

Rumbles Over Riyadh: A New Threat?

Chris Shieff
8 February, 2021



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.



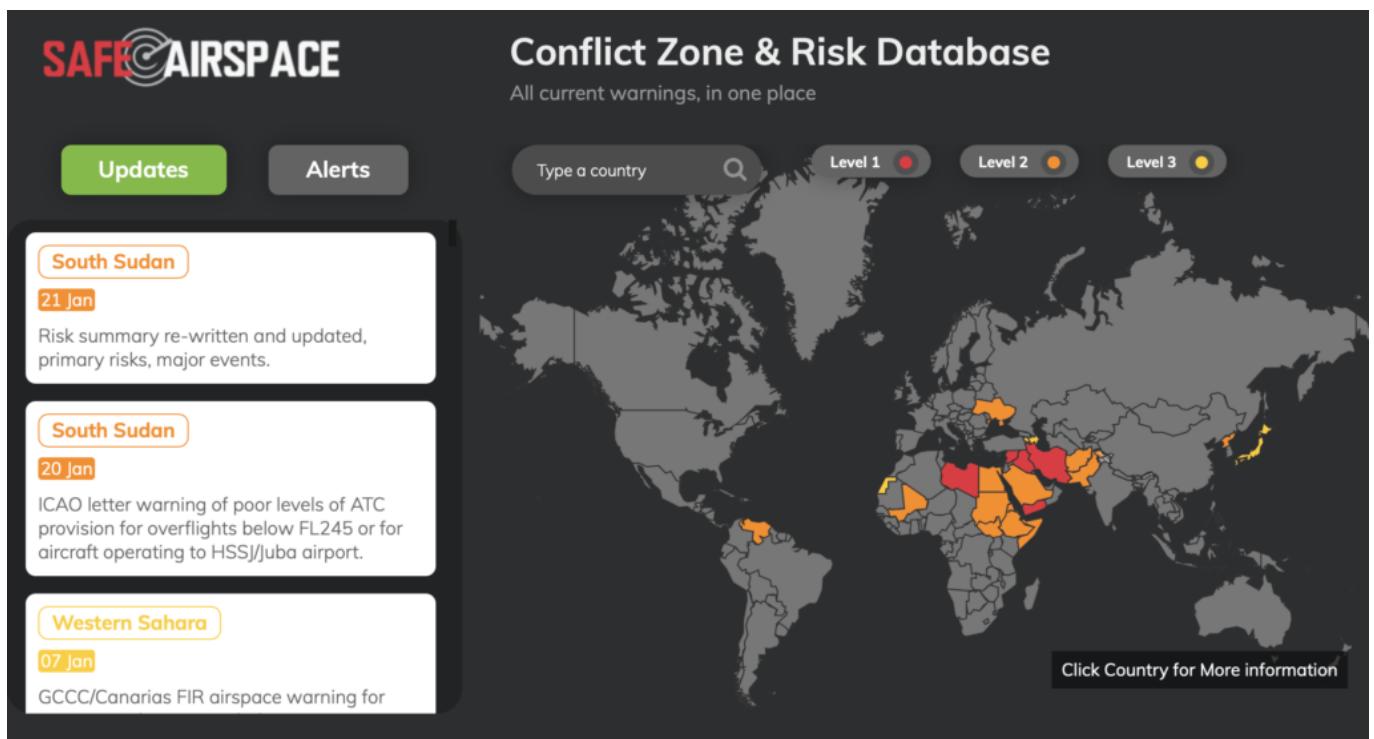
A drone similar to the ones believed to have targeted Riyadh.

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**.



SAFE AIRSPACE

Conflict Zone & Risk Database

All current warnings, in one place

Updates Alerts

Type a country

Level 1 Level 2 Level 3

South Sudan
21 Jan
Risk summary re-written and updated, primary risks, major events.

South Sudan
20 Jan
ICAO letter warning of poor levels of ATC provision for overflights below FL245 or for aircraft operating to HSS/Juba airport.

Western Sahara
07 Jan
GCC/Canarias FIR airspace warning for

Click Country for More information

Safeairspace.net – head over for a full risk briefing at any time.

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**.

FAA eases Gulf airspace restriction

David Mumford
8 February, 2021



The FAA has downgraded its airspace warning for the overwater airspace in the Persian Gulf and Gulf of Oman.

They previously said that US operators should **avoid this airspace** except when flying to/from the main airports in Bahrain, Kuwait and Qatar, UAE and Saudi Arabia.

The new guidance now just **advises caution** in this region, and recommends to avoid the airways nearest to the OIIX/Tehran FIR whenever possible, to reduce the risk of miscalculation or misidentification by air defence systems (remember, the US ban on Iran overflights is still in place).

The crucial change with this new warning is that **overflights in this region are now permitted**. So for US operators wanting to transit the OKAC/Kuwait, OBBB/Bahrain, OMAE/Emirates and OOMM/Muscat FIRs – you can now do so.



This new Notam represents a further loosening of the total airspace ban on the Persian Gulf and Gulf of Oman initially applied by the FAA shortly after the Iranian missile strike on US military bases in Iraq on Jan 8, which was quickly followed by the **shooting down of Ukraine Int Airlines flight 752 in Tehran** by the Iranian Armed Forces, having mistaken the aircraft radar return for an inbound missile.

The FAA cited **Iranian military de-escalation** as the reason for the change. "The FAA assesses there is sufficiently reduced risk of Iranian military miscalculation or misidentification that could affect U.S. civil aviation operations in the overwater airspace above the Persian Gulf and the Gulf of Oman," the agency said in their Background Information statement, issued on 18th Feb 2020.

Here's the Background Information statement in full:

Iran has de-escalated its military posture in the Persian Gulf and the Gulf of Oman as of early February 2020. Given this de-escalation, the FAA assesses there is sufficiently reduced risk of Iranian military miscalculation or misidentification that could affect U.S. civil aviation operations in the overwater airspace above the Persian Gulf and the Gulf of Oman in the Kuwait Flight Information Region (FIR) (OKAC), Jeddah FIR (OEJD), Bahrain FIR (OBBC), Emirates FIR (OMAE), and Muscat FIR (OOMB) to permit U.S. civil flight operations to resume.

While the risk to U.S. civil aviation operations in the above-named area has decreased, military posturing and political tensions in the region remain elevated, and there remains some inadvertent risk to U.S. civil aviation operations due to the potential for miscalculation or misidentification. As a result, on 14 Feb 2020, the FAA issued Notice to Airmen (NOTAM) KICZ A0014/20 (reissued on 17 Feb as A0016/20) permitting U.S. civil flight operations to resume in the above-named area while advising operators to exercise caution and to avoid operating on air routes nearest to the Tehran FIR (OIIIX) boundary whenever possible. The situation in the region remains fluid and could quickly escalate if circumstances change.

The 8 January 2020 accidental shoot down of Ukraine International Airlines Flight 752 shortly after takeoff from Tehran's Imam Khomeini International Airport (OIIIE) tragically highlights the airspace deconfliction

concerns, which pose an inadvertent risk to civil aviation from air defense engagements during periods of heightened tensions and associated military activity. Following the accidental shoot down, the region has seen a lowering of tensions, despite Iran's continued air defense coverage along its southern coast. In June 2019, there were two incidents of surface-to-air missile fire from the southern coast of Iran targeting U.S. unmanned aircraft systems operating in the Gulf of Oman.

Iran possesses a wide variety of anti-aircraft-capable weapons, including surface-to-air missile systems (SAMs), man-portable air defense systems (MANPADS) and fighter aircraft capable of conducting aircraft interception operations. Some of the anti-aircraft-capable weapons have ranges that encompass key international air routes over the Persian Gulf and the Gulf of Oman. Although Iran likely has no intention to target civil aircraft, the presence of multiple long-range, advanced anti-aircraft-capable weapons in a tense environment poses a risk of miscalculation or misidentification, especially during periods of heightened political tension and military activity.

There is also the potential for Iran to use Global Positioning System (GPS) jammers and other communications jamming capabilities, which may inadvertently affect their command and control capabilities and potentially pose a risk to U.S. civil aviation operating in the above-named area.

The FAA will continue to monitor the risk environment for U.S. civil aviation operating in the region and make adjustments, as appropriate, to safeguard U.S. civil aviation.

Here's the new Notam in full:

A0016/20 (Issued for KICZ)

SECURITY..UNITED STATES OF AMERICA ADVISORY FOR OVERWATER AIRSPACE ABOVE THE PERSIAN GULF AND THE GULF OF OMAN.

THOSE PERSONS DESCRIBED IN PARAGRAPH A BELOW SHOULD EXERCISE CAUTION WHEN OPERATING IN OVERWATER AIRSPACE ABOVE THE PERSIAN GULF AND THE GULF OF OMAN IN THE KUWAIT FLIGHT INFORMATION REGION (FIR) (OKAC), JEDDAH FIR (OEJD) , BAHRAIN FIR (OBBC), EMIRATES FIR (OMAE), AND MUSCAT FIR (OOMB) DUE TO CONTINUED ELEVATED MILITARY POSTURING AND POLITICAL TENSIONS IN THE REGION.

NOTAM KICZ A0002/20, WHICH PROHIBITS U.S. CIVIL AVIATION OPERATIONS IN THE TEHRAN FIR (OIIX), REMAINS IN EFFECT UNTIL FURTHER NOTICE.

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

B. PLANNING. THOSE PERSONS DESCRIBED IN PARAGRAPH A PLANNING TO OPERATE IN THE ABOVE-NAMED AREA MUST REVIEW CURRENT SECURITY/THREAT INFORMATION AND NOTAMS AND COMPLY WITH ALL APPLICABLE FAA REGULATIONS, OPERATIONS SPECIFICATIONS, MANAGEMENT SPECIFICATIONS, AND LETTERS OF AUTHORIZATION, INCLUDING UPDATING B450.

C. OPERATIONS. AVOID AIR ROUTES NEAREST TO THE TEHRAN FIR (OIIX) BOUNDARY, WHENEVER POSSIBLE, TO REDUCE THE RISK OF MISCALCULATION OR MISIDENTIFICATION BY AIR DEFENSE SYSTEMS. ADDITIONALLY, AIRCRAFT OPERATING IN THE ABOVE-NAMED AREA MAY ENCOUNTER INADVERTENT GPS INTERFERENCE AND OTHER COMMUNICATIONS JAMMING, WHICH COULD OCCUR WITH LITTLE OR NO WARNING.

THOSE PERSONS DESCRIBED IN PARAGRAPH A MUST REPORT SAFETY AND/OR SECURITY INCIDENTS TO THE FAA AT +1 202-267-3333. ADDITIONAL INFORMATION IS PROVIDED AT:

[HTTPS://WWW.FAA.GOV/AIR_TRAFFIC/PUBLICATIONS/US_RESTRICTIONS/.](https://www.faa.gov/air_traffic/publications/us_restrictions/)

SFC - UNL, 17 FEB 19:54 2020 UNTIL PERM. CREATED: 17 FEB 20:00 2020

For more on these, and for a full list of current warnings about Iran and Iraq from other states, see SafeAirspace.net

What's going on in the Strait of Hormuz?

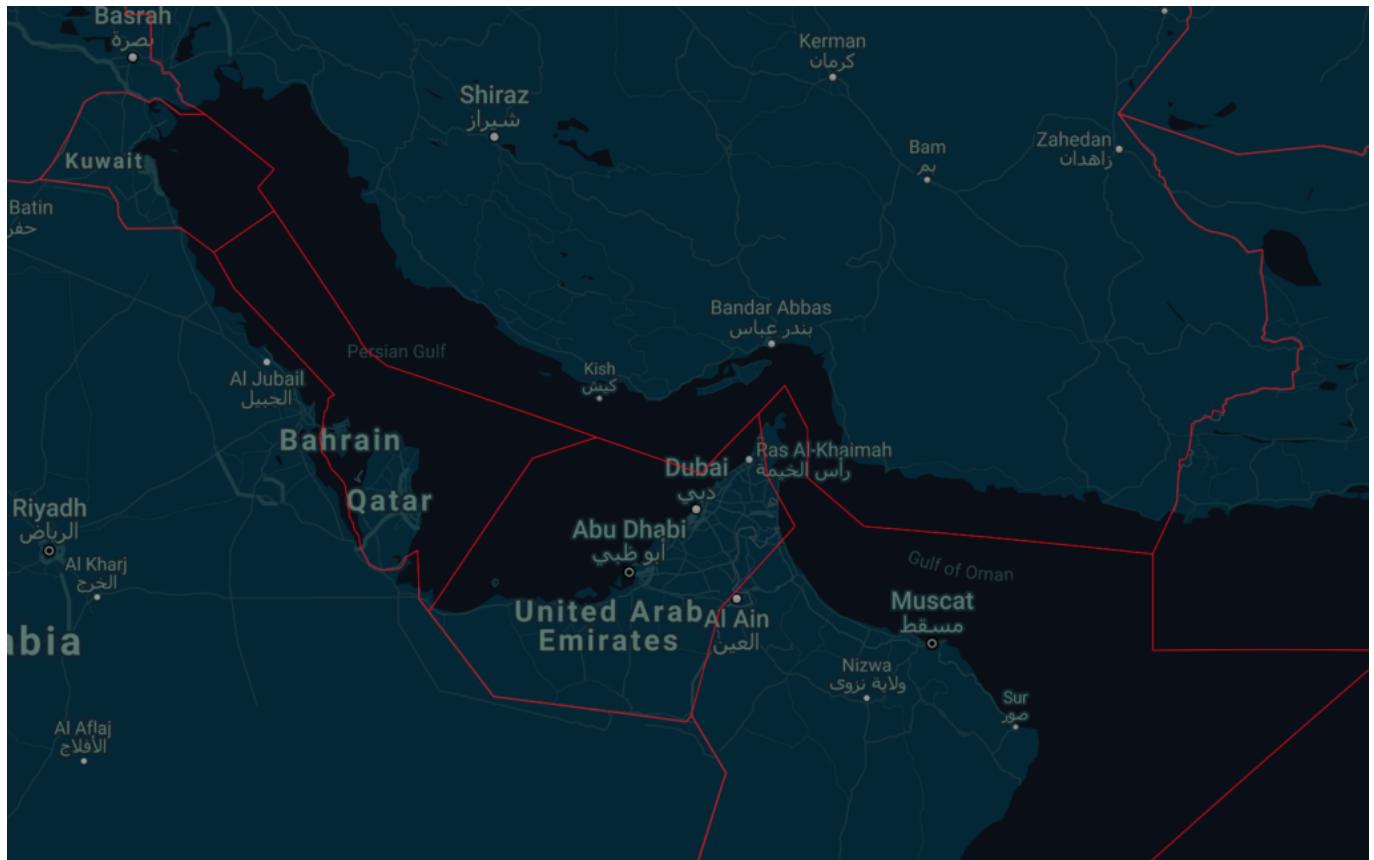
David Mumford
8 February, 2021



Amid rising tensions between the US and Iran, on 16th May the US FAA issued a new Notam and Background Notice advising operators to exercise caution in the overwater airspace above the Persian Gulf and Gulf of Oman.

The US has deployed warships and planes to the region, and withdrawn embassy staff from Iraq in recent days, and Iran has allegedly placed missiles on boats in the Persian Gulf.

In their Background Notice, the US FAA say 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.



The US published another airspace warning for Iran back in September 2018, but that was mainly focussed on the risks of overflying Iran itself due to missiles fired from sites in the far west of the country against targets in Syria. That warning only made passing reference to the Gulf region – the only tangible risk at that time being due to Iran’s “test launches” in the area between Iran and Dubai, where the Iranian military regularly fire missiles during drills to practise blockading the Strait of Hormuz.

In May 2018, the US pulled-out of the Iran nuclear deal, and re-imposed sanctions. Since then, the relationship between the two countries has rapidly gone downhill. This week, the White House Press Secretary said that Washington would continue its “maximum pressure” campaign on Iran, adding the US would like to see “behavioural change” from the country’s leadership.

With the military build-up in the Gulf region, the US government has been quick to defend its actions, but the message seems to be clear: **we don't want war, but we're ready for one.**

As National Security Adviser John Bolton said in a statement this week: **“The United States is not seeking war with the Iranian regime... but we are fully prepared to respond to any attack, whether by proxy, the Islamic Revolutionary Guard Corps or regular Iranian forces.”**

The full FAA Notam and Background Notice text is below. SafeAirspace.net is now updated with the new information.

16-May Iran

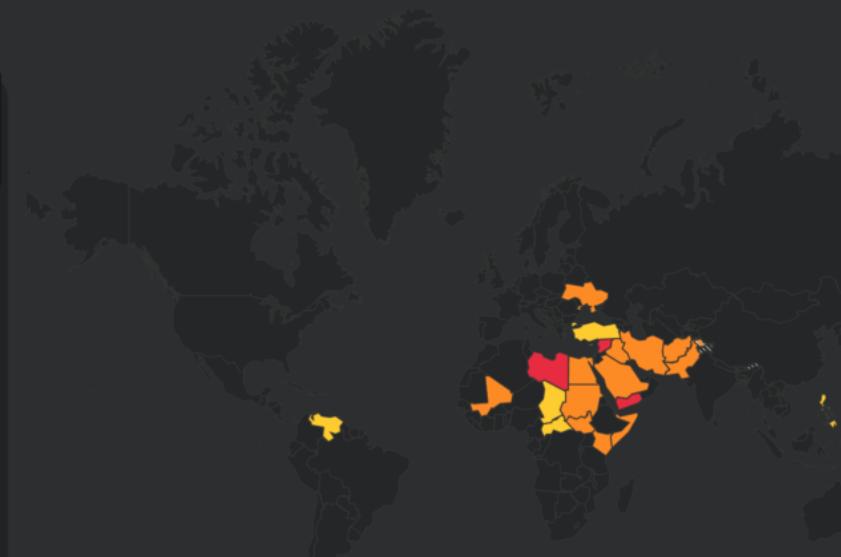
New FAA Notam: Exercise caution in the overwater airspace above the Persian Gulf and Gulf of Oman region. [Notam KICZ A0015/19]

16-May Iran

[US FAA Background Notice]

04-May Pakistan

German Notam updated, advice remains the same: potential risk of attacks at all airports in Pakistan. [Notam B0321/19]

**KICZ NOTAM A0015/19**

SECURITY..UNITED STATES OF AMERICA ADVISORY FOR OVERWATER AIRSPACE ABOVE THE PERSIAN GULF AND GULF OF OMAN.

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

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C. OPERATIONS. EXERCISE CAUTION DURING FLIGHT OPERATIONS DUE TO THE POSSIBILITY OF INTERRUPTIONS TO INTERNATIONAL AIR TRAFFIC DUE TO HEIGHTENED MILITARY ACTIVITIES AND INCREASED POLITICAL TENSIONS IN THE REGION. POTENTIALLY Affected OVERWATER AIRSPACE ABOVE THE PERSIAN GULF AND THE GULF OF OMAN INCLUDES PORTIONS OF THE TEHRAN FIR (OIX), BAGHDAD FIR (ORBB), KUWAIT FIR (OKAC), JEDDAH FIR (OEJD) , BAHRAIN FIR (OBBC), EMIRATES FIR (OMAE), AND MUSCAT FIR (OOMB). THOSE PERSONS DESCRIBED IN PARAGRAPH A MUST REPORT SAFETY AND/OR SECURITY INCIDENTS TO THE FAA AT +1 202-267-3333.

FAA Background Information Regarding U.S. Civil Aviation - For 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.

Iran has publicly made threats to U.S. military operations in the Gulf region. In addition, Iran possesses a wide variety of anti-aircraft-capable weapons, including surface-to-air missile systems (SAMs), man-portable air defense systems (MANPADS) and fighter aircraft that are capable of conducting aircraft interception operations. Some of the anti-aircraft-capable weapons have ranges that encompass key international air routes over the Persian Gulf and the Gulf of Oman. Additionally, Iran recently conducted a military exercise in the region, demonstrating their unmanned aircraft system (UAS) capabilities. Although Iran likely has no intention to target civil aircraft, the presence of multiple long-range, advanced anti-aircraftcapable weapons in a tense environment poses a possible risk of miscalculation or misidentification, especially during periods of heightened political tension and rhetoric.

There is also the potential for Iran to increase their use of Global Positioning System (GPS) jammers and other communication jamming capabilities, which may affect U.S. civil aviation operating in overwater airspace over the Persian Gulf and the Gulf of Oman.

The FAA will continue to monitor the risk environment for U.S. civil aviation operating in the region and make adjustments, as necessary, to safeguard U.S. civil aviation.