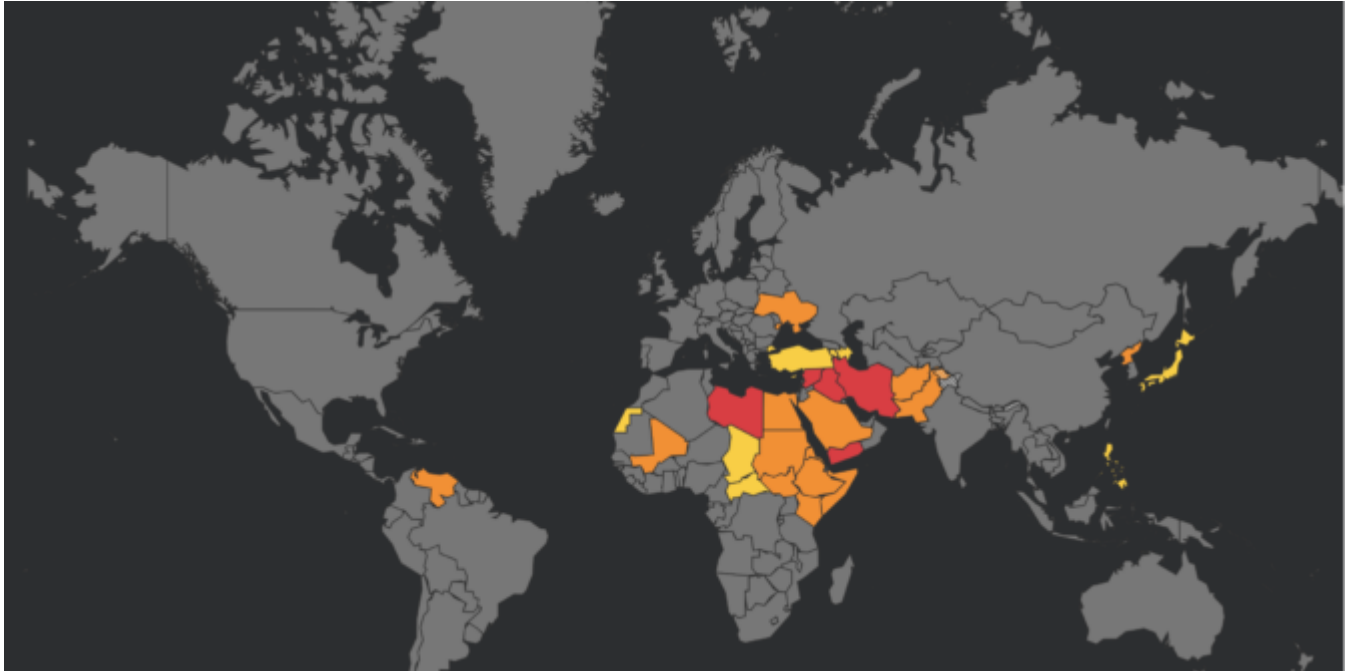


SafeAirspace: 2021 Update

Chris Shieff

26 January, 2021



2020 was a heck of a ride. But therein lies the risk – **what else might you have missed amongst all the Covid-related noise?** Sadly, conflicts and their risks to civil aviation have not taken a break during the pandemic.

As it's a new year, we thought **a summary of Airspace Risk** was called for. Here's what's making headlines at the moment:

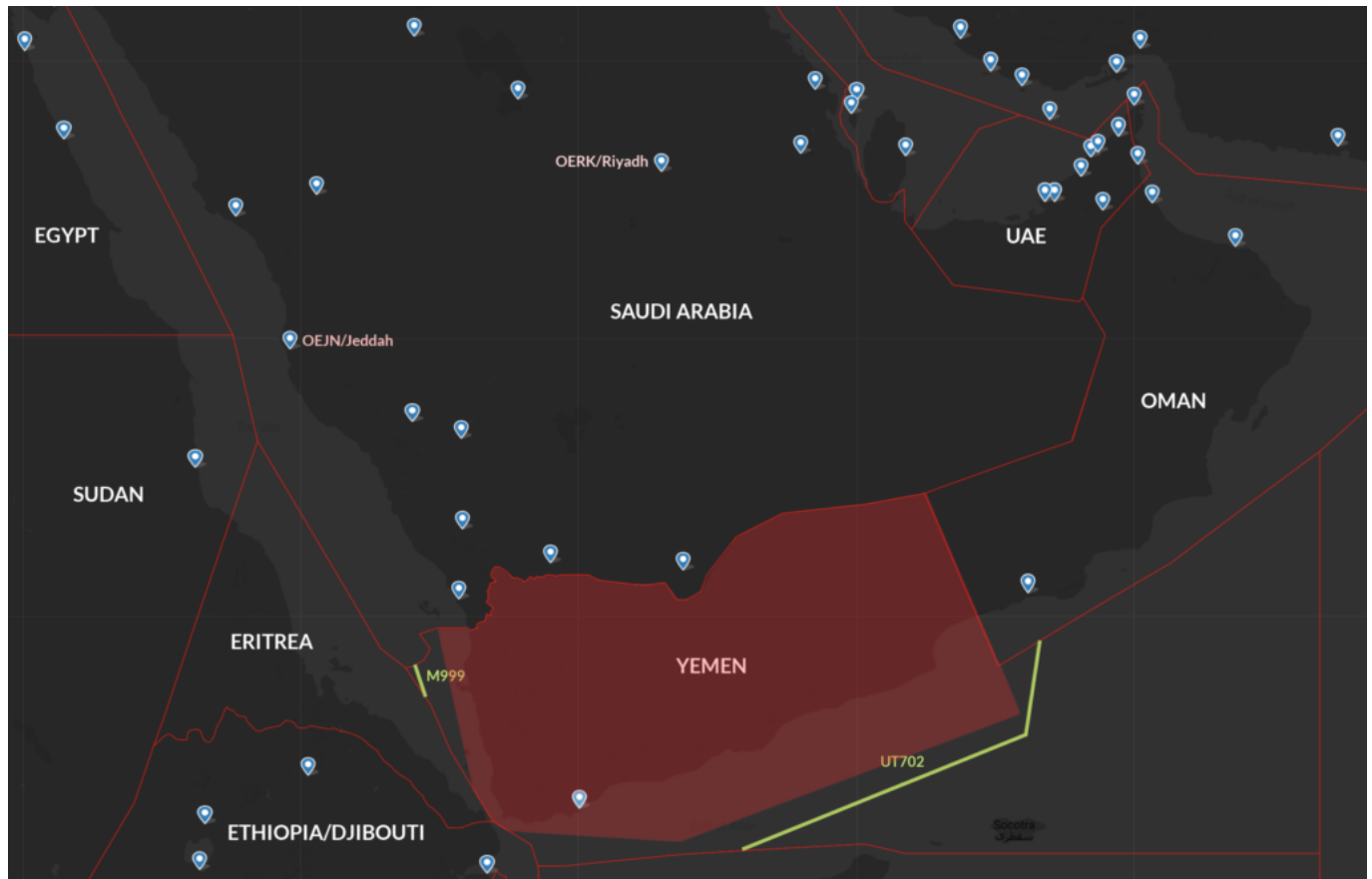
Saudi Arabia & Yemen

Houthi rebels in Yemen are regularly firing **explosive drones and rockets** across the border into Saudi Arabia, and these usually target airports in the south such as **OEAH/Abha** and **OEGN/Jizan**. Their latest attack was on **OYAA/Aden** airport in late December which resulted in mass casualties.

Saudi Arabia continues to retaliate with airstrikes. The latest was in the capital **Sanaa** just weeks ago, where multiple munitions landed near the airport.

The risk to aviation is that **overflying aircraft may get caught in the crossfire** or might be **misidentified by Saudi air defences**. Active terrorist groups in Yemen may also use anti-aircraft weaponry to target foreign interests.

The FAA prohibit all US operators from entering most of the OYSC/Sanaa FIR at any level. Only two airways are allowed, and they are well off the coast – **UT702** and **M999**.



Only two available airways for US operators near Yemen and both are well off the coast.

There are no restrictions on Saudi Arabia but **use caution in the southern regions**. France and Germany have issued their own warnings.

*SafeAirspace **Yemen** page – [click here](#).*

*SafeAirspace **Saudi Arabia** page – [click here](#).*

Iraq

Rocket attacks on military interests at airports have become a common occurrence. They are generally fired by local militia without warning. **ORBI/Baghdad** is frequently targeted, along with other airports including **ORER/Erbil**. There is a clear risk to aircraft at low levels.

US relations were further strained through 2020 with multiple attacks on the US embassy in Baghdad. The tensions escalated to a point where the US considering closing it.

Foreign aircraft continue to be at risk from **armed militia who have access to portable anti-aircraft weaponry**, while **misidentification by the air defence systems** of multiple foreign forces in the country is also possible.

The FAA has extended its ban on US operators entering the Baghdad FIR **at any level**. Even though the SFAR says you can enter above FL320, the long-running Notam KICZ A0036/30 says otherwise.

*SafeAirspace **Iraq** page – [click here](#).*

Syria

There have been several recent **Israeli airstrikes on targets throughout Syria**. In late December there

are reports that Israeli fighters transited Lebanese airspace at low level causing alarm in Beirut before attacking targets in Western Syria. Just weeks ago, several sites around Damascus were targeted by Israeli missiles.

The primary risk is that aircraft may be **misidentified by Syrian air defence systems** which are regularly activated. Civil operators may get **caught in the crossfire** as missiles may erroneously lock on to the wrong aircraft.



Syrian air defences in action in 2019.

The FAA are taking no chances – the ban on US operators entering the OSTT/Damascus FIR at any level has been extended a full three years to 2023.

*SafeAirspace **Syria** page – [click here](#).*

South Sudan

Just this week ICAO issued a concerning warning about the risk to aircraft operating below FL245 in the **HSSX/Khartoum FIR over South Sudan**, or flying in and out of **HSSJ/Juba**. They are ‘gravely’ concerned about ATC disruptions, a lack of contingencies, inadequate training of controllers, limited info about equipment outages and a lack of co-ordination with other ATS units.

*SafeAirspace **South Sudan** page – [click here](#).*

Emerging Conflict Zones

2020 saw **three new conflict zones** emerge, here is what is happening with them now.

Ethiopia

A civil conflict erupted in October last year in the **Tigray region of Northern Ethiopia**. The government went to war with the TPLF – a regional force seeking independence.

The region's airports were closed and TPLF showed an intent to internationalise the conflict by attacking aviation interests. They fired rockets into Eritrea targeting **HHAS/Asmara**, and also attacked multiple airports to the South of the Tigray region.

Two airways were closed (T124, and M308) with **no explanation of the risk**. Other airways remained open but uncomfortably close to the fight – especially UG300, UN321 and UL432. **No airspace warnings** were issued despite the dangers.

What's the latest?

In late November Ethiopian forces captured the region's capital **Mekelle** and regained control. Remaining TPLF forces have retreated leaving behind a humanitarian disaster and a vow to continue the fight. Since then, the **airway closures have been removed** and things have gone quiet, **but an airspace risk remains** – armed militia continue to be active in Northern regions and may be looking to make a statement. **Be wary of operating in the area.**

Western Sahara

Late last year the region's independence movement (the Polisario) declared war on Morocco for breaching a ceasefire agreement. The FAA published a warning that the Polisario **might have access to anti-aircraft weaponry** left over from previous conflicts.



Foreign, Commonwealth
& Development Office

Western Sahara: Travel Advice



Please note Briefing Maps are not to be taken as necessarily representing the views of the UK government on boundaries or political status. This map has been designed for briefing purposes only and should not be used for determining the precise location of places or features, or considered an authority on the delimitation of international boundaries or on the spelling of place and feature names.

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FCDO (TA) 046 Edition 1 (September 2020)

The Western Sahara region

What's the latest?

It is still an **active conflict zone**. The fight has reached the international stage after the US declared their support for Morocco. The Polisario have indicated they are willing to at least talk, but so far have not put down their weapons. So, it is a wait-and-see type deal.

The risk to overflying aircraft remains. The GCCC/Canarias FIR keep extending a Notam advising operators to **not fly below FL200** on the following airways: **UY601, UN728 and UT975**. However, the reason is still missing: because of the **risk of anti-aircraft fire**. The G000/Dakar FIR haven't issued any warnings despite the threat. Take care if operating in the area.

Armenia-Azerbaijan

In September last year, an ethnic conflict erupted over a disputed territory in Western Azerbaijan – **Nagorno-Karabakh**. The fight was between Azerbaijan and Armenia.

As a major air corridor for en-route traffic, there were **significant flight disruptions**. Azerbaijan swiftly closed all but one west/eastbound airway and routed traffic via Georgia. Armenia asked aircraft to take extra fuel and expect re-routes. The conflict was short but intense, with heavy artillery fire from both sides. The conflict eventually spread beyond the contested regions with longer range weapons. The entire border region posed a **risk for civil aircraft**.

What's the latest?

For once the news is good. In November a ceasefire agreement was signed with the help of Russia. Armenia effectively lost and withdrew from the region and **the conflict was officially over**. Armenia removed its airspace warning, while Azerbaijan re-opened the affected airways and a large section of airspace near the border.

With the conflict now over, and no new reports of significant fighting since the peace agreement in November, direct crossing traffic between the two countries is now technically possible again. However, **most East-West flights are currently still electing to go further north** instead, connecting between Azerbaijan and Georgia's airspace, avoiding Armenia.

What about Safeairspace.net?

Our conflict zone and risk database is **updated constantly**. We assess risk with official sources and build a simple picture for you of those need-to-know places.

There are currently 5 regions which are assessed as a **Level 1 Risk - No Fly**. These are: **Iraq, Iran, Yemen, Libya, and Syria**.

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.

Head over to safeairspace.net and click this button for a full airspace risk briefing.

Head over to SafeAirspace.net and take a look. With a single click you can download a **risk briefing** of the entire world in just a few pages of nice simple English.

The mission of SafeAirspace is this: to provide a single, independent, and eternally free resource for all airspace risk warnings, so that airlines and aircraft operators can easily see the current risk picture for unfamiliar airspace. If you know of a risk not listed on the site, or you have anything else to add, please get in touch with us at news@ops.group

Airspace Risk Warning - Ethiopia and Eritrea

Mark Zee

26 January, 2021



There is a new Conflict Zone in the east of Africa, which carries elevated risk to flight operations that may not be obvious from NOTAMs or other risk warning sources.

Some airways have been closed by the Ethiopian and Sudanese CAAs. Other airways that are still open are very close to the Conflict Zone. These are frequently used by international operators on the Europe- East Africa route. In particular: UN321, UG300 and UL432. **We are concerned that operators may be using these routes without being aware of the risk.**

OPSGROUP has today issued an Airspace Risk Warning to its members.

17 NOV 2020
AIRSPACE RISK WARNING
OPSGROUP

SAFEAIRSPACE

Airspace Risk Warning

ETHIOPIA & ERITREA


HAAA FIR (ADDIS)
HHAA FIR (ASMARA)

ISSUED: 17 NOVEMBER 2020
TO: OPSGROUP MEMBER AIRCRAFT OPERATORS

Notice to Flight Crew and Dispatch

There is a new Conflict Zone in the east of Africa, which carries **elevated risk to operations that may not be obvious** from NOTAMs or other risk warning sources.

Under the SafeAirspace tier system, this airspace is assessed as **Level 2 – Danger Exists**.



See full map on following page.

New Conflict Zone – Tigray
LEVEL 2 – DANGER EXISTS

The region being disputed is called Tigray. It's in the north of Ethiopia. Government forces are fighting a regional force that wants independence, called the TPLF. In the past week, there has been heavy fighting, multiple airstrikes, missiles launched, and a growing refugee crisis. A domestic conflict has become a cross-border war.

Danger – Airways near Conflict Zone

Some airways have been closed by the Ethiopian and Sudanese CAAs. Other airways that are still open are very close to the Conflict Zone. These are frequently used by international operators on the Europe-East Africa route. In particular:

UN321
UG300
UL432

Guidance
Enroute – Overflight:

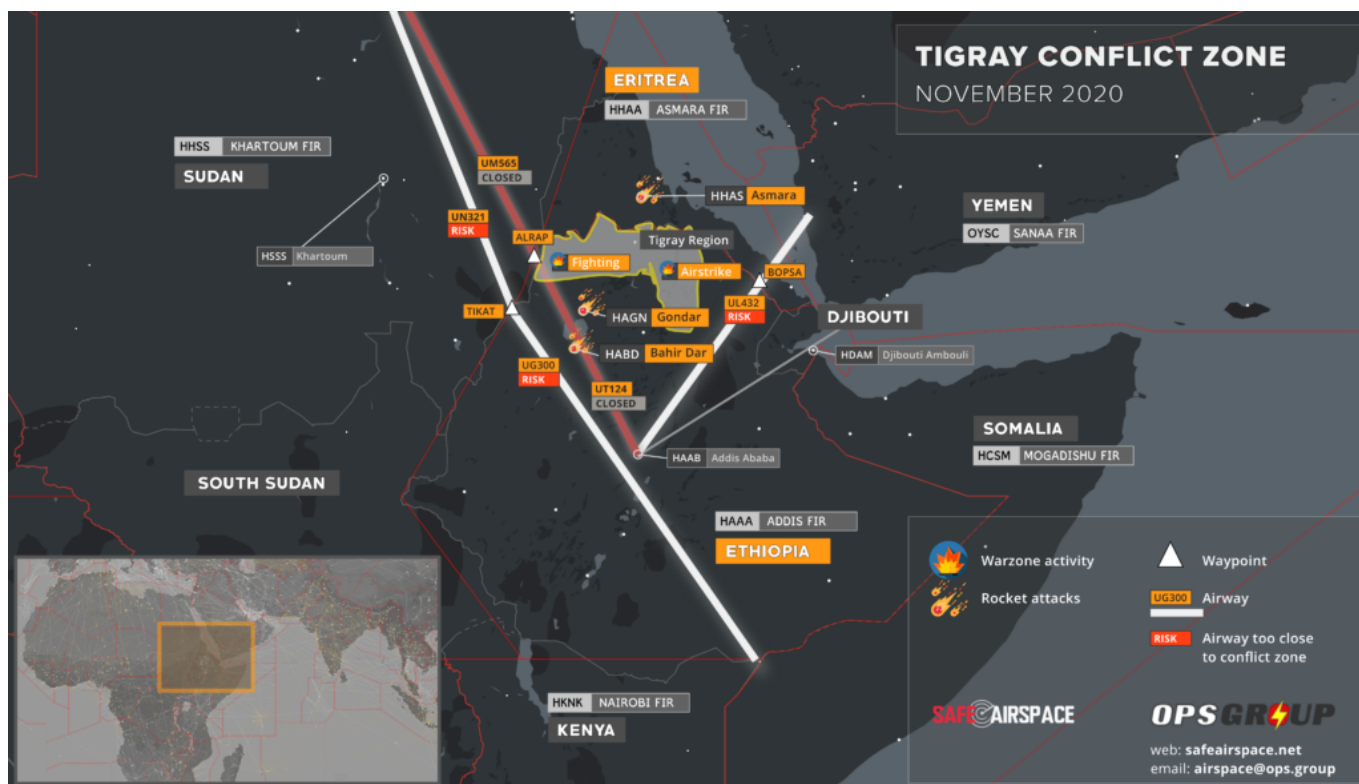
If you're transiting any airspace near or over Ethiopia, Eritrea, or Sudan, take a close look at the map and cross check the airways you are operating on. Several open airways are exceptionally close to the Conflict Zone. Just because they are open does **not** mean they are safe.

Landing – Airports:

Airports in the north of Ethiopia, including the Tigray and Amhara regions, are unsafe at present. Many are closed. There have been missile attacks on HABD/Bahir Dar, and HAGN/Gondar.

HHAS/Asmara in Eritrea should be avoided – missile attack on Nov 14, 2020.

Download OPSGROUP Airspace Risk Warning – Ethiopia/Eritrea (PDF)



Download Hi-Res version of this Conflict Zone map

Situation

The region being disputed is called Tigray. It's in the north of Ethiopia. Government forces are fighting a regional force that wants independence, called the TPLF. In the past week, there has been heavy fighting, multiple airstrikes, missiles launched, and a growing refugee crisis. A domestic conflict has become a cross-border war.

Our Concerns

There are many warning flags that point to previous shootdown incidents – not least MH17 and PS752. These are the reasons we are particularly concerned about the risk to civil aviation in this region:

Local NOTAMs are misleading

The NOTAMs issued by the Ethiopian CAA to close airways in the conflict zone (UM308, UT124) do not say why they are closed. NOTAMs issued to reroute traffic to adjacent routes (UN321, UL432) do not say why they are rerouted. The same applies to NOTAMs issued by the Sudan CAA to close airways and reroute traffic. Flight crews and aircraft operators are therefore not alerted to any conflict in the area by NOTAM.

Arbitrary Reroutes

Traffic is being rerouted to other airways by ATC, but it's not clear, or likely, that there has been any risk assessment. European flights are now using UN321/UG300, and UL432 – all of which come exceptionally close to the conflict zone. As we've learned from MH17 and PS752, just because airspace is open and available, does not mean it is safe.

Previous shootdowns

The Ethiopian Army shot down an Embraer 120 in May 2020, in Somalia. The Ethiopian Air Force shot down a US Learjet in August 1999 in the Eritrean border region. Both were misidentified.

No guidance to operators

No aviation authorities or official sources have issued any guidance or warnings to date via normal channels.

Rapid Escalation of Conflict

The situation has intensified rapidly, and is extremely unpredictable and unstable. The impact on aviation has not been widely reported.

Guidance

Enroute - Overflight:

If you're transiting any airspace near or over Ethiopia, Eritrea, or Sudan, take a close look at the map and cross check the airways you are operating on. Several open airways are exceptionally close to the Conflict Zone. Just because they are open does not mean they are safe.

Landing - Airports:

Airports in the north of Ethiopia, including the Tigray and Amhara regions, are unsafe at present. Many are closed. There have been missile attacks on HABA/Bahir Dar, and HAGN/Gondar. HHAS/Asmara in Eritrea should be avoided – missile attack on Nov 14, 2020.

Information Sources

The Conflict Zone & Risk Database at SafeAirspace.net contains all current published warnings and alerts for Ethiopia and Eritrea.

Ethiopia

Risk Level: **Two - Danger exists**

[\[about risk levels \]](#)

Nov 2020: Major escalation of the conflict in the Tigray region, along the Ethiopia/Eritrea border. Some airways have been closed by the Ethiopian and Sudanese CAAs. Other airways that are still open are very close to the Conflict Zone. These are frequently used by international operators on the Europe- East Africa route. In particular: UN321, UG300 and UL432. Multiple airports have been targeted by rockets. Missiles were fired across the border into Eritrea, targeting HHAS/Asmara. Within Ethiopia, HABD/Bahir Dar and HAGN/Gondar were also targeted.

Sep 2018: Risk due to hidden ATC strike. Ethiopian ATC controllers went on strike, and the ECAA and Ethiopian Airlines recruited both retired and foreign controllers to pick up the slack. Ethiopia denied several times that there was in fact a strike happening at all. The strike ended September 7th. Many were not qualified to operate in Ethiopian airspace, due to inexperience.



Ethiopia: What are other operators doing?

⚡ 0 % with Avoid or Do Not Land policy

Avoid	0%
Do not land	0%
Specific routes only	0%
Case by case	0%
Unrestricted	0%
No policy	100%

TAKE PART

SEE ALL

Notifications

SUBSCRIBE

to receive Conflict Zone & Risk warnings.

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

The countries that issue the most relevant updates for unsafe airspace are:

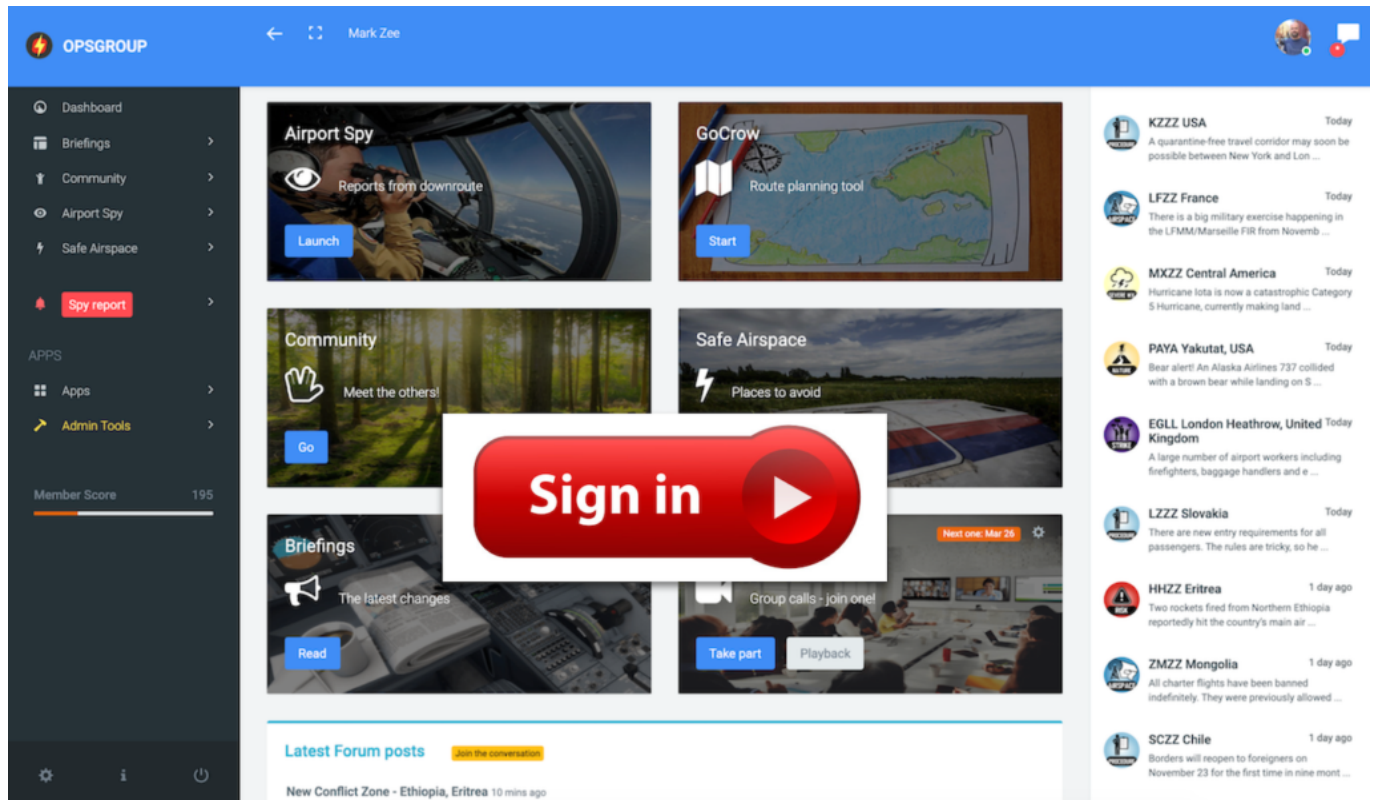
- US (FAA) – through Notams and SFARs
- UK (DFT) – by Notam and then AIP
- Germany (BMVI) – by Notam
- France (DGAC) – by AIC

Note: Operators should not rely on EASA Conflict Zone Information Bulletins (CZIB)'s as a primary source of information. These serve only as pointers to the above sources, and often are not issued until several months after updates, if at all. Note that the Civil Aviation Authorities of the countries whose airspace is determined to be unsafe are unlikely to issue reliable guidance.

Group effort

This information is compiled from OPSGROUP member input, information, intelligence and analysis. If you have additional information to share, please send it to report@safeairspace.net.

Members: More information

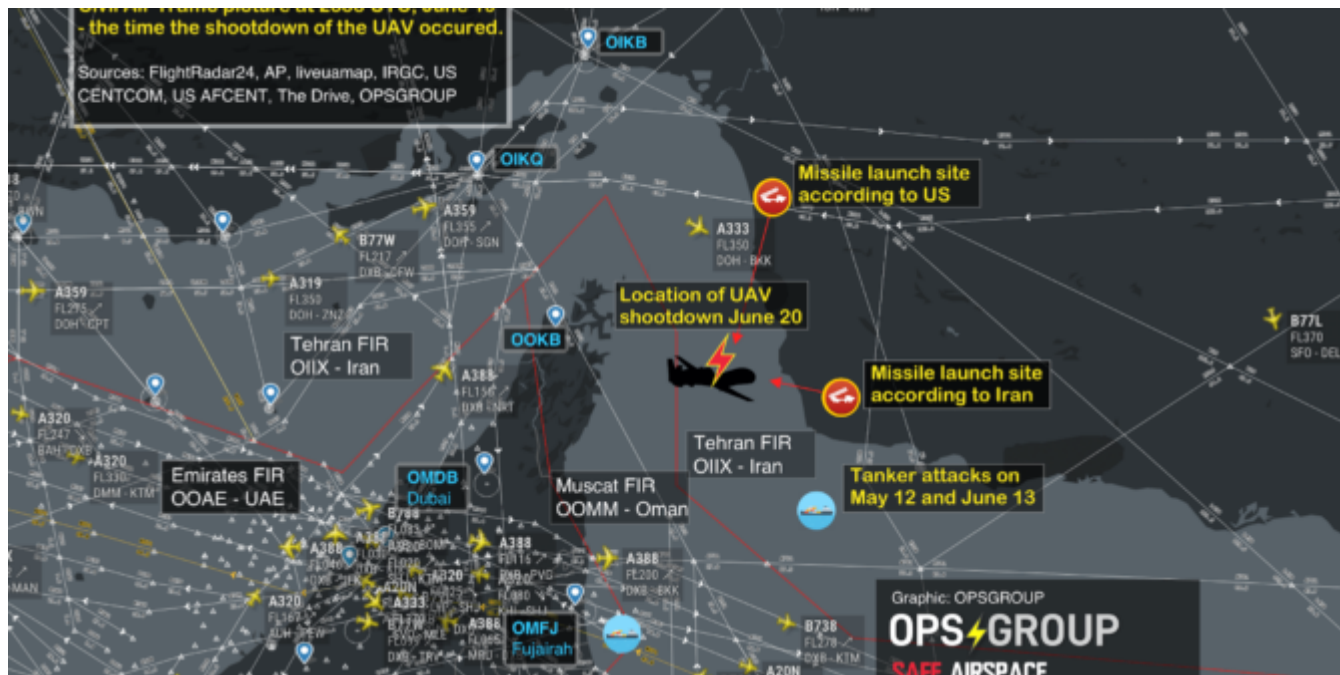


OPSGROUP Members: More information in the discussion in the Forum about Ethiopia/Eritrea:
Forum > International Ops > New Conflict Zone Ethiopia/Eritrea

All links to further resources are there.

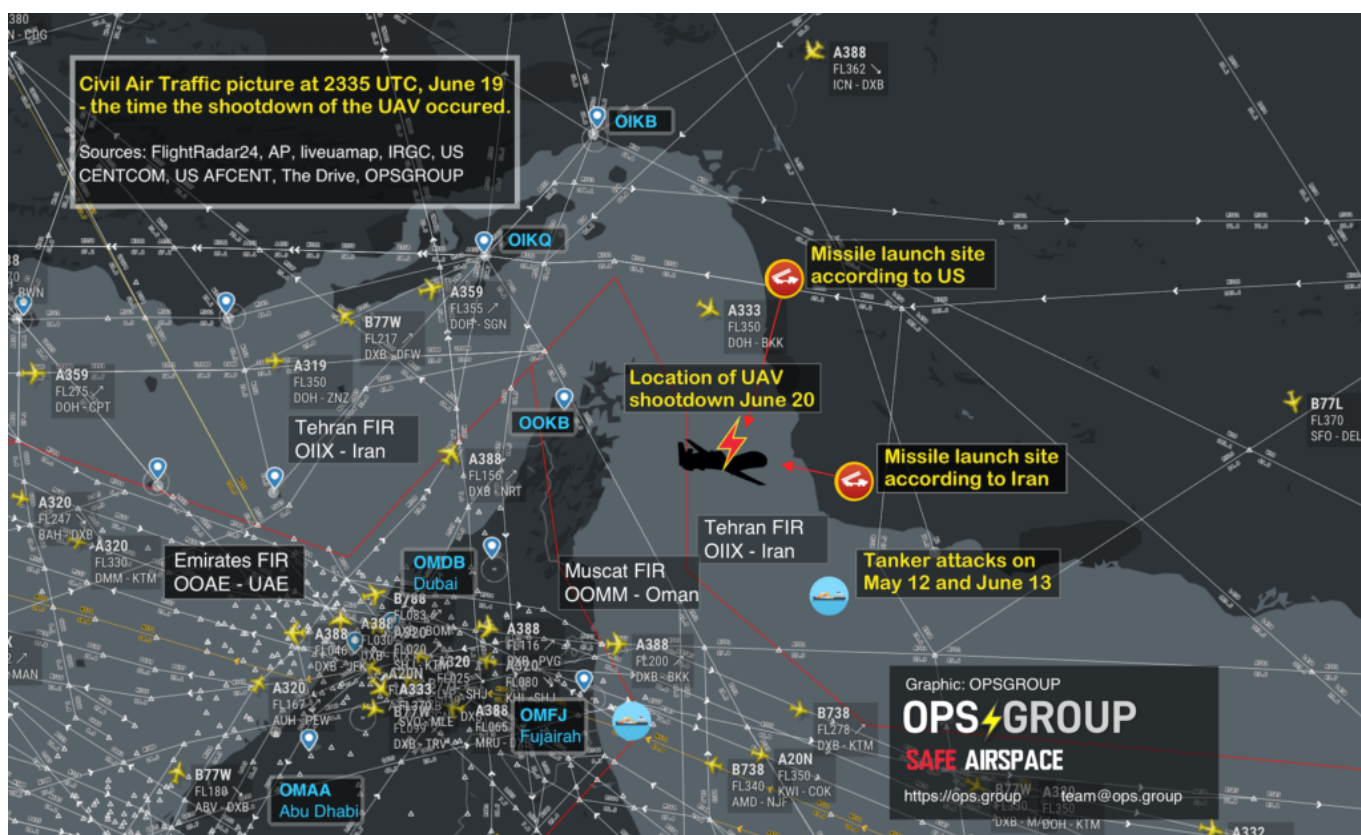
The Threat Of A Civil Aircraft Shootdown In Iran Is Real

Mark Zee
26 January, 2021



As we know by now, at 23:35Z last night (June 19, UTC), Iran shot down a US UAV on a high-altitude recon mission in the Straits of Hormuz. This was no small incident. The UAV was a \$200 million aircraft, weighing 32,000 lbs, with the same wingspan as a 737.

Although Iran and the US have slightly different versions of the position of the shooting down in the media, the approximate area is very clear, and marked on the map below, which shows the airspace picture at 2335Z, the time of the shutdown.



A high-res version of this map is available [here](https://ops.group).

For civil operators, the Straits of Hormuz have always been an area of high military activity, so it's tempting to mark this as 'more of the same'. However, over the last few weeks tension between the US

and Iran has heightened, and the launching of a surface to air missile by Iran represents an escalation in the current situation that crosses a threshold – warranting a very close inspection by airlines and aircraft operators overflying, or using airports like Dubai, Abu Dhabi, Ras Al Khaimah, Muscat, and Fujairah.

As we approach five years since MH17, we should remember the build up to that shootdown took several months, and there are the warning signs here that we must pay close attention to. In the lead up to MH17, 16 military aircraft were shot down before MH17 became the 17th. Look closely at the map. Civil aircraft were very close to the site of this incident.

This morning, we sent this out to our members in OPSGROUP:

OIZZ/Iran Earlier today, a large US military drone was shot down by Iran over the Strait of Hormuz. The US say it was over international waters, Iran say it was within their FIR. Either way, it means that SAM missiles are now being fired in the area, and that represents an escalation in risk. It appears a 787 was very close to the missile site this morning. Avoiding the Strait of Hormuz area is recommended – misidentification of aircraft is possible. If you are coming close to Iran's FIR, it's essential that you monitor 121.5, as Iran uses this to contact potentially infringing aircraft. Local advice from OPSGROUP members says 'Even if the operator/pilots think they will come close or penetrate Iran's Airspace they should contact Iran Air Defense on 127.8 or 135.1'. If the Iranians have an unidentified aircraft on their radar and not in contact with them they will transmit on guard with the unidentified aircraft coordinates, altitude, squawk (if there is one), direction of travel and then ask this aircraft to identify themselves as they are approaching Iranian ADIZ. Monitor safeairspace.net/iran for the latest.

Last September, when Syria shot down a Russian transport aircraft, we published an article on that risk, and noted "50 miles away from where the Russian aircraft plunged into the sea on Monday night is the international airway UL620, busy with all the big name airline traffic heading for Beirut and Tel Aviv. If Syria can mistakenly shoot down a Russian ally aircraft, they can also take out your A320 as you cruise past." That same risk of misidentification exists here in the Straits of Hormuz.

Apart from the misidentification risk, is the risk of a problem with the missile itself. The missile used by Syria in September was a Russian S-200 SAM, which was the same missile type that brought down Siberian Airlines Flight 1812 in 2001. The missile can lock on to the wrong target, and this risk is higher over water. The missile system used by Iran last night was a domestically-built Raad Anti-Aircraft system, similar to the Russian Buk that was used against MH17. Any error in that system could cause it to find another target nearby – another reason not to be anywhere near this part of the Straits of Hormuz.

Bear in mind that as an aircraft operator you won't be getting any guidance from the Civil Aviation Authorities in the region. As we saw with Syria, even when an aircraft had been shot down on their FIR boundary, the only Notams from Cyprus were about firework displays at the local hotels. It won't be any different here. **You need to be the one to decide to avoid the area.**

A further risk, if you needed one, is retaliation by the US. It seems probable that the US will at least try to find an Iranian target to make an example of. If you recall the Iran Air 665 tragedy, back in July 1988, which occurred in the same area, the US mistakenly shot down that aircraft thinking it was an Iranian F-14.

Bottom line: we should not be flying passenger aircraft anywhere near warzones. That's the lesson from MH17, and that's the lesson we need to keep applying when risks like this appear on our horizon.

The Iran risk is being monitored at Safe Airspace – the Conflict Zone & Risk Database. The Iran country page also has more information on further overflight considerations in other parts of the Tehran FIR.



Further reading:

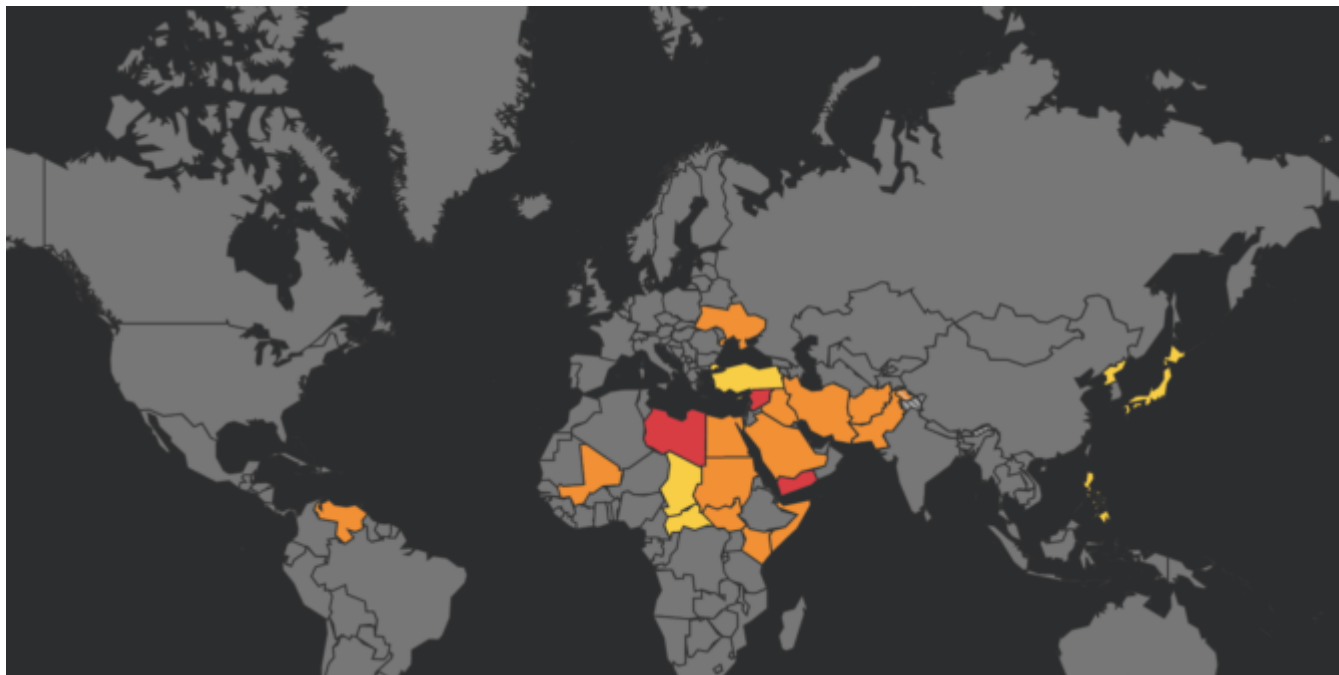
- The FAA published guidance in May that we have previously reported on and is still very much valid.

Sources for this article:

- The Drive
- The Aviationist
- The New York Times
- Safe Airspace
- OPSGROUP members
- Medium: Why are we still flying airline passengers over war zones

New features - Conflict Zone & Risk Database

David Mumford
26 January, 2021



To make it even easier to get a current risk picture for International Flight Ops, we've added a bunch of new features to the **Conflict Zone & Risk Database** at SafeAirspace.net.

Thank you to all OPSGROUP members – all our airlines, aircraft operators, pilots, dispatchers, and industry colleagues who've made this possible. Now we have a simple, single source of information for all risk warnings, analysis, that includes our Risk Radar project (so **for the first time** we can see what other operators are doing), all state warnings, and the ability to auto-generate a live Summary PDF of the current situation.

Start at SafeAirspace.net, where you have the current risk map, and feed of Updates and Alerts:



On each country page, you will now see Risk Radar information like this:



For each country, you'll see the current list of warnings, both from the country concerned and other states:

Current warnings list :			
Source	Reference	Issued	Valid to
Germany	Notam B0261/19	05 Apr 2019	04 Jul 2019
France	AIC 03/19	24 Jan 2019	Ongoing
USA	Notam KICZ A0025/18	10 Dec 2018	30 Dec 2020
UK	UK AIP ENR 1.1 (1.4.5)	22 Oct 2018	Ongoing
USA	Notam KICZ A0009/18	14 Apr 2018	Ongoing
UK	UK AIP ENR 1.1 (1.4.5)	12 Jun 2015	Ongoing

Scrolling down, you'll get the current Notam/AIC/AIP reference and a copy of the text:

Source: USA

Reference: **US FAA Background Notice**

Issued: 16-May-19, valid until: 16-May-20

Plain English: Exercise caution in the overwater airspace above the Persian Gulf and Gulf of Oman region.

Due to increased political tensions and heightened military activities in the region, there is an increasing inadvertent risk to U.S. civil aviation operating in overwater airspace above the Persian Gulf and Gulf of Oman. As a result, on 16 May 2019, the FAA issued Notice to Airmen (NOTAM) KICZ A0015/19, advising U.S. civil flight operations to exercise caution when operating in the above area.

For each country, there is a Summary and Analysis, so you get some background on why these warnings exist:

Iran

Risk Level: **Two - Danger exists**

[about risk levels]

Developments in Iran should be closely monitored, especially for US operators. In June 2018, tension between the US and Iran has continued to rise, with the US sending 1,000 additional troops to the region, while Iran announced the deployment of an indigenous air defense missile system, capable of tracking and shooting down six targets at the same time. On 16 May 2019, the US issued a new Notam and Background Notice advising operators to exercise caution in the overwater airspace above the Persian Gulf and Gulf of Oman region. The US has deployed warships and aircraft to the Gulf, and several attacks on tankers in the Strait of Hormuz have been blamed on Iran.

Consider carefully overflights of the Tehran FIR (OXXX), as landings in Iran for US operators especially could be an issue. A Norwegian 737 was stuck in Iran for two months, due to sanctions around spare parts. The US says that Iran has publicly made threats to US military operations, and are concerned about "a possible risk of miscalculation or misidentification, especially during periods of heightened political tension and rhetoric". They also warn of increased GPS jamming by Iran throughout this region.

A new feature is the ability to generate a **live summary** into a PDF, so you can print out everything into one document to share with your crew, dispatchers, and security team:

 **Print PDF**

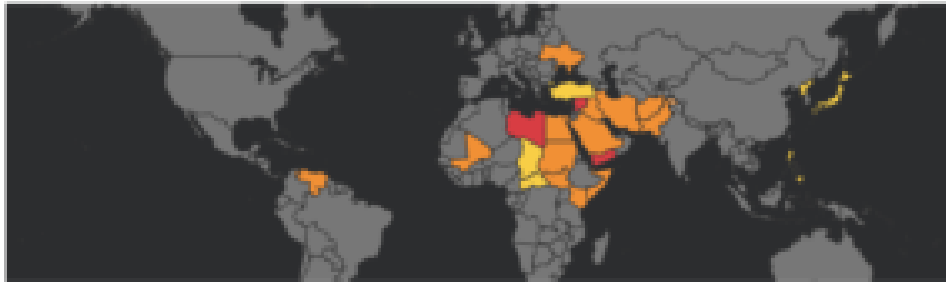
19 JUN 2019

WORLD AIRSPACE RISK SUMMARY

SAFE AIRSPACE

RISK SUMMARY
19 JUN 2019

ISSUED BY OPSGROUP
SITA HNLFSOH AKLPSOH
AFTN RMCDXAL
EMAIL: REPORT@SAFEAIRSPACE.NET



World airspace risk map at SafeAirspace.net as at Jun 19th, 2019

LEVEL 2: Danger exists

Criteria: Any of these will trigger Level 2: A prohibition warning is issued by another state, for specific altitudes or areas (usually with a "Do not operate below FLxxx"), but not for the entire airspace, OR more than one caution warning from other states, OR an OPSGROUP quick assessment of risk shows a clear threat to operators, and that risk is at least low.

Iran Level 2

Developments in Iran should be closely monitored, especially for US operators. In June 2019, tension between the US and Iran has continued to rise, with the US sending 1,000 additional troops to the region, while Iran announced the deployment of an indigenous air defense missile system, capable of tracking and shooting down six targets at the same time. On 16 May 2019, the US issued a new Notam and Background Notice advising operators to exercise caution in the overwater airspace above the Persian Gulf and Gulf of Oman region. The US has deployed warships and aircraft to the Gulf, and several attacks on tankers in the Strait of Hormuz have been blamed on Iran.

Consider carefully overflights of the Tehran FIR (OIRX), as landings in Iran for US operators especially could be an issue. A Norwegian 737 was stuck in Iran for two months, due to sanctions around spare parts. The US says that Iran has

Kenya Level 2

Kenya is affected by the ongoing Somali Civil War. There is a high threat from terrorism, including kidnapping. The main threat comes from extremists in response to Kenya's military intervention in Somalia. IED attack at HKJK/Nairobi in 2014.

 **12% avoiding**

26FEB19 USA Notam KICZ A0002/19 Exercise caution below FL260 in Kenya's airspace east of 40 degrees East longitude (the border region with Somalia) due to extremist and militant activity.

26FEB19 USA US FAA Background Notice Exercise caution below FL260 in Kenya's airspace east of 40 degrees East longitude (the border region with Somalia) due to extremist and militant activity.

12AUG16 UK UK AIP ENR 1.1 (1.4.5) Risk to aircraft overflying Kenya at less than FL250.

You can download an example of the PDF, generated on June 19th, 2019, here:

PDF Summary - World Airspace Risk at SafeAirspace.net



Download PDF, 800kb

You can generate your own live PDF here.

About the Conflict Zone & Risk Database

The Conflict Zone & Risk Database provides a single, independent, and eternally free resource for all airspace risk warnings, so that airlines and aircraft operators can easily see the current risk picture for unfamiliar airspace.

Safe Airspace is an initiative from OPSGROUP, an independent organisation with 5000 members, made up of airlines, corporate flight departments, private operators, charter operators, military, and government.

The Conflict Zone & Risk Database was launched in September 2016 as the lifespan of the ICAO CZIR was coming to a close, keeping the work ICAO did on the project alive, and providing the autonomous platform needed to make the concept work.

Objective - one single source

A single source for all risk warnings issued about an individual country, independent of any political or commercial motivation, so that a pilot, flight dispatcher, security department, or anyone responsible for flight safety can quickly and easily see the current risk picture.

Oversight and independence

The CZ&RD is managed by OPSGROUP. Because we are outside the chain of government, we are responsible only to our member airlines and aircraft operators, and more importantly, to the people ensuring a safe flight operation, and to the passengers that fly on our aircraft. For this reason, all information pertinent to a country can be assured to be carried here.

Eternally free

To remain completely independent of any bias, and to ensure that everybody has access, the Conflict Zone & Risk Database is completely free of charge. We have no commercial interest in publishing this information, it exists as a public service because our members care deeply about flight safety.

Contacting us

We rely on your input. If you have information to add, please email report@safeairspace.net. You can also use this address to discuss any content here. The collaborative effort is our focus. We're still a team of humans, and we miss stuff. If you see something missing here, please tell us!

New Unsafe Airspace Summary and Map

World Airspace **Risk** Map

World AFI ASI EUR NAM CAM SAM

[illegible]

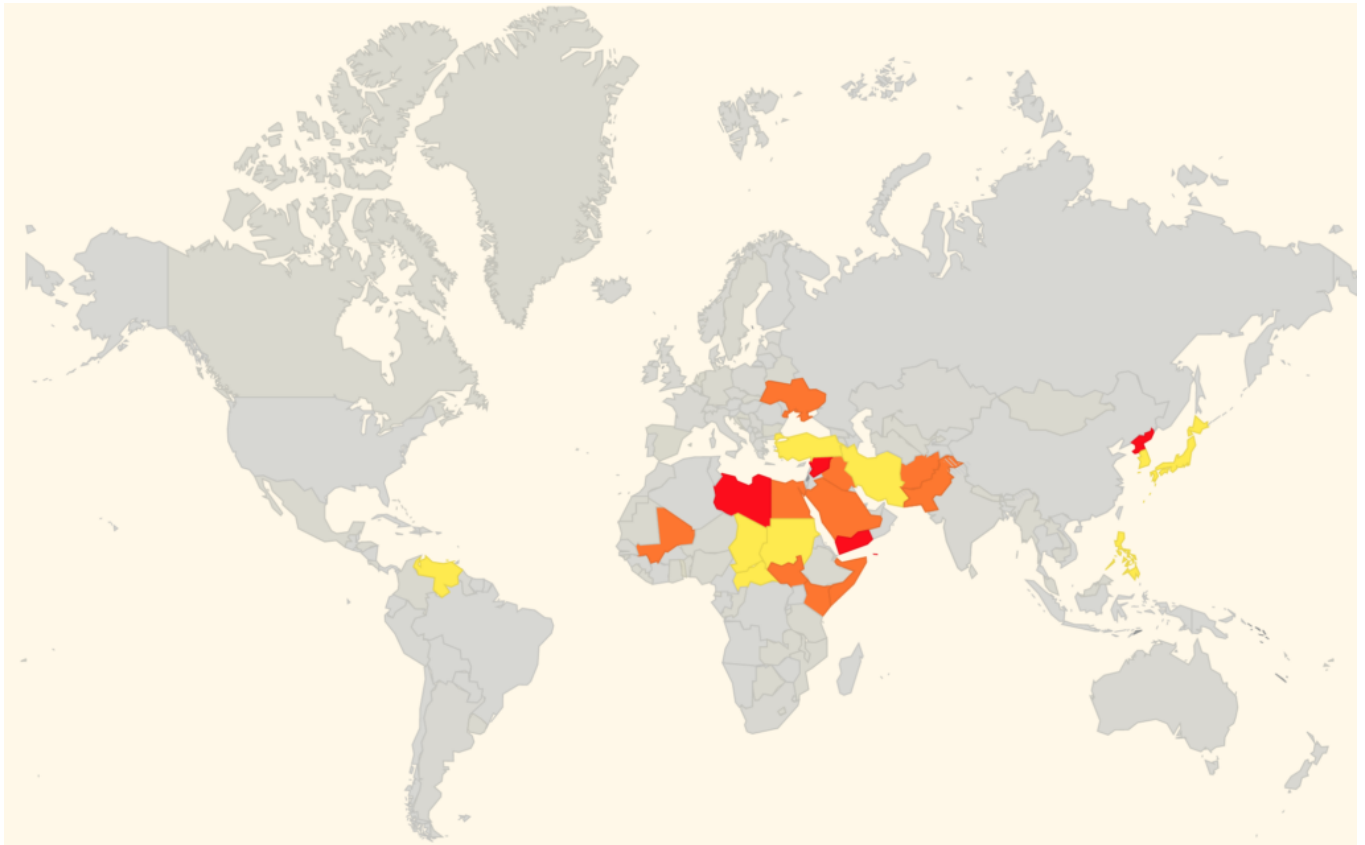
The **main changes** since the last summary are below. For a current risk map, refer to the Airspace Risk

map in your member Dashboard.

The situation in **Afghanistan** remains similar. On March 13, Germany added wording to maintain FL330 or higher, still recommending against landings at Afghan airports.

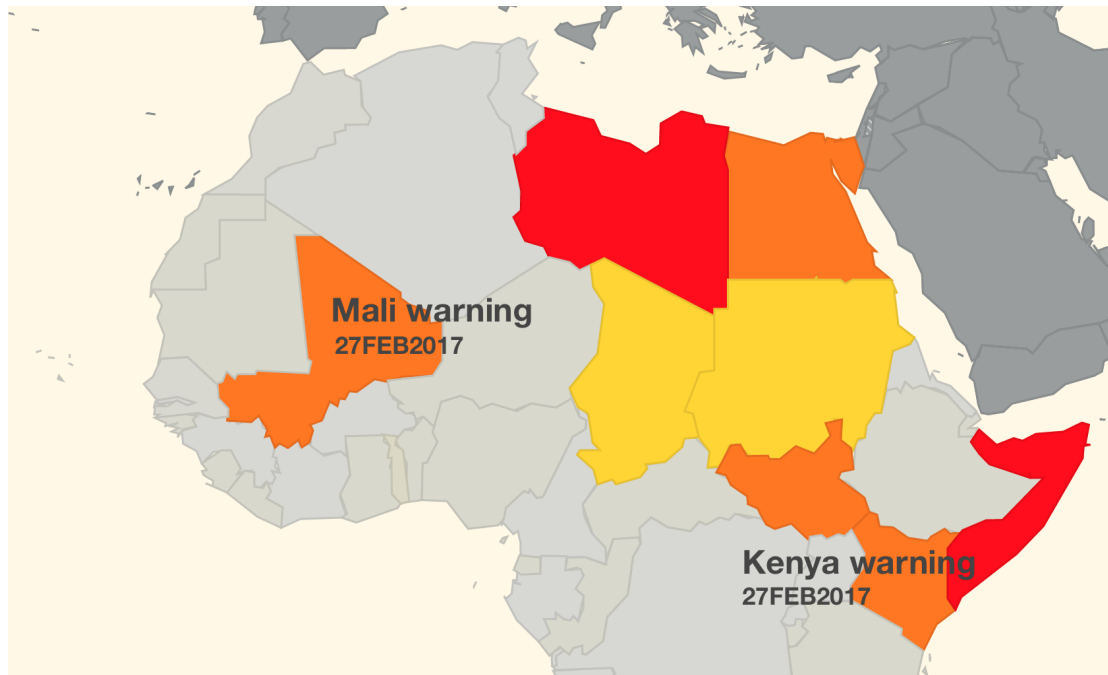
Germany also issued updated NOTAMs for **Mali**, **Iraq**, and **South Sudan**. All warnings remain as previous, unchanged from the prior NOTAMs.

- Full Airspace Risk Map
- Unsafe Airspace Summary 20MAR2018



Fresh warnings as FAA clarifies weapons risk in Kenya, Mali airspace

Declan Selleck
26 January, 2021



Feb 27th, 2017: The FAA has issued fresh warnings for Kenyan and Malian airspace, warning US operators of the potential dangers in operating through both the Nairobi and Malian FIR's.

Published on Feb 26th, the new advice **also adds new language with clarification of the type of weapons and phases of flight** that the FAA is concerned about, specifically:

- fire from small arms,
- indirect fire weapons (such as mortars and rockets), and
- anti-aircraft weapons such as MANPADS.

The scenarios considered highest risk include :

- landings and takeoffs,
- low altitudes, and
- aircraft on the ground.

The FAA uses the same wording for both Kenya and Mali. Additionally for **Mali**, the Algerian CAA has concurrently published airspace closures along their southern border due to the conflict, and the FAA's background notes on the Mali conflict still stand.

The updated guidance is intended for US operators and FAA License holders, but in reality is used by most International Operators including EU and Asian carriers, since only four countries currently provide useful information on airspace security and conflict zones.

The Notams both use FL260 as the minimum safe level, though we would suggest, as usual, that a higher level closer to FL300 is more sensible.

These updates have been notified through SafeAirspace.net, a collaborative and information sharing tool used by airlines, business jet operators, state agencies, military, and private members of OPSGROUP.

This is the new wording in the latest FAA Notams on Mali and Kenya:

POSSIBILITY OF ATTACKS ON CIVIL AVIATION BY EXTREMISTS/MILITANTS. AIRCRAFT MAY ENCOUNTER FIRE FROM SMALL ARMS; INDIRECT FIRE WEAPONS, SUCH AS MORTARS AND ROCKETS; AND ANTI-AIRCRAFT CAPABLE WEAPONS, INCLUDING MAN-PORTABLE AIR DEFENSE SYSTEMS (MANPADS). SUCH WEAPONS COULD TARGET AIRCRAFT AT LOW ALTITUDES, INCLUDING DURING THE ARRIVAL AND DEPARTURE PHASES OF FLIGHT, AND/OR AIRPORTS AND AIRCRAFT ON THE GROUND.

The NOTAMs in full are on our Kenya and Mali pages respectively.

References:

- Kenya country information page at safeairspace.net
- Mali country information page at safeairspace.net
- OPSGROUP collaborative project

What altitude is ‘safe enough’ to overfly a Conflict Zone?

Mark Zee

26 January, 2021



Most conflict zone guidance from Aviation Authorities is based on the risk posed by MANPADS – Man

Portable Air Defence Systems, or more descriptively – Shoulder Launched Surface to Air Missiles (SAMS).

Large-Unit SAM attacks on aircraft are uncommon – MH17, removed from the sky by a Russian-made Buk missile, was the first aircraft to be shot down by a large SAM unit since a Siberia Airlines Tupolev in 2001. These large units – requiring a radar system as part of the mechanism – have never been used by terrorists. Almost all incidences involving large-unit SAMs have involved misidentification. **There is no safe altitude from a large SAM.**

MANPADS, on the other hand, represent a greater threat to aircraft in 2017. These shoulder-launched systems are very portable, and far more likely to fall into the wrong hands. Common ranges are in the 10,000 – 15,000 ft range. The most dangerous is the FIM-92 Stinger, which has an operational ceiling of 26,000 ft (and there is concern that these have reached anti-government rebels in Syria)

The internationally promulgated standard safe altitude for overflight has now become about **25,000 ft AGL**. Most CAA/State guidance is issued based on this number. There are two important points for aircraft operators to note:

- That is 25,000 feet Above Ground Level. A missile could easily be launched from a mountain, or higher ground, so if you take 25,000 feet as your safety margin, make sure to add the terrain elevation beneath. In South Sudan, for example – Juba is at 2,000 feet – most of the country is at about this height. So 27,000 feet should be the minimum safe level, and you can work with FL270.
- This is based on the assumption that we're not worried about Stingers. Especially in the Middle East, a higher safe altitude might be better. **FL300 seems like a good place to start.**

References:

- Originally posted on safeairspace.net
- safeairspace.net Risk Map
- Download current Unsafe Airspace Summary (PDF)