

AIRSPACE LOCATION

Afghanistan

AIRSPACE IDENTIFIER

ICAO: OAKX (Kabul FIR)

PREPARED BY

MedAire Aviation Security Center

COUNTRY RATING

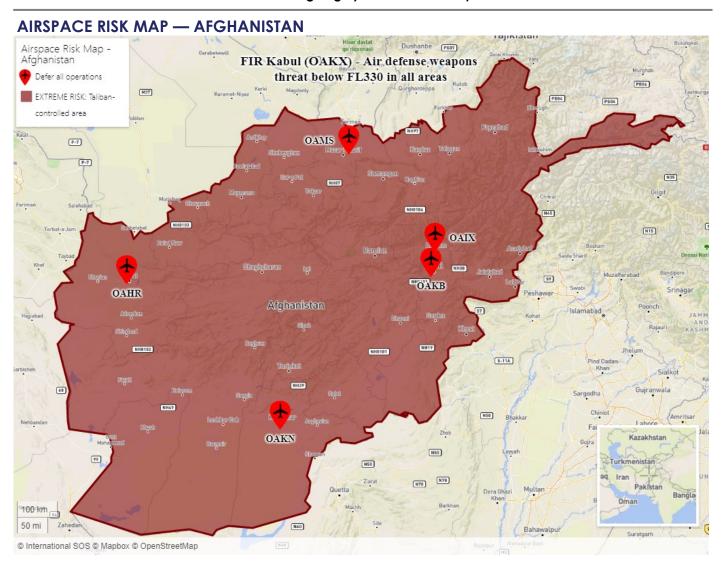
EXTREME

DATE OF REVIEW

22 August 2021

ASSESSMENT

Emergency and military flights continue at Kabul's Hamid Karzai International Airport (OAKB), though we recommend <u>deferring all but essential evacuation operations</u> due to overcrowding at the facility and a tenuous security environment; operations should be conducted only with exhaustive coordination with military elements in charge of the facility. If choosing to operate to Kabul, plan routing to reduce time spent over the Kabul FIR to an absolute minimum due to the Kabul FIR being largely uncontrolled airspace.



INTRODUCTION

Afghanistan has been embroiled in conflict for over forty years. Internal political turmoil prompted a Soviet invasion of the country in 1979. A brutal 9 year war followed, with the U.S. providing arms and munitions to insurgent groups. Following the Soviet withdrawal, an internal civil war in the country raged until the hardline Taliban regime took control. Their regime allowed the radical terrorist organization Al Qaeda to use the country as a base of operations to train and plan terror attacks against the West, most notably the September 11th attacks. This resulted in a U.S. led NATO invasion and occupation of the country. Though nominally out of power from 2001, the Taliban has since been engaged in a guerilla warfare campaign against the Afghan government and its NATO allies, and had made significant gains in territory through 2021 amid a drawdown of foreign forces, culminating in the capital Kabul on 15 August 2021. Details remain fluid as the situation develops.

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2021 DRAWDOWN OF NATO FORCES & TALIBAN TAKEOVER

Operators with interests in Afghanistan should closely monitor developments in the coming weeks and months amid the ongoing drawdown of coalition troops, and the reported transition of power from the elected Afghan government to Taliban forces that is underway from 15 August. US President Joe Biden had set 11 September 2021 as the symbolic deadline for the full withdrawal of US forces, this withdrawal will be complete in August 2021, and will presumably include the 5,000 US troops that were deployed to the capital in August to support evacuation efforts. Italian and German military forces completely withdrew from the country in June, and most other foreign forces have left the country in recent months, with some returning to evacuate their own foreign nationals from Kabul.

The Taliban's political leadership may face increasing internal pressure to restart attacks against foreign nationals and assets over the coming months. Some factions will advocate for restraint to avoid slowing the pace of the international withdrawal and triggering defensive airstrikes, especially following the group's takeover in Kabul. However, the militants' leadership will also need to accommodate the demands of influential hardliners.

In addition, other militant organisations – particularly the extremist Islamic State-Khorasan (IS-K) group – will seek to capitalise on the international withdrawal to escalate their own activities. IS-K retains the intent and ability to carry out high-impact attacks outside its traditional strongholds in the east, including in the capital Kabul. Such operations will be primarily focused on government and military interests. However, foreign nationals and assets—including civil aviation assets—will remain attractive targets for attacks and kidnappings.

The Taliban's gains across the country echo recent US intelligence assessments that the Afghan government would struggle to defend territory against Taliban offensives with the withdrawal of international troops. Nevertheless, the group is unlikely to launch a large-scale military operation within the capital while US troops remain in the country; however, we are now recommending that operators all but essential evacuation operations to Kabul amid the transition of power, and depart immediately if still in-country.

Based off all these factors, we assess that Afghanistan will continue to remain an extreme risk environment for the foreseeable future, with the potential for risks to become further elevated amid the now-commenced gradual departure of NATO forces from the country. As this will be gradual and details of exact troop movements will be carefully guarded, the security situation is subject to change with little to no notice.

THREAT TO AVIATION OVERVIEW

Any operation that takes place in Afghanistan would require comprehensive contingency planning and security measures in order to minimize exposure to the threat environment. Historic attacks on aircraft in-flight and assaults on aviation facilities highlight the capability and intent of Taliban (both Afghan and Pakistani) and other Islamist militants; including the Islamic State Khorasan (IS-K) and al-Qaida (AQ). The risk stems from a general threat from small arms, rocket-propelled grenades (RPGs), man-portable air defence systems (MANPADS), anti-aircraft artillery (AAA) and the reported use of armed drones by Taliban-affiliated forces.

The range of these weapon systems can be extended when used at higher elevations, an important consideration in a mountainous country like Afghanistan. At altitudes above FL330 however, these specific weapons pose little danger to aviation. However, aircraft are vulnerable upon ascent after take-off and descent while landing as they transition to and from higher altitudes. Additionally, indirect fire (IDF) and direct attacks on airports and airbases in Afghanistan are an ongoing concern and pose a nascent risk to the safety and security of aviation assets on the ground at locations within the country. There is also a periphery risk from any surge in US and NATO air operations over Afghan airspace.

AVAILABILITY

During the Soviet War in Afghanistan in the 1980s, the US Central Intelligence Agency (CIA) provided MANPADS and training to Mujahedeen fighters. Some estimates indicate that a small number of US-produced FIM-92 STINGER MANPADS are still circulating in Afghanistan. Russian, Chinese and Iranian produced MANPADS have reportedly shown up on the battlefields in the Afghanistan-Pakistan region in the hands of Islamist militants.

AAA: The Taliban, IS, AQ and Islamist militants are assessed to possess AAA systems.



- MANPADS: The Taliban, IS, AQ and Islamist militants are assessed to possess small quantities of MANPADS.
- **SAMS:** The Taliban, IS, AQ and Islamist militants do not possess any known SAMS, nor do they have the capability to operate them.

PORTABILITY

The portability of air defence weapons varies dramatically by type. AAA and MANPADS can be relocated and or transported with ease and are relatively easy to conceal. The Taliban controls territory located in multiple provinces of Afghanistan. In addition, the Taliban controls pockets of border areas with Pakistan which the group utilizes as a support base.

- AAA: AAA systems are highly mobile; the majority are vehicle mounted and some are towed/self-propelled.
- MANPADS: MANPADS inventories are highly mobile; also such systems are easy to transport and conceal.

LETHALITY

The lethality of air defence weapons varies dramatically by type. Although AAA and MANPADS can be used to down aircraft, they are only capable below typical cruising altitudes. It is important to note that high elevations can essentially extend the range of threat weapon systems

- AAA: With most aircraft flying above FL330, AAA pose no threat to aircraft at a typical cruising altitude. However, aircraft are vulnerable as they transit the threat envelope upon ascent after takeoff and descent while landing.
- MANPADS: With most aircraft flying above FL330, MANPADS pose no threat to aircraft at a typical cruising altitude.
 However, aircraft are vulnerable as they transit the threat envelope upon ascent after takeoff and descent while landing.

EASE OF USE

The ease of use of air defence weapons varies dramatically by type; though, AAA and MANPADS can be used with relative ease. While the majority of the US-provided MANPADS were recovered by the US CIA since 1990, air defence weapons training and tactics received by the Mujahedeen fighters have been proliferated across the Middle East and North Africa to Islamist militants.

- AAA: Vehicle mounted and towed/self-propelled AAA are relatively easy to use; however, these are highly inaccurate.
- MANPADS: The use of MANPADS has a number of constraints that have traditionally limited their use and effectiveness. One of the most common failures is related to batteries, particularly in areas that experience extreme heat. These batteries have a relatively short shelf-life and many have been stored for a number of years. By the time they are put in use by a belligerent actor, many batteries will have already lost sufficient charge to operate the launcher and missile. The seeker is another common point of failure which contain materials that degrade over time, especially in hot weather. Finally, maintenance is a constant issue with MANPADS.

DOCUMENTED USE — INTENT TO TARGET MILITARY AVIATION ASSETS

Since the 1980s, Islamist militants; including the Taliban, operating in the Afghan-Pakistan region have shown the capability and intent to utilize air defence weapons, RPGs, and small arms fire to down military grade aircraft helicopters. These incidents are too numerous to list in this report but highlight the capability and intent of these forces to utilize air defence weapons to target aircraft operating below FL330 in Flight Information Region (FIR) Kabul (OAKX). Below are some notable incidents since November 2015:

- **8 June 2021:** An ANSF helicopter crashed in Wardak province. While the Taliban claimed that they shot it down, international media has cited technical issues as being responsible for the incident.
- **18 March 2021:** An ANSF Mi-17 helicopter was shot down in central Wardak province shortly after takeoff from a military position, killing all aboard. Video footage shows the helicopter was impacted by a rocket or missile fired from a higher elevation, though it is unclear which weapon system was used.
- **4 May 2020:** Local Taliban-affiliated reports claim that the group downed an ANA helicopter in Kandahar province. These claims are unconfirmed, and have not been acknowledged by Western press.



- 7 February 2019: An Afghan Air Force MD-530 helicopter was destroyed by surface-to-air fire near Ghazni City, Ghazni Province.
- October 2016—Present: The Taliban claimed to have downed seven ANSF helicopters. However, in each case the Afghan government has stated the helicopters experienced technical faults.
- **30 October 2016:** The Taliban claimed to have downed a US military drone operating over Uruzgan province via surface-to-air fire.
- **27 September 2016:** The Taliban claimed to have downed a drone operating over Nangarhar province via surface -to-air fire.
- 11 July 2016: The Taliban claimed to have downed a drone operating over Maiwand district (Kandahar province) via surface-to-air fire.
- **29 June 2016:** Extremist IS group published images of militants in Nangarhar province firing low-caliber AAA pieces at ANSF helicopters.
- 31 March 2016 & 16 December 2016: IS militants claimed to have downed US military drones in Achin district (Nangarhar province).
- 24 March 2016: The Taliban destroyed an ANSF helicopter as it landed at a remote base in Kunar province.
- 3 October 2015: US military reporting indicates that a US C-130 was unsuccessfully targeted by a MANPADS while over Kunduz province.
- 13 October 2015: A US F-16 was hit by small arms fire causing significant damage as it overflew Paktia province.

DOCUMENTED USE — TARGETING OF CIVIL AVIATION ASSETS

In 1985 and 1987 respectively, Mujahedeen fighters in Afghanistan utilized MANPADS to down civilian aircraft resulting in the deaths of over 100 passengers. The downing of civilian aircraft by militants, highlights the capability and intent of these forces to utilize air defence weapons to target all aircraft operating over Kabul FIR (OAKX).

- **2 July 2021:** The National Directorate of Security (NDS) announced police detained an individual attempting to smuggle explosives hidden into a musical instrument case on a flight from Herat to Kabul. CCTV footage shows the explosives were detected during routing baggage scanning checks.
- 17 February 2016: A United Nations (UN)-chartered helicopter was hit with small-arms fire while landing at Kunduz Airport (OAUZ) in Kunduz province. The helicopter sustained external damage in the attack by suspected Islamist militants.

IDF ATTACKS — TARGETING OF AIRPORTS/AIRBASES

IDF attacks (rockets and mortars) against airports and airbases within Afghanistan occur on a frequent basis. Aircraft are at a higher risk of damage resulting from a rocket attacks while they are on the ground in airports and at airbases. More recent examples exemplify these tactics:

- **3 August 2021**: Multiple projectiles were launched targeting Herat International Airport (OAHR); the resulting damage remains unclear, but at least one inbound commercial flight was forced to abort its landing.
- 1 August 2021: Three rockets were launched targeting Kandahar Airport (OAKN), resulting in a suspension of flights while damage was repaired.
- 12 July 2021: Taliban forces claimed to have destroyed 2 Afghan Air Force Black Hawk helicopters in an attack at Kunduz Airport (OAUZ). Drone video footage was released by a Taliban spokesman showing a burning helicopter on a helipad.
- 1 May 2021: US officials stated that Taliban forces launched several projectiles toward Kandahar International Airport (OAKN). No damage or casualties were reported. US forces responded with airstrikes targeting other nearby rocket emplacements
- 7 April 2021: US officials stated that Taliban forces launched several projectiles toward Kandahar International Air-



port (OAKN). No damage or casualties were reported.

- 30 March 2021: The Taliban claimed a rocket attack targeting a US base in Khost province. No damage or casualties were reported.
- 19 December 2020: Five rockets targeted the Bagram Airbase (OAIX). There were no casualties or injuries reported.
- 12 December 2020: At least 10 rockets targeted the Hamid Karzai International Airport and nearby residential areas. One person was killed and two were injured in the surrounding neighborhoods. One rocket hit the edge of the
 airport compound, with shrapnel causing slight damage to a Kam Air parked aircraft.
- 19 September 2020: Six rockets were launched at Ahmad Shah Baba International Airport (OAKN) in Kandahar. There were no casualties or injuries reported.
- **9 April 2020:** Five rockets were launched a Bagram Airbase (OAIX) on 9 April, responsibility was claimed by the extremist Islamic State—Khorasan group. There were no casualties or injuries reported.
- 19 February 2020: Rockets impact in vicinity of Hamid Karzai International Airport (OAKB) on the border of Police Districts 10 and 15. Airport operations were not affected.
- **8 April 2018**: Two rockets reportedly hit the northern part of Kabul International Airport, damaging air force hangers and 4 helicopters; Taliban militants claimed responsibility.
- **27 September 2017:** The Taliban launched as many as 30 rockets at Kabul Airport (OAKB) that were reportedly meant to target the visiting US Defense Secretary.

DIRECT ATTACKS — TARGETING OF AIRPORTS/AIRBASES

Islamist militants and the Taliban have conducted numerous bombings and coordinated attacks in the vicinity of international airports across Afghanistan. The following is a list of selected major incidents that have affected international airports in Afghanistan and their perimeters since January 2015:

- **15-20 August 2021:** Unconfirmed and confirmed accounts of sporadic gunfire near Kabul's Hamid Karzai International Airport (OAKB) were reported amid the Taliban's takeover of the capital and unrest at the airport.
- August 2021: The ongoing Taliban offensive has targeted multiple installations, including Kunduz (OAUZ), Herat (OAHR), Kandahar (OAKN), and Sheberghan (OASG).
- **30 April 2021:** A bombing attack targeting a mosque within Bagram Airbase (OAIX) killed at least two Afghan soldiers and injured at least 18. The attack took place during Friday prayers.
- **15 January 2021:** A weaponized drone attack at an Afghan Army base in Kunduz province damaged an MD-530 helicopter.
- **16 April 2020:** An unknown assailant on a motorcycle ambushed and killed five Afghan nationals near the gates of the Bagram Airbase (OAIX) on 16 April. Four others were injured in the attack; the group were employees of the airbase on their way home from work.
- 11 December 2019: A suicide bomber targeted a medical facility just off Bagram Airbase, killing 2 and injuring 73; coalition forces were in a protracted gunfight with additional fighters for twelve hours after the initial attack.
- 23 September 2019: An Afghan policeman was killed after turning his weapon on NATO forces at Kandahar Airport (OAKN).
- **23 July 2018:** Islamic State Khorasan claimed responsibility for a suicide bombing that killed or injured 60 people near the Hamid Karzai International Airport (OAKB) main gate.
- 11 September 2017: A suicide bomber drove a car bomb into an armored convoy outside Bagram Airfield (OAIX); wounding five US military members, one Georgian soldier, and four civilians.
- **6 September 2017:** A Taliban suicide bomber rode a motorcycle outside a security gate at Bagram Airfield (OAIX) in Parwan province and detonated his explosives, wounding at least three US military members and three civilians.
- 14 December 2016: Local sources reported that one foreign national was killed when a member of the ANSF opened fire on passengers at a security checkpoint outside the capital's Kabul International Airport (OAKB).



- **12 November 2016**: A Taliban suicide bomber penetrated security at Bagram Airfield (OAIX) in Parwan province and detonated his explosives, killing two US military members and two civilian contractors.
- **28 December 2015:** At least one person was killed and around 30 others injured, including three Turkish military personnel, in a suicide car bombing on Airport Road in the vicinity of Kabul International Airport (OAKB).
- 21 December 2015: A Taliban suicide bomber attacked a military convoy near Bagram (OAIX), killing six US military members.
- **9 December 2015:** Around 37 people were killed in an attack targeting Kandahar International Airport (OAKN) in Kandahar province.
- **20 September 2015:** A suicide car bomb targeted a security forces checkpoint in close proximity to Kandahar Airport (OAKN).
- 10 August 2015: A suicide car bombing near the civilian entrance to Kabul Airport (OAKB) killed five and injured 15 others.
- 17 May 2015: The Taliban carried out a car bomb attack against a two-vehicle convoy near the main terminal of Kabul Airport (OAKB).
- **29 January 2015:** Three US contractors were killed when a member of the ANSF opened fire at Kabul Airport (OAKB).

AIRSTRIKES — AIRSPACE CONGESTION

Since September 2001, the US and NATO coalition has conducted extensive airstrikes against the Taliban and Islamist militants operating across Afghanistan. Further airstrikes by the US and NATO coalition against Islamist militant targets within Afghanistan had increased in recent years, up 42% from 2016 to 2017, and up another 69% from 2017 to 2018. This trend peaked in September 2019 before reducing sharply amid ongoing peace talks.

Airstrikes by both Afghan and US forces have increased since June 2021 amid the ongoing Taliban offensive and withdrawal of US forces. While the degree to which US air support against Taliban militants will continue remains unclear, airstrikes by Afghan forces are likely to increase significantly in the coming weeks and months, potentially impacting civil aviation operations.

US and NATO manned and unmanned air operations have the potential to impact civil aviation flight activity across the Middle East region, and we advise all aviation operators to monitor Notices-to-Airmen (NOTAMs) prior to departure.

AIRSPACE PROHIBITIONS

A US Federal Aviation Agency (FAA) issued NOTAM, French Directorate General for Civil Aviation (DGAC) advisory, United Kingdom (UK) Civil Aviation Authority (CAA) NOTAM, German Federal Aviation Office (FAO) NOTAM, and an European Aviation Safety Agency (EASA) bulletin have led civil aviation operators to halt or at least reconsider flight operations over Kabul FIR (OAKX). Please see the links below to views these documents in their entirety.

Each national aviation alert differs slightly in their exact recommendations, specifically in regards to what elevation they recommend while transiting Afghan airspace. Our guidance falls in line with the FAA recommendation: that operations stay restricted to pre-established routes above FL330. While this may be a higher flight level than normally recommended, we feel this is the safest course of action based of the proliferation of threat weapon systems, the enemy's demonstrated capability to utilize them, the uncertain security environment ahead, and the varying elevation across the country which extends threat system capabilities.

Following the Taliban takeover of the country, several countries – notably the US and France - have issues updated advisories for Afghanistan.

US FAA NOTAM A0022/21

US FAA Background Information

AIC France Circular 07/21

France F1296/21

UK AIP ENR 1.1

German AIP 10/21

EASA CZIB-2017-08R7



On 16 August 2021, a NOTAM was issued indicating that due to the ongoing security situation in the country, civilian ATS services would no longer be provided. All ATS services had been turned over to the military forces. In light of this, we would advise that operators defer all overflight of Afghanistan unless directly engaged in an evacuation operations and in direct coordination with military ATC entities.

CONCLUSION

Kabul FIR (OAKX) encompasses the entire Afghan airspace; however, the severity of the risk posed to flight operations by non-state actors differs across the country. While we can only speculate on the real reasons for the NOTAMs, bulletin and advisories discussed above, these seem to be in line with the new "risk-based decision making" approach of many countries and airlines and the concern expressed by numerous national and international civil aviation bodies regarding flight operations to or over conflict zones. Numerous Middle East-based and some European civil aviation operators continue to operate over Afghan airspace and to the major international airports within Kabul FIR (OAKX). Due to the extreme threat:

- Closely monitor developments amid a drawdown of coalition troops in the country amid the ongoing Taliban offensive. Maintain flexible flight plans and be prepared to postpone flight operations or depart at short notice.
- Restrict operations below FL330 and stay on established flight routes.
- Follow guidance issued by leading civil aviation governing bodies regarding conflict zone overflight.
- Monitor airport/airspace NOTAMs prior to departure for situational awareness and flight planning purposes.
- Take risk mitigation precautions on flights to all airports in Kabul FIR (OAKX). These actions are advisable in order to
 mitigate the risk posed by a MANPADS, AAA, RPGs, and or small arms fire targeting aircraft on take-off or approach.

RECOMMENDED OPERATION TYPES BY AIRPORT

Defer all but essential evacuation operations to Kabul International Airport (OAKB)

- Heavy volume of military and diplomatic flight operations continue at Kabul International Airport (OAKB). If planning to operate in support of an evacuation mission, do so with stringent security precautions and comprehensive contingency planning. Operators should be prepared to depart or divert at short-notice due to a fluid security environment.
- The US military is controlling access to the facility through the PPR process. Although civilian flights are allowed to apply, military and government flights are being prioritised to support the evacuation process. Additionally, the lack of services at the facility will likely delay any commercial carriers from attempting scheduled routes. Per recent NOTAM, the facility is currently operating under visual flight rules (VFR) only, and navigational, meteorological and fuelling services are not available. US military forces are reportedly providing navigational services for military aircraft.
- Turkish military forces—who are responsible for security at the facility—have indicated that they will not continue their mission past the US withdrawal following the Taliban takeover of the country.

Defer all operations to Bagram Airfield (OAIX), Kandahar International Airport (OAKN), Herat International Airport (OAHR), Mazar-e-Sharif International Airport (OAMS), and any of Afghanistan's domestic airports

• We advise deferring operations to any airport outside of Kabul following the Taliban takeover of the country.