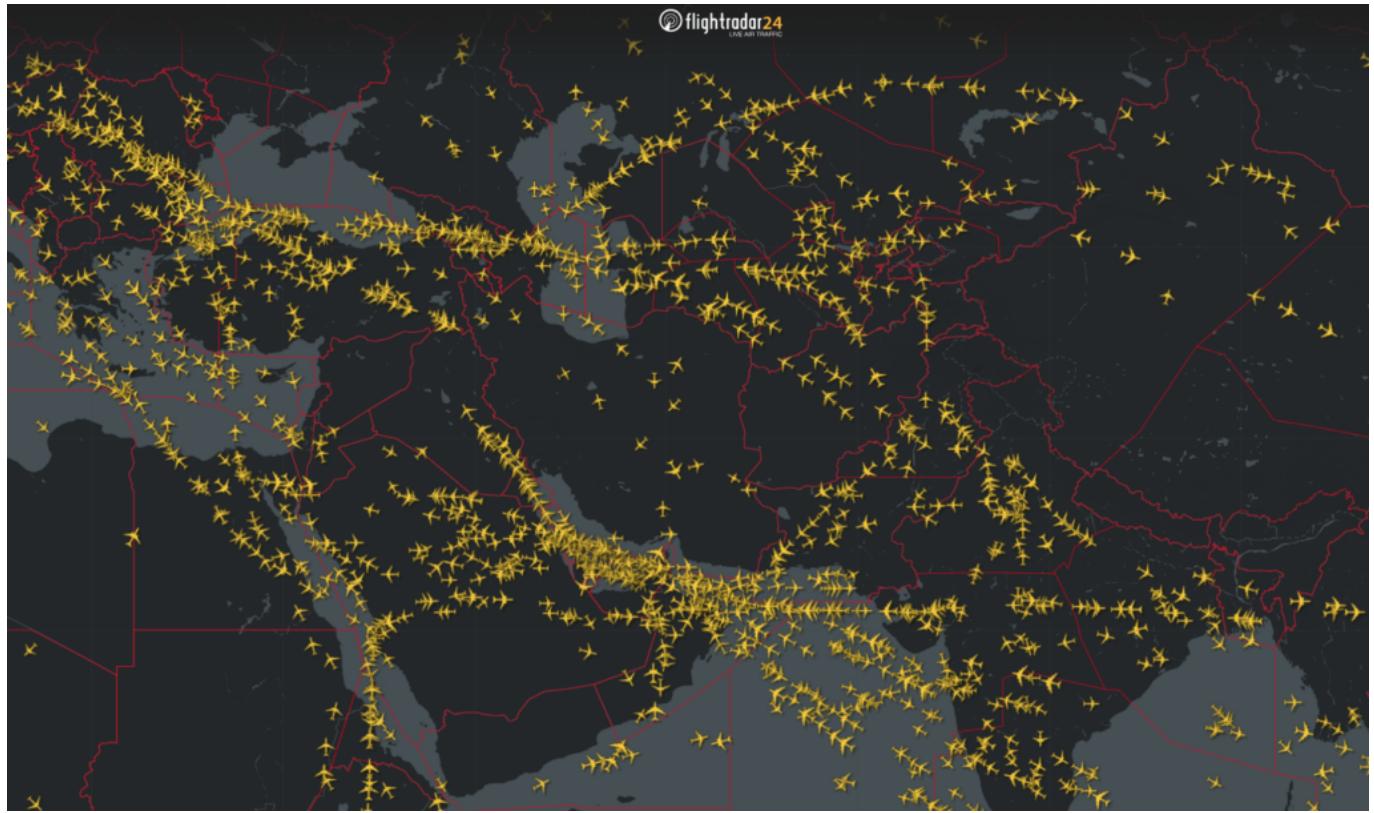
In recent times, risk to civil aviation in the region has changed at a pace we have never seen before.

Transits are now faced with a common conundrum: it no longer seems to be a simple question of '*is this route safe?*' but instead, of one's own appetite for known risks.

There simply is **no 'risk-zero' route available.**

Therefore, a common question that bizav operators are asking OPSGROUP is '*what are the major airlines doing?*' A snapshot of flight tracking right now shows that Middle Eastern transits are managing risk through the use of three distinct routes:

- **South** via Saudi Arabia and Egypt
- **Central** via Eastern Iraq and Turkey.
- **North** via the Stans and the Caspian Sea.



This article provides a **brief risk profile** for each of these routes to help operators carry out their own risk assessments when choosing a route to fly.

A Note About Risk

OPSGROUP also runs safeairspace.net – a database of all **state-issued airspace warnings**, along with risk briefings for each country in plain simple English.

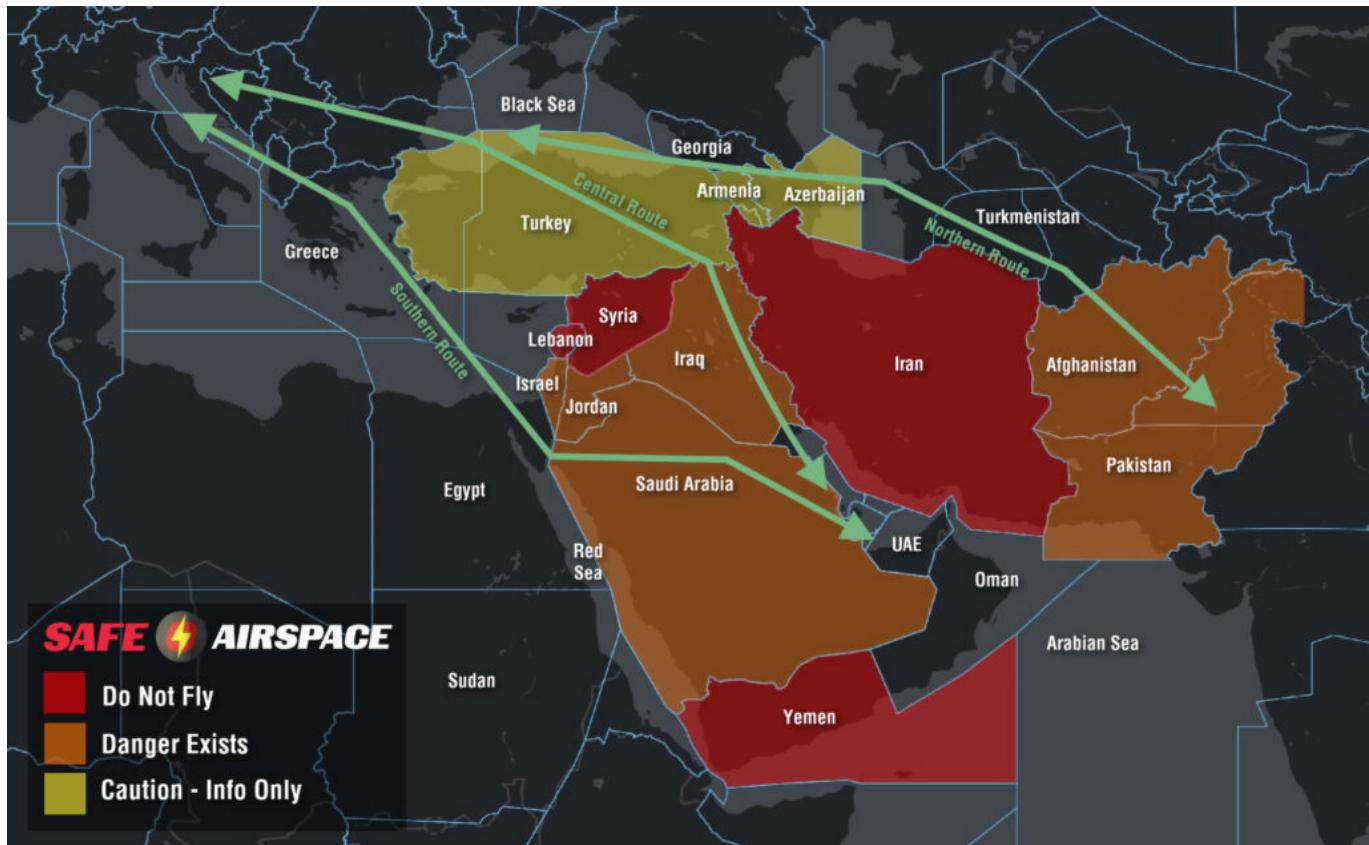
We take into account both official advisories, recent and past events, advice from other specialists and potential for emerging risk when making a risk assessment.

To keep things simple we have three levels:

- **Level 1 Do Not Fly (Red)**
- **Level 2 Danger Exists (Orange)**
- **Level 3 Caution (Yellow).**

None of the three routes above enter any country's airspace we have classified as 'Do Not Fly.'

For the rest, you'll see the map below is color coded according to the same risk profile.



The Southern Route

This route begins with a lengthy crossing of Saudi Arabia, steering clear of Israeli and Lebanese airspace to the north before crossing the Red Sea into Egypt.

It's considered advantageous because it keeps tracks miles down (compared to the Northern Route) and avoids the potential for a sudden escalation of hostilities between **Israel** and **Iran**.

From a contingency perspective, it also provides **safer diversion options** than a transit of Iraq.

But now for the more-risky stuff.

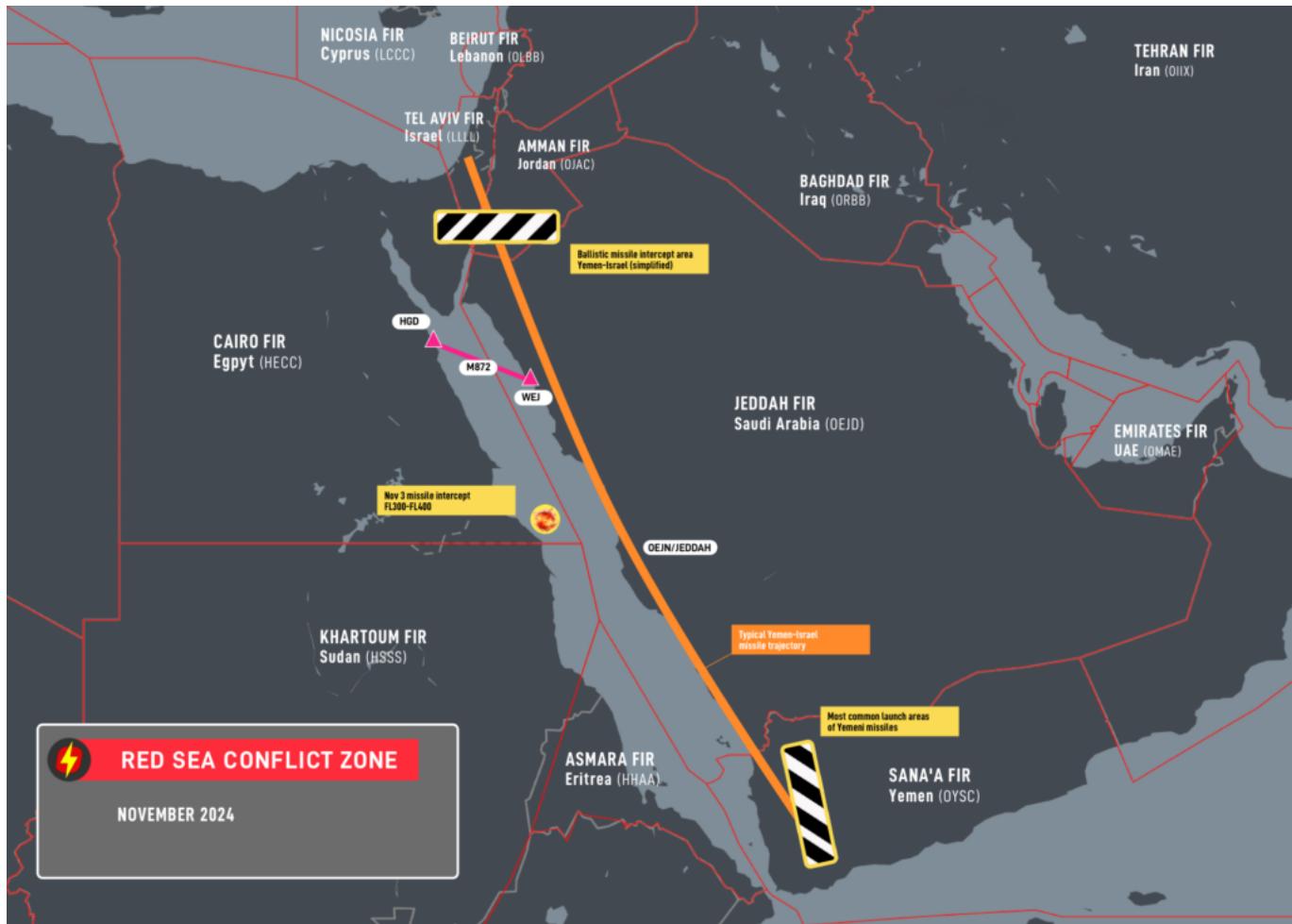
The Houthi Campaign:

There is currently heightened risks to civil aviation in this area.

Houthi Rebels in **Yemen** are currently engaged in a long-term campaign to use **missiles and drones** to target Israel (therefore infringing the Jeddah FIR) along with shipping channels in the **Red Sea**.

The military response to these activities is the use of **air defence systems** to destroy them.

The latest incident occurred on Nov 3, where a crew witnessed the interception of a missile at a similar level in open airspace near **Jeddah**. OPSGROUP members can access a special briefing on this latest event here.



Of particular concern to aircraft at altitude is the use of ballistic missiles which originate from Western Yemen and are destroyed by defensive intercepts while on descent toward their target – which puts the airspace of **Northern Saudi Arabia** at heightened risk given its proximity to Israel and Gaza.

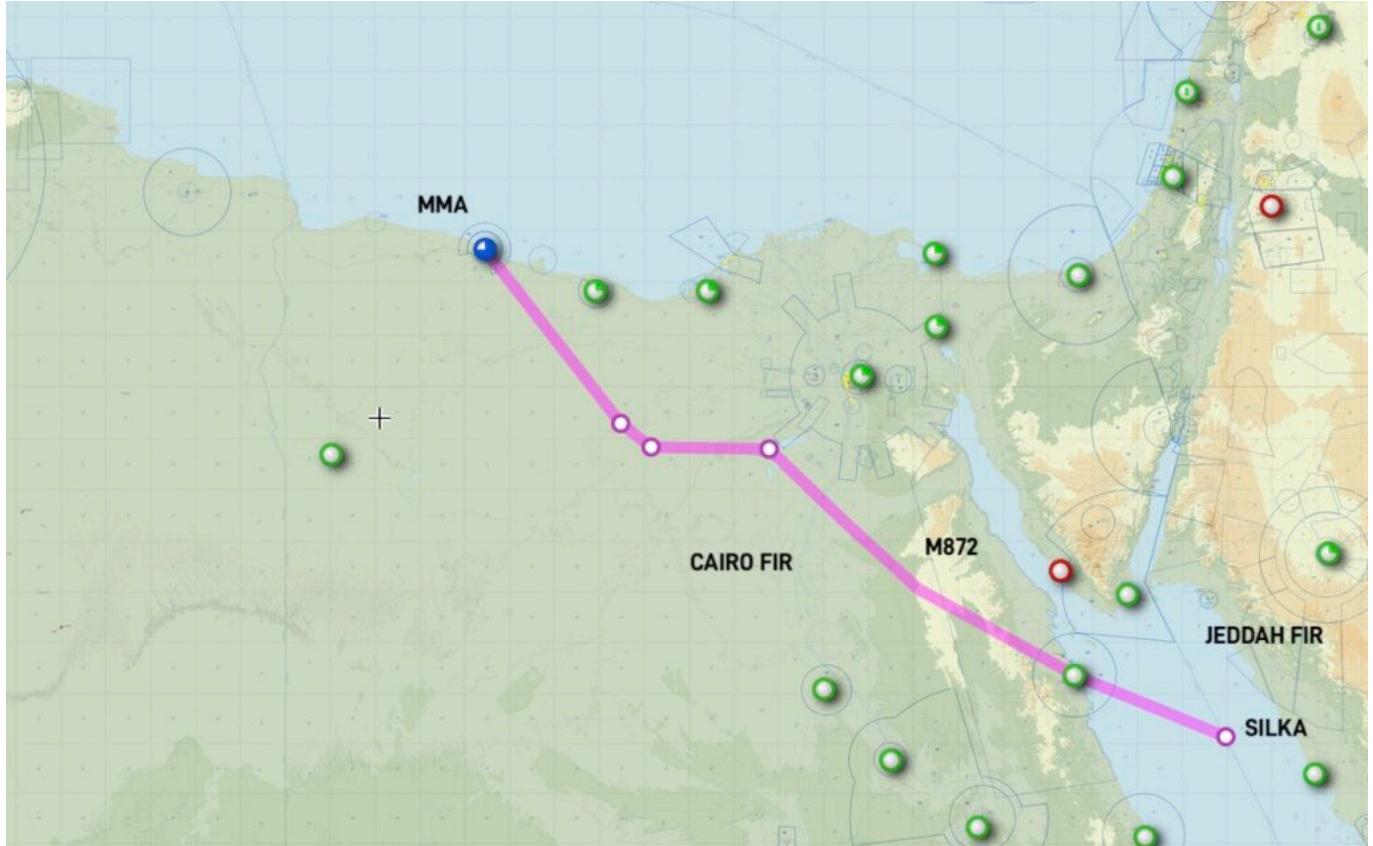
This essentially creates three risks to overflying aircraft – a direct hit by a missile (extremely unlikely), debris fields from inflight break ups or successful interceptions, and **misidentification**.

For the latter, many well-known incidents affecting civil aviation have come from **mistaken identity**. Malaysia 17, Ukraine 752 and Iran Air 652 were all due to misidentification.

Egypt ATC Congestion:

OPSGROUP has received several recent member reports of **severe frequency congestion** in the Cairo FIR apparently due to ATC overload.

One crew even reported that during an entire portion between the North Coast of Egypt to the Red Sea (MMA – M872 – SILKA) that they were **unable to talk to ATC**.



The corridor is much busier than usual which may present latent threats. Good airmanship at this time would be to keep a close eye on TCAS, ensure all anti-collision lights are on and consider the use of a PAN call if a deviation becomes necessary without a clearance.

We have approached both the Egyptian CAA and ANSP for feedback and have yet to receive a response. If you have experienced this yourself in the **HECC/Cairo FIR**, please get in touch with us at team@ops.group.

The Central Route

This more conventional route tracks northwards along the Persian Gulf before an extended transit of **Eastern Iraq** using the UM860 and UM688 airways which run parallel to Iranian airspace before crossing **Turkey** and a southern portion of the **Black Sea**.

The overriding question from this route is *"is it safe to overfly Iraq?"*

In our opinion, yes but with some disclaimers.

UM860/UM688 Airways:

The UM860/UM688 have been **considered safe** for a long time. And prior to 2021, remained the only option available for **US operators** to enter the **Baghdad FIR** at all.

They continue to see heavy traffic by major carriers and can be considered a viable option.

When using them, an important consideration is their **proximity to Iranian airspace**. Due to the recent escalation in hostilities between Israel and Iran, many states prohibit operators from entering the Tehran FIR due to the risk of anti-aircraft fire at all levels.

Extensive **GPS interference** (including spoofing) can be expected in Northern Iraq and on at least one occasion has led an aircraft to almost inadvertently enter Iranian airspace without a clearance.



Extra vigilance for the early signs of GPS interference is essential for the safety of this route, along with early notification to air traffic control if it is suspected. Radar vectors remain your best fail safe.

Also beware of the potential for sudden closures of the **ORBB/Baghdad FIR** should further fighting occur between Israel and Iran. It closed completely during recent Israeli airstrikes and remains geographically sandwiched between the two, along with Jordan and Syria.

Free Routing:

In 2021, the FAA changed the rules. A new SFAR was issued that allowed N-reg overflights anywhere in Iraqi airspace, provided they're conducted **at or above FL320**, which has opened-up new options for free routing.

Great for fuel, but arguably not safety. We continue to advise against flights away from the above airways due to well publicized risks of militant and terrorist activity which may target civil aircraft with **anti-aircraft weaponry**.

They may also be misidentified by air defense systems targeting drones which are frequently used to conduct attacks in Northern Iraq that originate from Turkey and Iran.

Crew and passenger safety is also an important concern should an emergency landing be required.

Turkey (beware of GPS interference):

We maintain a low-risk rating of caution for Turkey. As two of the three routes in this article include a lengthy overflight of the country, it is worth touching upon why any risk rating has been applied at all.

There is minor risk to overflights from misidentification by local militia who infrequently target Turkish military aircraft with anti-aircraft weaponry. This risk is predominantly near the border with Syria and Iraq where a higher level of airborne military traffic and UAS is present.

Far more prevalent is GPS interference – there have been frequent reports of both jamming and spoofing

by aircraft well inside Turkish airspace. It appears to be common throughout the LTAA/Ankara FIR, especially anywhere near the border with Iran or Iraq. PIREPs also extend to Turkish airspace over the Black Sea. Reports share very similar symptoms: Un-commanded turns, position errors, and multiple GPWS warnings. The spoofed locations tend to center on Sevastopol on the Crimean Peninsula - a difference of between 120-250nm from the actual aircraft position. OPSGROUP members can access a special briefing on this hazard [here](#).

The Northern Route

This is the route being favored between destinations in Europe and India/South East Asia.

It begins with a transit of Pakistan, before an uncontrolled crossing of Afghanistan and into Turkmenistan. A westerly turn is then made cross the Caspian Sea, Azerbaijan, Armenia and Turkey before rejoining the central route over the Black Sea.

While a fairly conservative option, it is the longest in terms of track miles.

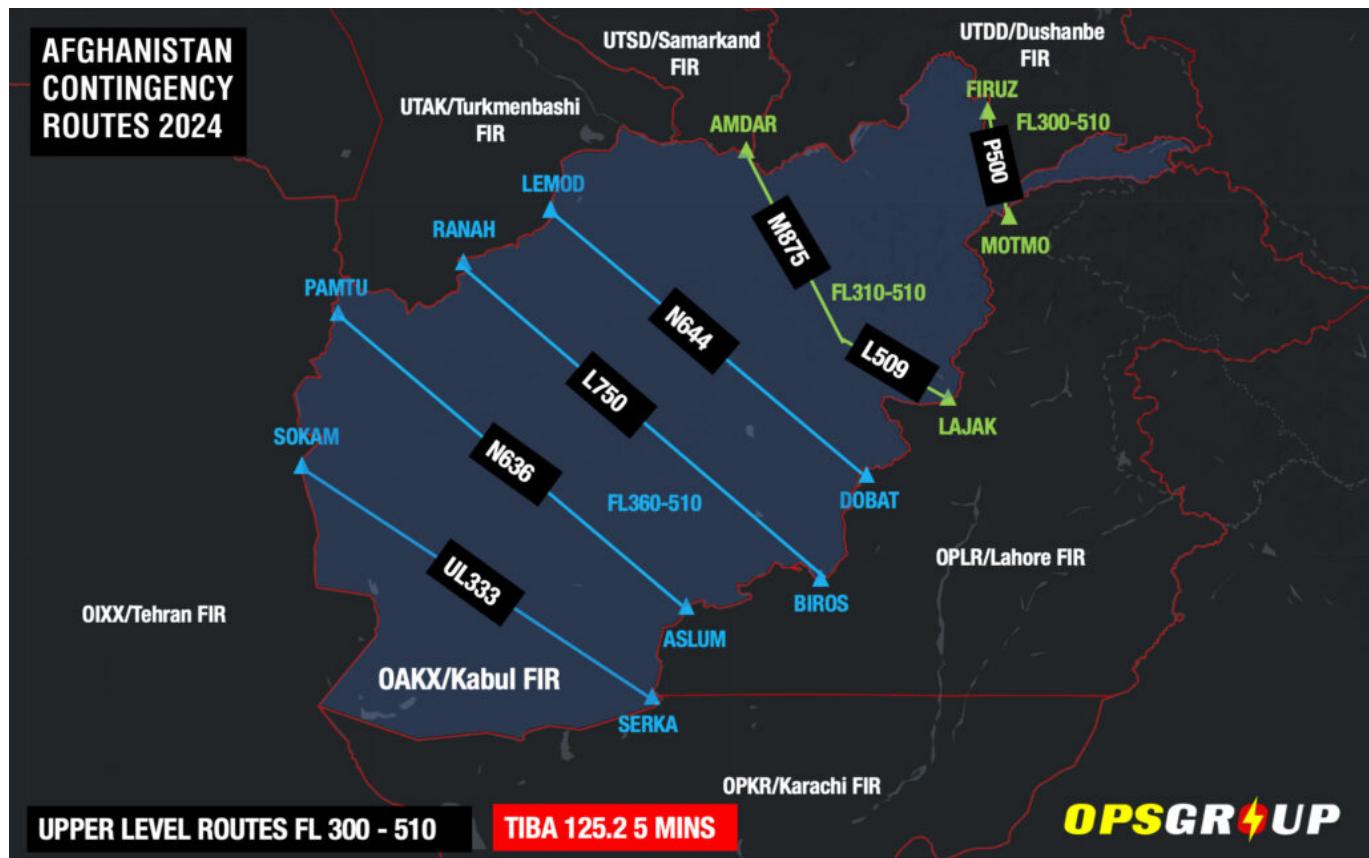
Afghanistan:

For all intents and purposes, airspace safety in the **Kabul FIR** has not changed since the Taliban re-assumed control of the country in late September 2021.

The entire FIR remains **uncontrolled** and there is no guarantee of crew or passenger safety if you need to land. In that sense it remains the most important consideration in the selection of this route.

With that said, adjacent FIRs are managing the entry and exit of traffic and separating them with miles-in-trail and level restrictions.

Once inside, fairly robust contingency procedures (including the use of TIBA) appear to be working, with major carriers the likes of Lufthansa and KLM making **safe crossings** every day.



Aside from potential **insurance complications** of extended flight in uncontrolled airspace, it seems the predominant risk for overflights is what happens if you have an emergency and **need to divert**.

The overriding consensus (along with common sense) is **don't land in Afghanistan**. In our recent article we explained it would be wise to consider it akin to ditching i.e. a last resort. Careful consideration of critical fuel scenarios to clear the Kabul FIR in event of de-pressurization, engine failure or both is essential to moderate this risk.

Azerbaijan and Armenia:

We maintain a level of caution for overflights of these countries given their history of conflict, but for now the risk to overflights remains low.

A ceasefire agreement is in place, and most states have lifted their airspace warnings for the **YDDD/Yerevan** and **UBBA/Baku FIRs**.

When sporadic fighting has occurred, it has been confined to border regions. A contingency to keep to mind is the use of northerly waypoints BARAD, DISKA and ADEKI to avoid the area and **transit from Azerbaijan through Georgia instead**.

Stay Informed

The situation in the Middle East has recently proven that **airspace risk can change quickly and without warning**.

Overflights need to stay informed and have good contingencies in place to manage unexpected re-routes and airspace closures, along with suitable diversion airports.

OPSGROUP issues Ops Alerts for members on a daily basis, but our risk and security alerts are also available for free on safeairspace.net which our team keeps updated around the clock.

If you have more questions, you can get in touch with us on team@ops.group. We'd love to hear from you.

Middle by Middle East

OPSGROUP Team
18 November, 2024



A lot of people lump 'The Middle East' together into one singular region of "Middle Eastyness", but actually each country is very different, particularly during Ramadan. Each has diverse cultures and rich histories, very different political interests, and of course their own unique operational and environmental challenges that pilots should know a bit about before heading in.

So, here is your 'In the Middle of the Middle' guide to the 'Middle East' (or at least the parts of it you're likely to need to know about.)

Starting with the 'Need to Know'

The UAE

The UAE only became the UAE fairly recently. Before that it was seven separate emirates and a big port in Jebel Ali which the Brits took an interest in. When they got their independence from Britain, the emirates joined up, led by Abu Dhabi. Dubai is the **most westernized of the all emirates**, and each pretty much has its own international airport.

- **OMAA/Abu Dhabi International** is the capital airport for the UAE. They generally prefer not to be used as an alternate for Dubai bound flights since they are vert busy.
- **OMDB/Dubai International** is the main Dubai airport, and the busiest airport by passenger numbers in the world. You have two parallel runways 12/30 left and right with CAT III approaches.
- **OMSJ/Sharjah International** is the next door neighbour to OMDB/Dubai (around 20km north and you fly past it on some Dubai arrivals). **Runway 12/30 is 13,320 ft** long with an ILS either end. Watch out if OMDB is getting foggy though because OMSJ won't be far behind given it is also close to the sea, and it will fill up fast with diversions if it isn't.
- **OMDW/Dubai World** is the **slightly smaller international Dubai airport** just next door. Mainly used for cargo flights, it offers a good alternate to OMDB. There is limited parking and fuel trucks though so if you divert here on a day a lot are diverting then expect long delays. **Runway 12/30 has CAT 3 ILS** both ends and is 14,764 ft long
- **OMRK/Ras Al Khaimah** is a decent airport to **consider as an alternate** with an ILS on 34,

an RNAV on 16 and 12,336 ft of tarmac between the two ends. Watch out for terrain here though.

- **OMAL/Al Ain** has a 13,140 ft runway with ILS/RNAV approaches. Another UAE **option for an alternate**.
- **OMAD/Al Bateen** is a small but quite busy executive airport near OMAA/Abu Dhabi, which **just caters for private jet ops**. This airport will be completely closing from **May 11 to July 20**.

We put together a little regional brief on this with some handy contacts for you.

Saudi Arabia

Saudi Arabia is the largest country in the Middle East.

They are a major world economy, the third biggest producer of oil (behind the USA and Russia) and the largest exporter. It is also at the heart of the Islamic religion and you need to bear their customs and laws in mind if heading in there. **Women are expected to dress modestly and cover their heads**, and alcohol, swearing, gambling etc is forbidden. This will be much more strictly enforced during Ramadan.

- **OEJN/Jeddah** - long taxis possible. Keep an eye on those brake temperatures. This airport can accommodate the most number of aircraft in the world so... it's big! There are no less than three runway 16/34s here. The longest is 13,123 ft and all of them have an ILS approach. Jeddah has recently been targeted by drone attacks and the southern Jeddah FIR (close to Yemen border) should be avoided).
- **OERK/Riyadh** - high elevation airport with steeper than normal GS on some approaches. You have two runways to choose from, although they tend to stick to one for takeoff and one for landing. 15R/33L is the longer of the two, offering 13,797 ft (a whole 2 ft more than 15L/33R)
- **OEDF/Damman** - Often keep you high or use track shortening. 34L/16 R and 34R/16L are both 13,123 ft long with an ILS approach.

Because of the ongoing conflicts with neighbors, Saudi have a procedure called ESCAT (used to be called SCATANA) which is basically an emergency procedure when the airspace is under threat. If they announce it, be prepared to follow whatever instructions given - probably either to leave the airspace, or to land where they tell you.

- Consider what your alternative routing options or alternates will be in advance. **ESCAT** has been activated more frequently of late, and this may mean long holding at the boundary of their airspace.
- **Egypt** is available to the west, but **Israel** may not accept you if you haven't advised them in advance. The process for landing and overflying Israel is still quite lengthy and dependant on where you come from, are registered, who you carry etc.
- **Jordan** is available, but **Syria** is a no go country, and landing in **Iraq** is less advisable.
- **Yemen** to the south is a no fly area.

Full info on ESCAT is found in their AIP. We wrote a bit about the Yemen conflict threat here.

Oman

Oman is a funny shaped country with a bit above the UAE and most of it below, bordering Yemen. They generally aren't too political and get on with everyone.

- **OOMS/Muscat** is the main airport. 08L/26R is currently the only operational runway. It offers an ILS either end and 13,123 ft. **Muscat is a decent fuel and tech stop** if routing from the Far East.

Iran

US operators are not allowed to overfly Iran, and there are overflight warnings associated with the country. If you do overfly and need to divert in the country, be aware that if you are coming from other countries, or have some nationalities onboard, this might cause some problems for you on the ground.

If you operate in with female crew, expect them to be asked to cover their heads leaving the airplane at some airports. There are also potential issues with lack of female security staff and crew have reported female pilots being asked to let their male co-pilot carry out walk-arounds to avoid difficulties with male security staff escorting a female.

The main airport OIIE/Tehran is a pretty decent one to go into though, although it is in the middle of some high terrain.

- **OIMM/Mashad** - Another high altitude, high terrain airport with two decent length parallel runways (longest being 12,861 ft). Only 31R has an ILS approach (VOR DME on the rest) and you can likely expect a procedural to the ILS. Watch out on the GA because there is a large Holy Shrine which you are not allowed to fly over below 6000'
- **OISS/Shiraz** - Right in the middle of a load of terrain. Not easy approaches to fly. The longest runway here is 14,200 ft and only 29L has an ILS. The GA on this is another one to watch - a lot of turns to keep you away from high ground.
- **OITT/Tabriz** - Ok, all airport in Iran have high terrain around them. Tabriz is no exception. A little easier since it is only on three sides. Like the others, it has two decent length runways, but limited taxiways. There is an ILS approach onto 30 L and R but if you want to land onto either runway 12 you will need to circle...
- **Most smaller airports are not always well maintained.** A quick Notam search shows up no less than 16 holes in poor runway 30 at OIIP/Payam International, and OIII/Tehran International (the other one), OIBB/Bushehr, OIHH/Hamadan, OINZ, OITL, OIMS... also come up

Jet Business Solutions, based in the UAE, can assist with support and handling in Iran - ops@jbs.aero

Qatar

- **OTHH/Doha Hamad** is the main airport here. Doha is one of the most modern airports in the world and fantastic for passengers. The longest runway is a whopping **15,912 ft** and there is a CATIII approach onto all four. The airport and ground operations here tend to be very efficient.

It is nice to operate into because it is built out on its own little bit of land. The city is quite futuristic looking and its a nice view on approach. There is high terrain close by so watch out for GPWS warnings if you mess

up your tracking or speeds. The buildings also lead to wind shear and turbulence on approach.

While fairly westernised like Dubai, Qatari customs and laws can be stricter and should be carefully observed during Ramadan.

Kuwait

- **OKBK/Kuwait** - pretty restricted airspace close into the airport so be careful if deviating. Get those calls for weather in early. This is another big airport with long but efficient taxis. Kuwait is more prone to big sand storms than some of the other areas. The **longest runway is 11,483 ft** and there is a CATII approach onto all four. Watch out if you're operating on the 15s though - the taxi can be long and brake temperatures can heat up fast.

Bahrain

- **OBBI/Bahrain** - This airport gets a lot of thermal activity in the summer to watch out for turbulence on short finals. The runways 30L and R have been known to confuse folk in the past as well. 30R is the long one in case you're not sure (13,305 ft vs 8,301 ft so the difference should be quite obvious).

Iraq

- **US operators are permitted** to overfly the ORBB/Baghdad FIR above FL320, but landing there would be unadvisable due to conflict, security and safety concerns.
- **ORER/Erbil, ORBI/Baghdad, ORMM/Basra, ORNI/Al Najaf** international airports are all fairly well equipped.

Safeairspace

Conflict is common across the region. Currently several countries are no fly areas, with cautions applied to others. Visit Safeairspace for full information on the current status.

- Syria is a no fly country
- Yemen is a no fly country
- The southern Jeddah FIR (Saudi Arabia) and OEJN/Jeddah airport have cautions due attacks from Yemen
- Iraq can be overflowed, but with certain restrictions
- Iran is off limits to US operators
- Israel has political tensions with neighbouring countries. Overflying and landing is possible but requires pre-planning
- Lebanon has some risk due to proximity to other conflict nations.

Why fly to the Middle East?

It is very central and provides a connection between the west and the Far East and Asia. **The main**

airports offer good tech and fuel stop options.

It is also an interesting region. There is great golf in Dubai, World Heritage sites in Saudi and Iran. And then of course there are the Finance and Oil Industries so corporate companies might find themselves flying business folk over. So, if you are ever operating in make the most of the layover, there are some cool sites to see and interesting things to see and do.

And ending with some 'Good to Know'.

Some history of the region if you want to read some more. And a little mention is necessary because conflicts and Safeairspace aside, actually the political goings-on of the region are fairly important to our airplane goings-on.

For example, until the end of 2020 **Israel was out of bounds**. You could not fly across it if you were routing from a big old bunch of places. It was BIG news at the end of 2020 when the likes of **Saudi Arabia and the UAE rebuilt their relationship with Israel** and agreed to flights between the nations. Neighbors followed suit, and Jordan now also allow flights passing over Israel to utilize their airspace. Being able to fly across Israel **significantly shortens the flight time for aircraft** routing from the Middle East and Europe.

A second big political/ aviation newsworthy event was the ending of the Qatar blockade by Saudi, the UAE, Egypt and Bahrain. Obviously, this primarily helped Doha bound flights, but for all operators in the region it means **easier airspace and radio work**, and the opportunity to once again **use OTHH/Doha as an alternate**.

The politics of Iran and Iraq mean if you are routing through one airspace, you probably should not divert into the other. Iran is the bigger worry here because they have an **ADIZ and need you to check in prior to entering** their airspace. One of the main southbound routes through **Iraq (UM688)** brings you close to the Tehran FIR border, and if you meet a big thunderstorm along the way and deviate in the wrong direction, you might just find yourself accidentally edging over the border. The same goes for routing along the **M677 in Kuwait**. If you are heading to Dubai, the **VUTEB hold** sits close to the border and again, weather can push you close to the FIR boundary.

The tensions with Iran and much of the rest of the Middle East are constantly simmering. One big no-no on your routings here is to refer to the Arabian Gulf as the Persian Gulf. At least to the wrong controller.

May 2021: Israel Airspace Risk

Chris Shieff
18 November, 2024



Update May 23, 2000z:

- The ceasefire between Israel and Hamas in Gaza agreed on May 21 is continuing to hold.
- Israel has now removed its Notam advising caution to operators in the LLLL/Tel Aviv FIR.

Update May 15, 1200z:

- The Israeli CAA have now published a Notam advising caution in the LLLL/Tel Aviv FIR due to the ongoing conflict between Israel and Gaza. Operators can contact the Israel Airports Authority for operational info: contactus@iaa.gov.il.
- Militants continue to launch rockets and drones at towns in central Israel, while the Israeli Defense Force continue to target locations in the Gaza.
- LLBG/Tel Aviv airport will be closed all day tomorrow, May 16.
- The US has updated its Travel Advisory for Israel, increasing the level of advice to "Level 3: Reconsider Travel".

Story from May 12:

Flights at LLBG/Tel Aviv Airport were temporarily suspended on May 11, with some diverting to Greece and Cyprus, **as the city was bombarded with multiple long range rockets** launched by militant groups in Gaza. No damage has been reported at the airport, although some airlines have cancelled flights this week.



Israel has an Air Defense System - "Iron Dome" which protects populated areas of Tel Aviv from rocket attacks by launching interceptor missiles to ensure rockets detonate prior to reaching the ground, minimizing damage. However, the sheer number of rockets launched resulted in **several impacting the city**.

Sporadic rocket attacks in Southern Israel are not unusual but don't often target Tel Aviv itself, and certainly not on this scale. One look at the footage of the attack and you will begin to see just how dangerous the skies of Israel became on Tuesday night.

[נתב"ג הלילה](https://pic.twitter.com/aZBc7xgNul)

Itay Blumental (@ItayBlumental) May 11, 2021

The conflict has been escalating throughout the month of Ramadan, which coincides this year with the significant religious Jewish event Shavuot.

Earlier on Tuesday, a series of Israeli airstrikes in Gaza led to the collapse of a residential building and the reported deaths of several people. Militant groups in Gaza immediately retaliated by unleashing a large-scale rocket attack on Central Israel, forcing the temporary suspension of flights at LLBG/Tel Aviv Airport as air defence systems were activated around the country.

It marks a major escalation in the conflict which **may present a new risk to aviation**.



Are there new airspace warnings?

EASA have published a warning, available via the Eurocontrol homepage:

12/05/2021 16:15

Considering the heightened tensions in Israel, including exchange of rocket fire and retaliatory airstrikes, air carriers operating within Israeli airspace and to or from Ben Gurion International Airport (LLBG/TLV) in particular, should monitor closely these developments and adapt their operations according to Israeli Authorities aeronautical publications. Several NOTAMs are already in place for FIR Tel Aviv (LLLL) and its commercial aerodromes rerouting civilian aviation flight paths as necessary to ensure safety and security of the air operations. Due to the unstable regional situation, these publications may be more restrictive within short notice. The situation in the region remains a matter of high concern for commercial aviation – It is recommended to exercise caution by taking into account any relevant information, alongside available guidance or directions from your national authorities as appropriate.

So just a warning for now – no firm restrictions on flights. The most recent incident of major rocket fire from Gaza against Tel Aviv was in 2014 during the Gaza War. Back then, **the US FAA** responded quickly by imposing restrictions at LLBG/Tel Aviv airport for a two day period, and **EASA** advised that operators should suspend flights, which ultimately resulted in 30 airlines cancelling flights.

What are the risks?

There are parallels between the situation in Israel and similar rocket attacks carried out recently on Saudi Arabia's major cities. Previously issued guidance on those and the threat which they pose to civil aircraft may also be relevant here.

The major risks identified from rocket attacks were:

- Misidentification or miscalculation by air defence systems.
- Falling debris from air defence activities.
- Ballistic impact while on the ground.
- Short notice airspace closures.

Where to from here?

We're likely to see further rocket attacks on Israel and Israeli air strikes on Gaza. From an operator's perspective, perhaps the most significant development here stems from the fact that militant groups are now showing **renewed ability and intent to mount major aerial attacks on Tel Aviv**.

Keep an eye on the SafeAirspace.net page for Israel where we will report changes as they happen, and **continue to monitor the situation if planning to operate within the LLLL/Tel Aviv FIR** – the events of this week have shown us just how quickly quiet skies can become active conflict zones.



Rumbles Over Riyadh: A New Threat?

Chris Shieff
18 November, 2024



You might have seen the headlines a week or so ago. On January 23, Saudi Arabia's capital Riyadh was attacked by a 'hostile air target' – likely an **explosive 'kamikaze' drone**. Saudi air defences destroyed it, causing a loud explosion over the city and flight disruptions at OERK/Riyadh.

Then a few days later it happened again. Another big bang in the skies of Riyadh and more flight disruptions. Plenty of people caught it on camera. But the silence from official channels was **deafening**.

So what? Isn't there is always stuff in the news about drones over there?

Yes. They're sporadically sent over the border from Yemen by the Houthi – the folk who overthrew the Yemeni government back in 2014. Southern regions are usually the worst hit and occasionally **Jeddah** and **Riyadh** are targeted just to remind Saudi Arabia that they can.

But here's the kicker: **this time it probably wasn't them**.

How Do You Know?

Firstly, the Houthi have adamantly denied they were to blame. They've actually gone out of their way to distance themselves from the attack. So why should we believe them? Because of the status quo – **they want to make headlines**. Their attacks on Saudi Arabia are a demonstration of their firepower and willingness to target anywhere in the country. They're even known to claim responsibility for attacks that weren't theirs.

Secondly, someone else has already put their hand up for the attack – a group of **militants in Iraq** called the Alwiya Waad al Haq. The Who? The 'Brigades of the Righteous Promise'. It's a fancy name but the takeaway is this: **someone new is apparently taking shots at Saudi Arabia from Iraq**.

Here's why

Saudi Arabia and Iran don't get along. The reasons are long and complicated and you can read more about them here. But in a nutshell, religious differences and a desire for regional dominance are the cause of the ongoing conflict. The attacks on Riyadh are a worry because they may reflect a changing way that Iran asserts its dominance throughout the Persian Gulf – **by proxy**.

Proxy conflicts are a thing. It means when someone is doing the hands-on fighting for somebody else. Remember those Brigades of the Righteous Promise people? It is alleged that **Iran may have put have**

put them up to it, and supplied the firepower to do it.

There's no shortage of independent militia in Iraq. They're difficult to trace and new ones emerge seemingly from nowhere – so much so that they're sometimes known as '**shadow militia**.' In reality, they are usually a cover for larger and much more well-known groups. In this case, possibly the Hezbollah – one of Iran's largest proxies. By hiding behind different names they can cause confusion, unpredictability and can divert blame away from the prime suspects.

It is possible that Iran may now start using these proxies more often for **attacks on its regional adversaries**.

So why is this an aviation issue?

We get twitchy when anyone is firing things into the sky. This way of fighting is unpredictable and the weapons being used are getting more sophisticated and can cover large distances.

Case in point. Back to the Brigade guys – since their alleged attack on Riyadh they have since threatened to attack the Burj Khalifa in **Dubai**, and also **Abu Dhabi airport**. Whether or not their threats can be taken seriously remains to be seen – but if the attack on Riyadh is anything to go by, they might have the weapons and intent to do it.

For aircraft, there are a few threats to be aware of:

- Misidentification by sophisticated air defence systems.
- Being caught in the cross fire.
- Simply being in the wrong place at the wrong time. Airports are often a prime target.

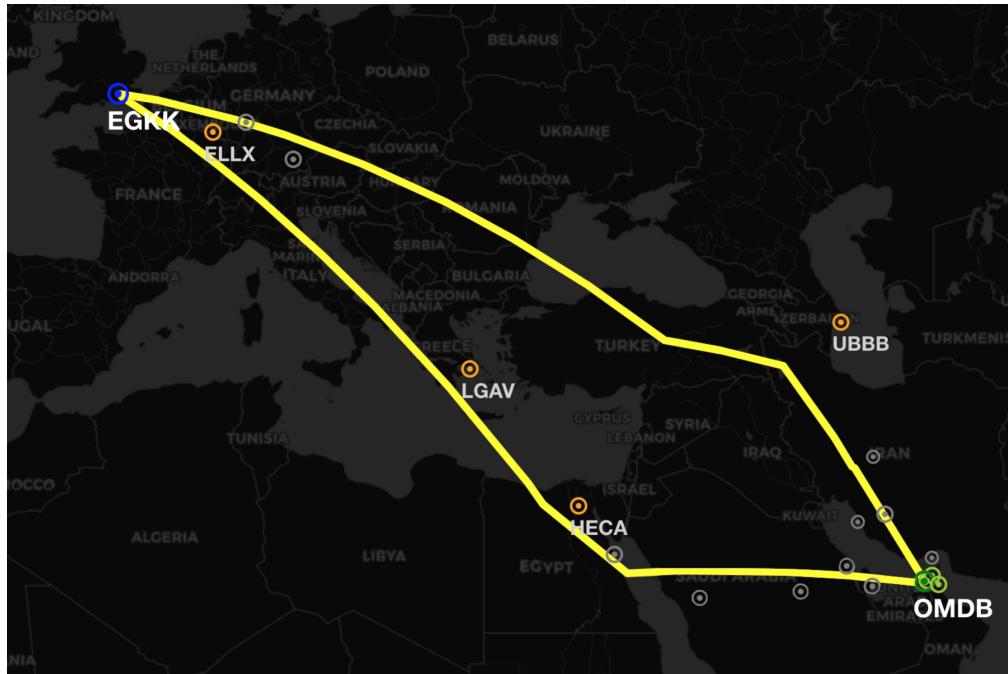
What can we do about it?

Continue to monitor Safeairspace.net for airspace warnings – it is our database of airspace risk and we update it all the time. Head over there and take a look – there are multiple warnings for the Persian Gulf region including four 'no fly' countries: **Syria, Iraq, Iran and Yemen**.

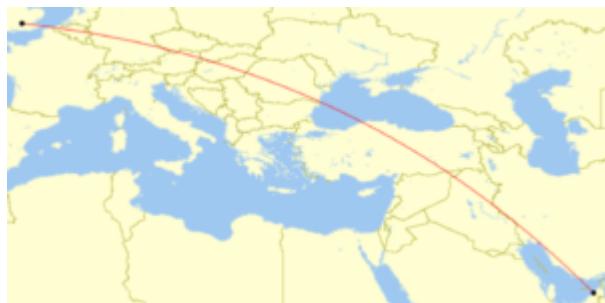
Understand **ESCAT** rules. Or you might know them as SCATANA. Either way they are a protocol for getting you out of dangerous airspace and fast. **ATC may divert you clear of an FIR or ask you to land**. They're in use in Southern Saudi Arabia – but can be applied at short notice to any airspace where the risk is high. ESCAT procedures are published in GEN 1.6 of Saudi Arabia's AIP. If you don't have a login, you can see the relevant section [here](#).

Lastly, carry out your own risk assessment and know what's going on down there. Just because airspace is open **doesn't mean that it's safe**.

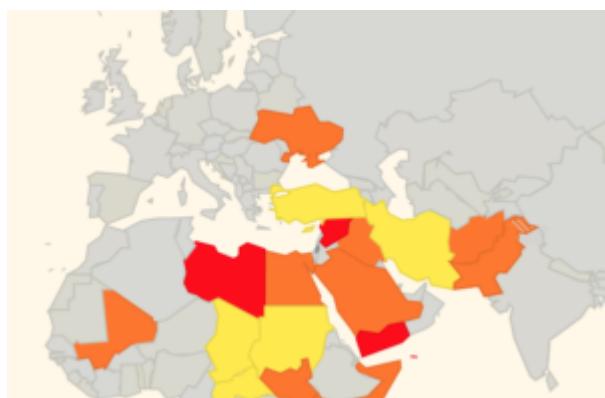
Dubai to London - which way is best?



In Short: Two main options, via **Saudi and Egypt** (safer, cheaper but longer) or via **Iran and Turkey** (shorter, busier and geo-politically more unstable). It's a **complicated** planning climate at present. **Review regularly based on latest risk factors.**



There are more business aviation operators flying between the Middle East and Europe than ever before. So we took the time to look over the route options between the two regions. For our example we will be using a flight from Dubai to London, but similar operational considerations are valid for the plethora of route combinations through this whole region.

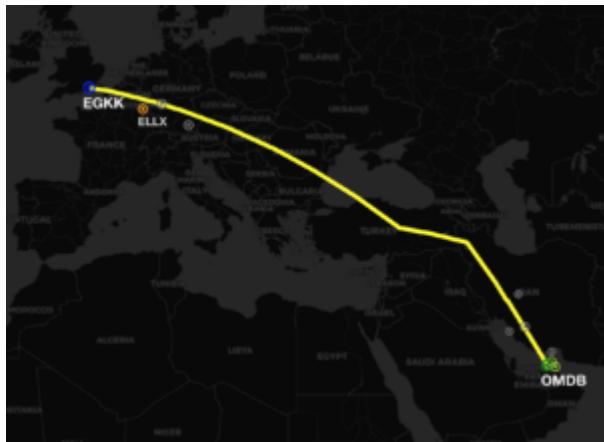


Firstly, we are sure you are a frequent visitor to our safe airspace website. Updated all the time with the latest notes and risk recommendations based on the latest intel. So, first things first, **we want to avoid Syria, Libya and the Sinai Peninsula**. As you can see however, this is a complicated geo-political region for flight planning. The direct great circle route would take us through Syria and would be around 3125nm. But that isn't going to work. So, what else we got?

We will look at the two ways to head over the region. One is via Iran, Turkey and onwards to Europe. The

other over Saudi Arabia and Egypt towards Europe.

Option 1: Iran/Turkey



Safety: Both Iran and Turkey are FSB Risk Level: Three –

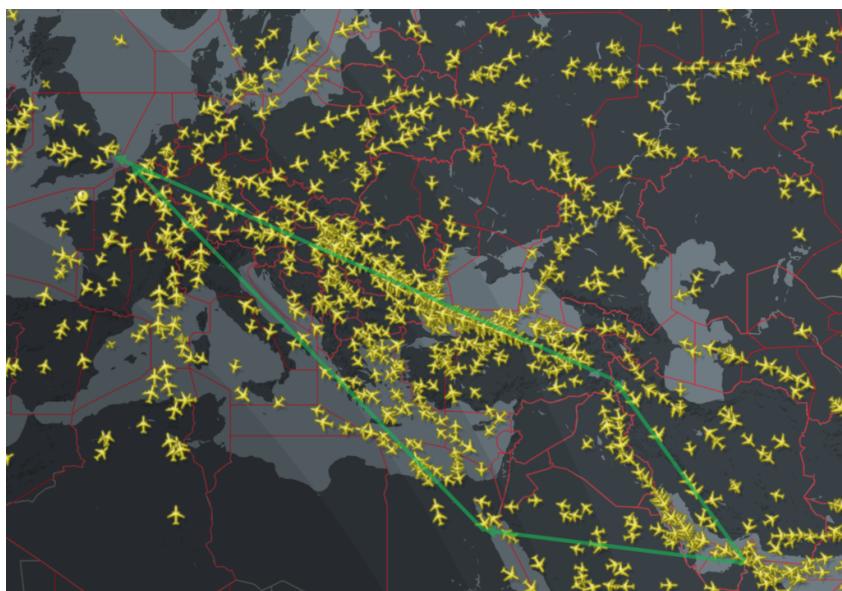
Caution. Iran is involved in the ongoing conflict with Syria and several Russian missiles crossed the Tehran FIR and several busy international routes. There are also increased tensions between the USA and Iran at present – if you had to divert in an N-reg aircraft, Iran would not be the friendliest of places to do so. Turkey borders with Syria and we have received multiple reports of GPS interference in the area.

Distance: an extra 100nm.

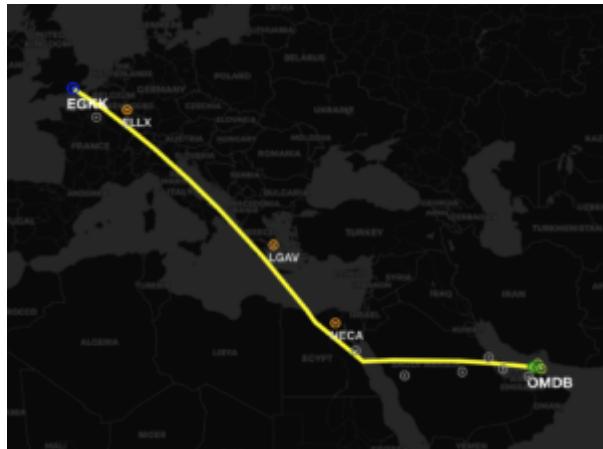
Time: About 15 minutes longer than great circle route.

Ease and Cost: Iran has higher overflight costs and for US based operators a reminder of the sanctions for dealing directly with Iran, or agencies in Iran. You'll want to use an approved agent if you're from the US (i.e.-not an Iranian company). Iran doesn't work on Fridays, so be aware there. Turkish overflight costs are reasonable and remember that Turkish authorities require the use of an agent to apply for permits.

Traffic: The biggest issue with this route is that everyone is using it! It's congested with a lot of airline traffic. It's a major corridor for Asia-Europe flights also. So, getting the levels you want, and off route deviations are more complicated. Things get busy, as you can see!



Option 2: Saudi/Egypt



Safety: In terms of airspace warnings and risk, this route is **slightly** better. We have rated Saudi and Egypt airspace as FSB Risk Level: Two – Assessed Risk. Beyond the Sinai Peninsula and the Saudi/Yemen border, generally there is less of a chance of airspace security risks at present.

Distance: An extra 300nm from the great circle.

Time: Around 45 minutes longer.

Ease and Cost: Saudi and Egyptian airspace are generally a cheaper option (\$1,000USD+). In Egypt, by law you have to get your permit through an Egyptian agent, but it's a straight forward process. In Saudi, again, using an agent is best; they normally have three-day lead time – so keep that in mind. Also remember that the CAA only work Sun-Wed during office hours.

Traffic: For most of the day, much less of a traffic bottle neck.

Bottom line

Of the two options, routing via **Saudi/Egypt** is cheaper, and safer (as long as you steer clear of Egypt's Sinai Peninsular and Saudi's border with Yemen), but it's going to take slightly longer.

What about Iraq?

We **don't** think it's a good idea. There's a lot of information out there saying certain airways are ok but only at higher levels. But if you needed to get down fast, or even make an unexpected landing, Iraq isn't the place you would want to go at present. **Treat with caution.**

Which one is your favourite choice? Let us know!

Further reading:

- US updates its Syria airspace warning
- Don't overfly the Tripoli FIR, and don't land at any Libyan airports
- France add Saudi Arabia to their airspace warning list