

Passenger plane almost shot down over Syria

David Mumford
12 February, 2020



In the early hours of Feb 6, a commercial flight en-route to Damascus was **forced to divert** to Russia-controlled Khmeimim air base after **coming under fire from Syrian air defences**.

The Cham Wings A320, with 172 people on board, was flying from ORNI/Najaf to OSDI/Damascus when the incident took place. According to The New York Times, Syrian air defences directed **anti-aircraft gun and missile fire** against the Airbus, but failed to hit the aircraft.



Russia has accused the Israeli military of **putting commercial flights like this at risk** in the past, by timing their airstrikes on Syria too close to flights arriving at Beirut and Damascus airports. In the past few months there have been a number of air strikes by Israel against military targets in Syria, including OSDI/Damascus airport, with the Syrian government firing its own missiles over Syrian airspace and along the Lebanese border to repel the attacks.

In the days following, many countries issued warnings to **avoid the airspace of Iran and Iraq**, and most airlines other than Middle Eastern carriers have now stopped overflying these countries entirely.

Eastern Med. Airspace Risk 2018

Shootdown Events 2018

Estimated Shootdown Sites

OSTT Flight Information Region / National Airspace Boundaries

UL620 Airway / Airport Marker

OPSGROUP Avoidance Area

OPSGROUP

The map displays the Eastern Mediterranean region, including Turkey, Syria, Lebanon, Israel, Egypt, Jordan, and Saudi Arabia. It highlights various Flight Information Regions (FIRs) and National Airspace Boundaries (OSTT) in yellow. Airways and Airport Markers (UL620) are shown in orange. A red line indicates the OPSGROUP Avoidance Area. White circles represent estimated shootdown sites. Specific shootdown events are labeled with dates and aircraft types: 12FEB Turkish UAV, 10FEB Turkish T129, 03FEB Russian SU-25, 17SEP Russian IL-20M, 18MAR Syrian SU-24, 10FEB Israeli F-16, 24JUL SU-22M4, 11JUL Syrian UAV, and 10FEB Iranian Drone. Other FIRs shown include LTAA Ankara FIR (Turkey), LCCC Nicosia FIR (Cyprus), HECC Cairo FIR (Egypt), LLLL Tel Aviv FIR (Israel), OJAC Amman FIR (Jordan), and OEJD Jeddah FIR (Saudi Arabia).

Further reading:

Safeairspace - Managed by OpsGroup, this is our public repository and first point of warning for Airspace

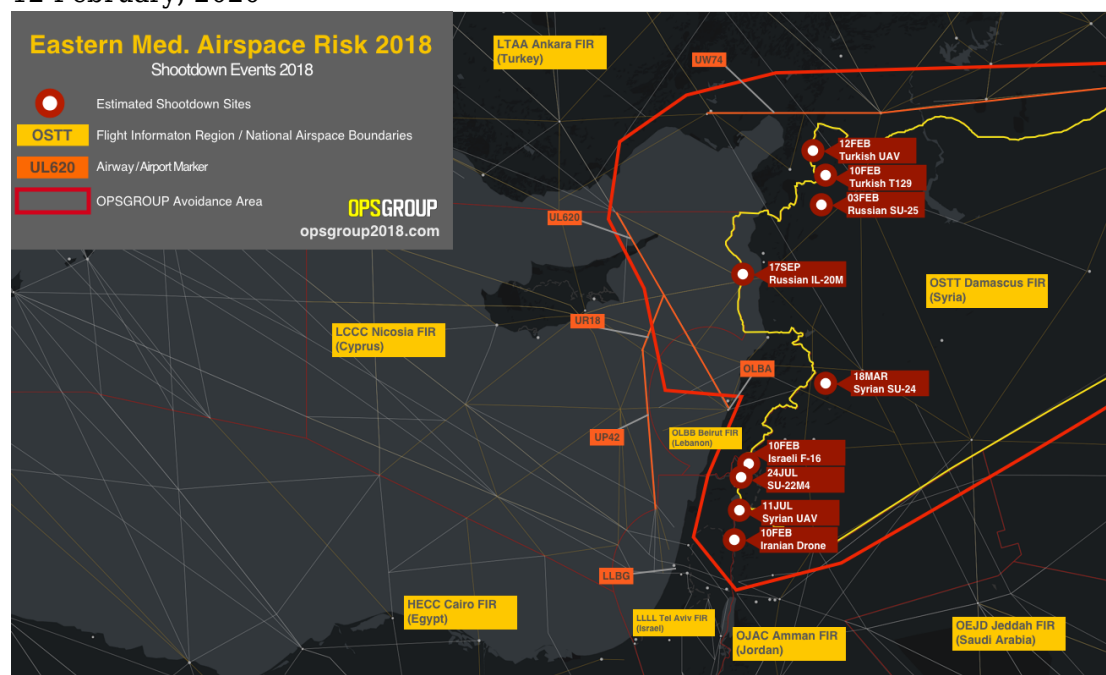
Risk for airlines, pilots, dispatchers, and aircraft operators.

Why are we still flying airline passengers over war zones? – *OpsGroup* article from Sept 2018, following the shoot-down of the Russian IL-20M off the coast of Syria, with a new note to members on the airspace risk in the Eastern Mediterranean.

Why are we still flying airline passengers over war zones?

Mark Zee

12 February, 2020



Here's the level of inconsistency we've reached in international air transport: we take each passenger, scrutinize their booking, check the no-fly-list, watch them on CCTV, pull them apart at TSA, remove anything sharper than a pen, question them, x-ray the bags, run Explosive Trace Detection tests, screen the hold baggage, background check every member of the crew, and then, once they've all boarded, **fly this ultra-secure airplane straight into a war zone.**

Welcome to the Eastern Mediterranean. It's an active conflict zone. The Russian naval build up there this month is the largest since Moscow's intervention in Syria began in 2015. Over Syria, 9 aircraft have been shot down this year.

The most recent was on Monday night this week, when Syria came under attack from Israel fighter jets, and started firing indiscriminately at anything off the coast that looked like a threat. They wanted to shoot something down, and they did—except it was a friend, not foe. They took out a Russian Ilyushin IL-20M transport category airplane. Even on the worst radar, that doesn't look anything like an Israeli F-16.

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.

And yet, most airlines continue to operate. Are we really so comfortable with operating in conflict zones again?

The lessons of MH17 seem to be fading fast. It's a little over four years since 298 people lost their lives over Ukraine one summer afternoon, thanks to an errant missile fired during a civil war at an aircraft that they thought was a military threat. "Why were they over a war zone", everyone cried afterwards.

Well, we all were. Me too. I was a pilot for Austrian Airlines at the time. I recall one morning in Vienna, some months before MH17. Boarding the last of the passengers, my BBC news app flashed up a story about a helicopter being shot down in eastern Ukraine .

Ukraine army helicopter shot down near Sloviansk, 12 dead

🕒 29 May 2014 | [Europe](#)

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Pro-Russian rebels in eastern Ukraine have shot down a military helicopter near Sloviansk, killing 12 people, the Ukrainian military says.

It says the rebels used a Russian-made anti-aircraft system, and that an army general was among the dead.

The town of Sloviansk, Donetsk region, has seen

Ukraine crisis

Witnessing clashes outside Kiev parliament

Life on street dividing Ukraine and Russia

Putin shows who is boss

As we were headed east, with my colleague in the cockpit, we quickly plotted the position on our enroute chart, and noted that it was really close to our route. Maybe 30 miles north. “We might see something interesting!”, we said, and pushed back. We didn’t, nor did we think much more about it.

Do you see the thought process though? Before MH17, we didn’t consider the risks to our aircraft from war zones. Especially being so high. Helicopters might be getting shot down, but we’re at 35,000 feet. No problem.

This is why all of these airlines—mine, at the time, included—operated on the route.

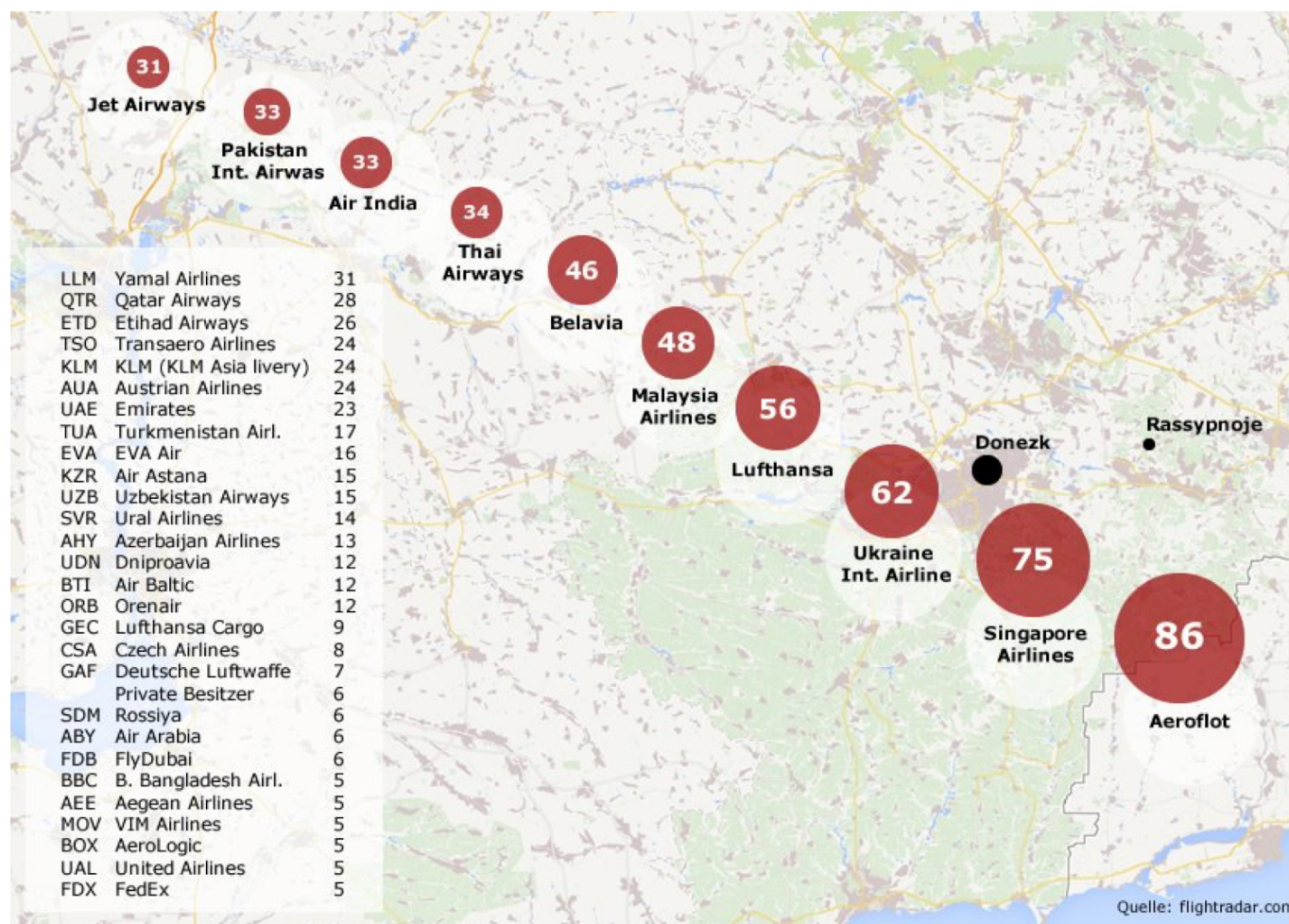


Image: Der Spiegel

And then it happened, and none of us could quite believe it.

But we learned. “Conflict Zone” became a buzzword. We had task forces and committees, whitepapers and promises, and—myself included—talked at length about how this happened, why, and how to avoid it in the future.

And yet, here we are flying unsuspecting passengers along the Syrian border. If you’re unsuspecting enough, and buy a SkyTeam codeshare ticket—you’ll actually overfly Syria on the Honey Badger airline of the region, Middle East Airlines.

Here we are flying passengers in the Eastern Mediterranean war zone. Why is this happening?

My guess: because we don’t think anything bad is going to happen, because the airspace boundary lines on the charts make that little bit of sea near Cyprus feel different from that little bit of sea near Syria, but mainly because there is **no clear guidance from Aviation Authorities**.

Let’s start with Cyprus. The Nicosia FIR has a big chunk of unsafe airspace. The Russian aircraft on Monday

was shot down on the Nicosia FIR boundary. What do the Notams say? Take a look. There are 97 of them. Mostly about fireworks at local hotels. Critical stuff indeed. Then there are 20 or 30 about “Russian naval exercises”. A clue, perhaps, but where is the black and white **“An Aircraft was Shot Down on our Border on Monday?”**. Or, since we are still using teletype to communicate Notams to crews, “AN AIRCRAFT WAS SHOT DOWN ON OUR BORDER ON MONDAY”. Wait, we have to abbreviate that, and use codes, for some reason. “ACFT SHOT DOWN ON FIR BDY 17SEP”. That’s better.

What about Turkey? Anything on the Eastern Mediterranean risk? Let’s have a look. Nope, just 132 Bullshit Notams, and something about an AWACS aircraft. See you back here in 30 minutes when you’ve read them all.

Remember, I’m being a pilot, an airline, a dispatcher, trying to find information on the Risk in the Eastern Mediterranean. And this is how hard it is.

EASA (European Aviation Safety Agency), how are you doing? Let’s start here, at the **“Information on Conflict Zones”**. Paragraph 2 tells us that ICAO have a Central Repository on Conflict Zones, launched in 2015.

No, they don’t. That died—quite a long time ago. This is where it used to live. So, there is no ICAO Central Repository on Conflict Zones. There is a new ICAO document with guidance on managing Conflict Zone risk (and it’s a bloody good one, too)—but where is the picture of current risk?

Let’s plough on through the EASA site. Aha! Seems we have a Conflict Zone alerting system, and Conflict Zone bulletins. Here they all are: <https://ad.easa.europa.eu/czib-docs/page-1>

The last one on Syria was issued on April 17th. But it seems to be just a list of Notams issued by other states. And these are out of date. The German Notam has expired, the French AIC has been replaced.

And there’s no guidance. No Map. No routes to avoid. Nothing about Cyprus, or Beirut. No mention of the Russian shootdown. No mention of the 9 aircraft shot down this year.

How am I supposed to know, as an operator, or pilot, what the risks are and where to avoid. We’re getting closer to the point here. **You’re not supposed to rely on the Aviation Authority. That is their message.** You must conduct your own risk assessment. You must research and find out about the risks yourself.

You are on your own.

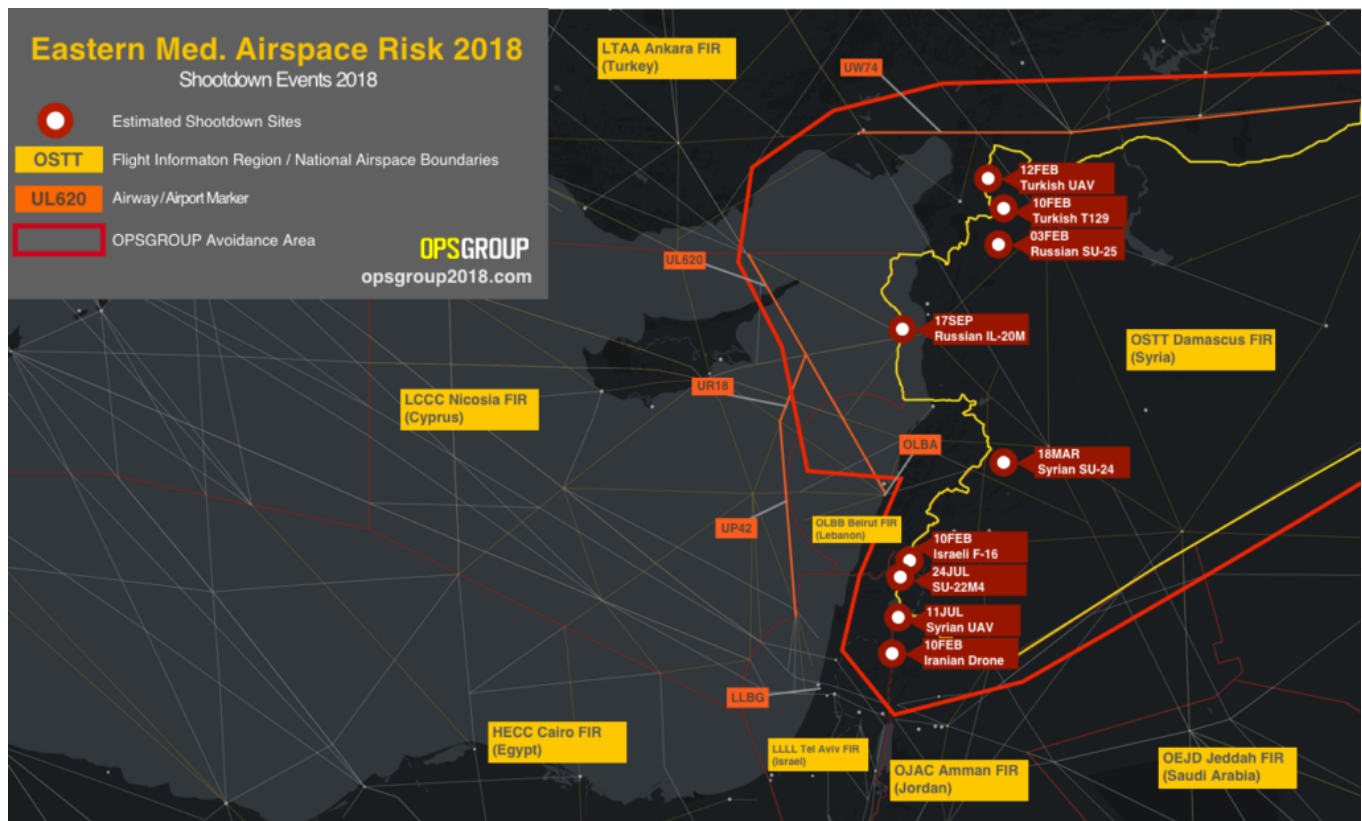
If you’re a big airline, that’s probably fine. You’ll make your own decisions about where to fly, anyhow. But what about everybody else?

While OpsGroup works hard to get information out to our members—and we spend a lot of time researching risk—I would greatly prefer that we didn’t have to.

Aviation Authorities must issue better guidance for the aircraft entering their areas.

Let me remind you. Airlines are operating 50 miles from a position where an airplane was shot down at night, by a missile type that’s already taken out a passenger airliner by mistake, fired by a beleaguered Syrian defence post, at a friendly aircraft that they did not take time to identify.

And the guidance to operators from Authorities: **NIL.**



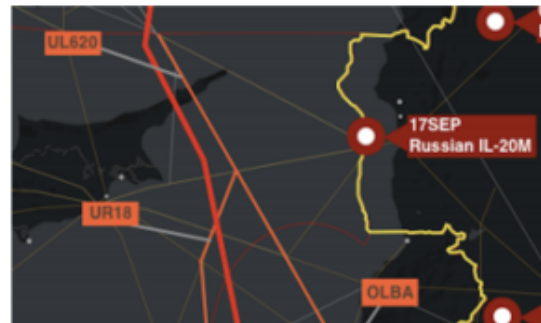
Opsgroup has now published Note 31: Airspace Risk in the Eastern Mediterranean. **There is a clear risk to civil aircraft operating on airways UL620, UW74, UR18, and UP62. In simple terms, if you find yourself planned overwater east of Cyprus, reconsider your route.**

OPSGROUP®**NOTE TO MEMBERS
#31 21 SEP 2018****ISSUED BY OPSGROUP**SITA HNLFSXH AFTN KMCOXAAL
WEB OPSGROUP2018.COM
EMAIL TEAM@OPS.GROUP**SUBJECT:**
EASTERN MED AIRSPACE RISK
ISSUED: 21 SEP 2018**CIRCULATION: OPSGROUP****Situation/Event**

On Monday, September 17th, Syria shot down a Russian IL-20M transport category aircraft, mistaking it for an Israeli fighter. All on board died.

The position of the shootdown was – according to Russia Mil - **35°19'N 35°41'E** – on the Nicosia (LCCC) / Damascus (OSTT) boundary, over international waters 20nm off the coast of Syria.

This event significantly changes the risk picture for civil aircraft operating in the vicinity of Syria. There is a **clear risk to civil aircraft** operating on airways UL620, UW74, UR18, and UP62. In simple terms, if you find yourself planned **overwater east of Cyprus**, reconsider your route.



Shootdown location of Russian IL-20M. Full Eastern Mediterranean Risk Picture on next page.

Primary concerns

1. The shootdown of the Russian IL-20M on Sep 17 was a mistake. The Syrian defences were under attack by Israel, and assumed it was another attack aircraft. Russia is an ally for them, so this was a friendly aircraft. If Syria can make this magnitude of mistake, **it can clearly also misidentify civil aircraft operating in the vicinity**.
2. The position of the shootdown is only **50nm away** from UL620 – still heavily in use by civil traffic inbound to Beirut. UR18 is also very close.
3. The missile used by Syria 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.

Siberia 1812 lessons

In 2001, Ukraine shot down, by accident, a Siberian Airlines Tupolev 154, killing 78 passengers and crew.

Ukrainian officials speculated that water interference caused the missile to veer off course.

US assessment indicated the S-200 missile overshot its target drone - and instead of self-destructing, locked on to the passenger aircraft about 134nm further away and detonated 50 ft over the aircraft.

- ICAO Doc 10084 – Risk Assessment Manual for Civil aircraft flying over or near conflict zones. This was published this year, fully updated – read it!
- Safeairspace. Managed by OpsGroup, this is our public repository and first point of warning for Airspace Risk for airlines, pilots, dispatchers, and aircraft operators.

Europe squawks 7600 on ops in the Eastern Med

OPSGROUP Team

12 February, 2020



As we reported last month, Eurocontrol published a 'Rapid Alert Notification' on their website regarding imminent air strikes into Syria.

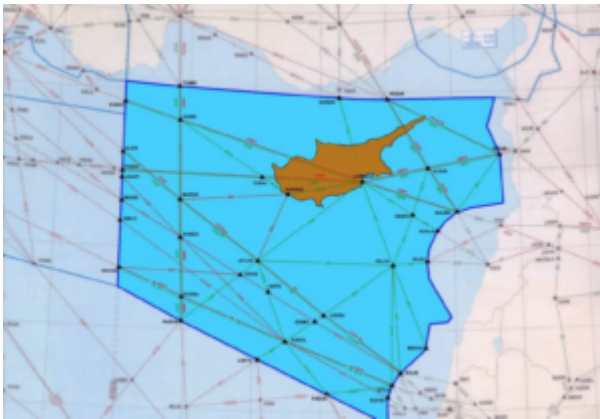
"Due to the possible launch of air strikes into Syria with air-to-ground and / or cruise missiles within the next 72 hours, and the possibility of intermittent disruption of radio navigation equipment, due consideration needs to be taken when planning flight operations in the Eastern Mediterranean / Nicosia FIR area."

Around this time LCCC/Nicosia FIR released this vague (and now deleted) NOTAM:

A0454/18 – INFORMATION TO AIRSPACE USERS

THE DEPARTMENT OF CIVIL AVIATION OF THE REPUBLIC OF CYPRUS IS CONTINUOUSLY MONITORING THE GEOPOLITICAL DEVELOPMENTS IN THE REGION AND WILL NOTIFY THE AVIATION COMMUNITY IF AND WHEN ANY RELEVANT AND RELIABLE INFORMATION IS AVAILABLE THE DEPARTMENT OF CIVIL AVIATION IS TAKING ALL APPROPRIATE ACTION TO SAFEGUARD

THE SAFETY OF FLIGHTS. 12 APR 15:25 2018 UNTIL 12 JUL 15:00 2018 ESTIMATED. CREATED:
12 APR 15:26 2018



Beyond this alert and NOTAM though; nothing else happened. A few days later, the conflict escalated.

Very few commercial flights operate over Syria, and authorities in the US, UK, France and Germany have all previously issued warnings for Syrian airspace.

But many airlines regularly transit the LCCC/Nicosia FIR: there are frequent holiday flights to the main Cypriot airports of LCLK/Larnaca and LCPH/Paphos; overflight traffic from Europe to the likes of OLBA/Beirut, OJAI/Amman and LLBG/Tel Aviv; as well as traffic from Istanbul heading south to the Gulf and beyond.



What has happened in the few weeks since then?

Normal Eurocontrol protocol is (during expected ATC strike for example) – regular teleconferences with operators, active re-routes and removal of certain overflight approval requirements. So did that happen this time? **No.**

Essentially just radio silence on Syria and operations in the Eastern Mediterranean Sea.

Right now, it's a busy place. With all the normal holiday traffic in the region, there is also a large number of military surveillance aircraft from numerous nations patrolling the region. United States assets operating from Greece and Italy. UK air power from Cyprus and the French from bases in Jordan. Add to that the normal Israeli defense air frames and even the odd Swedish gulfstream surveillance flight! Then there are the Russians conducting aerial operations and defense exercises in and around Syria.

Cyprus has activated a litany of “temporary reserved/segregated areas” inside of Nicosia FIR.

On May 3rd, Cyprus issued this vague information, to ‘exercise caution’.

A0580/18 – NAVIGATIONAL WARNING TO ALL CONCERNED. EXTENSIVE MILITARY OPERATIONS IN NICOSIA FIR PILOTS TO **EXERCISE CAUTION** AND MAINTAIN CONTINUOUS RADIO CONTACT WITH NICOSIA ACC. 03 MAY 12:00 2018 UNTIL 31 MAY 23:59 2018. CREATED: 03 MAY 11:25 2018

There is also a current warning about GPS interruptions.

A0356/18 – RECENTLY, GPS SIGNAL INTERRUPTIONS HAVE BEEN REPORTED BY THE PILOTS OF THE AIRCRAFT OPERATING WITHIN SOME PARTS OF NICOSIA FIR. AIRCRAFT OPERATORS OPERATING WITHIN NICOSIA FIR ARE ADVISED TO **EXERCISE CAUTION**. 20 MAR 10:04 2018 UNTIL PERM. CREATED: 20 MAR 10:05 2018

It may be unfair to blame the authorities completely. At the end of the day, due to the lack of appropriate communication from the various security agencies it’s hard to get accurate information out there. Still, there was enough warning to alert civilian operators of imminent strike – but then nothing else. Shouldn’t airspace customers and users expect more?

So what to make of all this?

Let’s end it with this great 2009 (and still current) NOTAM from the Cypriots.

A0687/09 – **NAVIGATION WARNING TO ALL CONCERNED.**

15 SEP 09:30 2009 UNTIL PERM. CREATED: 15 SEP 09:34 2009

US updates its Syria airspace warning

OPSGROUP Team
12 February, 2020



Following the US, UK and French airstrikes on Syria on April 14, the US FAA say there is now a risk posed to civil aviation within 200 nautical miles of the country due to increased military activity, GPS and comms interference, and the potential for more long range surface-to-air missiles in the area.

In the updated US FAA conflict zone Notam and Background Information for Syria, US civil aviation continues to be prohibited from operating within Syrian airspace, but has also now been instructed to “exercise caution” when operating within 200 nautical miles of Syria’s OSTT/Damascus FIR.

As they say in the Background Information doc, here’s why this updated guidance has been published:

“Heightened military activity associated with the Syrian conflict has the potential to spill over into the adjacent airspace managed by neighboring states and eastern portions of the Mediterranean Sea. Military operations may result in the risk of GPS interference, communications jamming, and errant long-range SAMs straying into adjacent airspace within 200 nautical miles of the Damascus Flight Information Region (OSTT FIR). These activities may inadvertently pose hazards to U.S. civil aviation transiting the region. This concern stems from the Syrian military response to previous airstrikes on 10 February 2018, which included Syrian forces launching long-range SAMs. Some of the Syrian SAMs flew into adjacent airspace and landed in Lebanon and Jordan, according to media reporting. GPS interference and communications jamming in the region may also occur associated with the military activity. Some U.S. air carriers have reported GPS interference in portions of the eastern Mediterranean Sea in the period following the 10 February airstrikes, and the interference may have originated from the Damascus Flight Information Region (OSTT FIR) as a defensive response.”

The US FAA haven’t provided a map to show where boundary would lie for 200 nautical miles from the border of Syrian airspace, but we think it would look something like this:

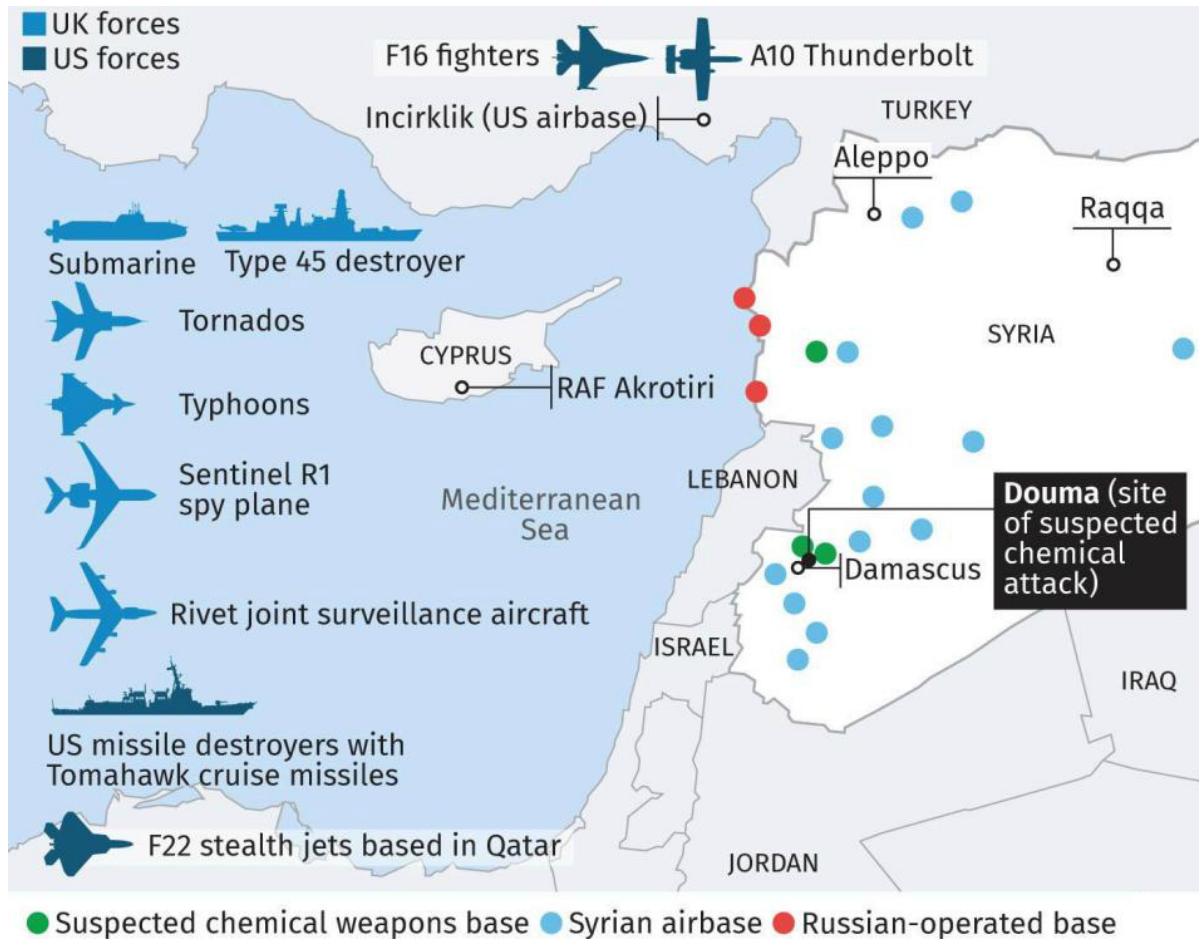


The 200 nautical mile zone would include the entire airspace of Lebanon, Jordan and Israel; half of Turkey and Iraq; and a portion of airspace over the LCCC/Nicosia FIR that covers the whole island of Cyprus!

The area may seem vast, but the possibility of further US, UK and French strikes against Syrian targets does still exist, as well as the Syrian military using surface-to-air missiles in response to any attacks.

During the airstrikes on April 14, the Syrian military reportedly used Russian-made missile systems to attempt to counter the strikes – these included missiles which have the capability to engage aircraft at altitudes well above FL900 and at ranges of around 190 miles.

While there is likely no intention to target civil aircraft, with all the missile defence activity going on in Syria and the spillover into neighbouring countries there still remains a risk of misidentification – and that's what the 200 nautical mile warning seeks to address.

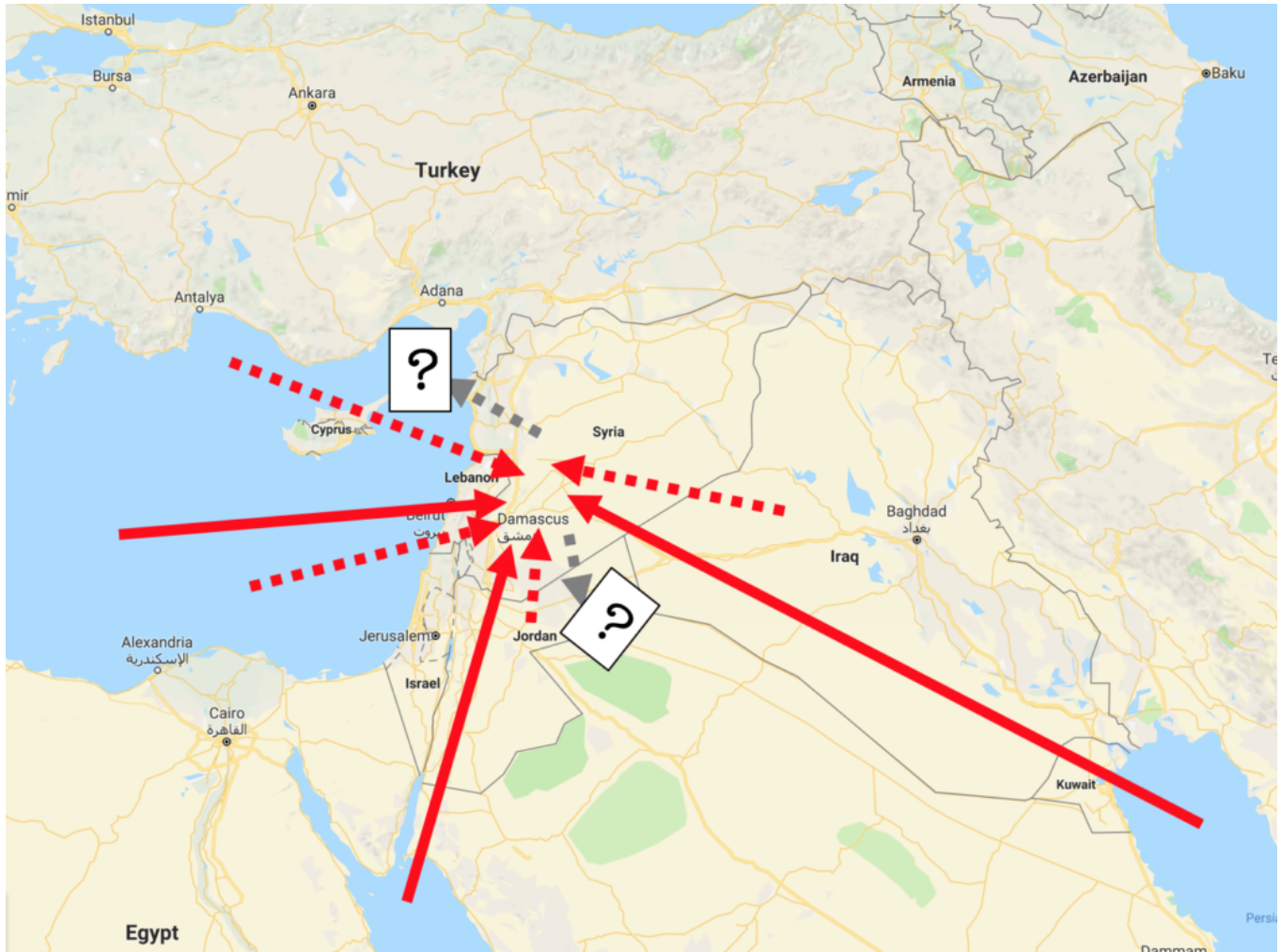


Amidst continued heavy military air presence in the region, almost all airlines are now avoiding Syrian airspace entirely. Lebanon's Beirut based MEA has now also re-routed all of their flights to avoid Syrian Airspace (was using it post recent attacks). Only local operators Fly Damas, Charm Wing Airlines, Syrian Air and Iran's Mahan Air continue to use the airspace.

Here's what the Pentagon had to say about the airstrikes on April 14:

- **105 missiles** were launched in the strikes against Syria. They included **30 Tomahawk missiles fired from** the USS Monterey and seven from the USS Laboon in the **Red Sea**. Another **23 Tomahawk missiles were launched from** the USS Higgins in the **North Arabian Gulf**.
- A submarine, USS John Warner, fired **six Tomahawk missiles from the eastern Mediterranean** and a French frigate in the same area fired another three missiles.
- At least one US Navy warship operating in the Red Sea participated in airstrikes, as well as US B-1 bombers.
- The air assault involved **two US B-1 Lancer bombers**, which fired **19 joint air to surface standoff missiles**. The **British** flew a combination of **Tornado and Typhoon jets**, firing **eight Storm Shadow missiles**, while **French** Rafale and Mirage fighter jets launched **nine SCALP missiles**.
- Four Royal Air Force Tornado GR4's were used in the strikes, launching Storm Shadow missiles at a "former missile base — some 15 miles west of Homs," according to the UK Ministry of Defense.

- **Syria fired 40 surface to air missiles 'at nothing'** after allied air strikes destroyed three Assad chemical sites.
- The United States remains **"locked and loaded"** to launch further attacks.
- **United States** and Allies **maintain positive posture of force** in the region, especially in the air.



*105 missiles launched from multiple locations in the region.
Over 40 Syrian surface to air missiles fired "at nothing".*

Further Reading:

- Everything We Know (And No One Has Said So Far) About The First Wave Of Air Strikes On Syria.
- US FAA KICZ Notam 9/18 - Syria.
- US FAA Background Notice.
- Safeairspace has been updated to reflect the latest information.
- And finally, just in case you were wondering what the airspace authorities in Cyprus have to say about all this, here's the superbly vague Notam they issued on the subject:

THE DEPARTMENT OF CIVIL AVIATION OF THE REPUBLIC OF CYPRUS IS CONTINUOUSLY MONITORING THE GEOPOLITICAL DEVELOPMENTS IN THE REGION AND WILL NOTIFY THE AVIATION COMMUNITY IF AND WHEN ANY RELEVANT AN RELIABLE INFORMATION IS AVAILABLE THE DEPARTMENT OF CIVIL AVIATION IS TAKING ALL APPROPRIATE ACTION TO SAFEGUARD THE SAFETY OF FLIGHTS. 12 APR 15:25 2018 UNTIL 12 JUL 15:00 2018 ESTIMATED. CREATED: 12 APR 15:26 2018

If you have anything to share that we've missed, please tell us by email bulletin@fsbureau.org