



SAFETY AND RISK ASSESSMENTS OF CIVIL AIRCRAFT OPERATING NEAR OR OVER ACTIVE CONFLICT ZONES

1 Purpose

- 1.1 This Safety Information (SI) is to raise awareness to all pilots and air operators in response to the volatile security situation and heightened military activity with active conflict zones. It underscores the importance of conducting thorough risk assessments for flights over or near conflict zones to safeguard the safety of aircraft and passengers.

2 Background

- 2.1 Amid escalating political conflict, military activities and multiple closures throughout the airspace in the Middle East, there is a possible existence of serious risks to the safety of international civil flights, particularly ones operating over Tehran Flight Information Region (OIIX FIR), Beirut Flight Information Region (OLBB FIR), Tel Aviv Flight Information Region (LLLL FIR) and the airspace adjoining it. It would be judicious to anticipate additional closures in adjacent airspace as the situation continues to develop.
- 2.2 The conflict zones in this region present significant challenges due to their unpredictability and rapidly evolving dynamics, posing a substantial risk to civil aviation. The conflict involves the use of rockets, missiles, drone launches, airstrikes, and artillery fire, as well as the systematic activation of air defence systems. The presence of all-altitude-capable cruise and ballistic missiles, combined with air assets operating at various altitudes, heightens the risk of misidentification and miscalculation. Furthermore, the deployment of cruise missiles and military-grade weaponised drones raises additional safety concerns for airspace in the region. Given the lack of available mitigation measures against such threats, a systematic approach to risk assessment is therefore, crucial.

3 Recommendations

- 3.1 Air operators are to exercise extreme caution when operating in the regions surrounding active conflict zones and shall monitor the situation, establish / review contingency plans, maintain communications with Air Traffic Control (ATC) authorities, and closely follow ATC instructions and other guidance.
- 3.2 Additionally, air operators shall conduct risk assessments and appropriate mitigation actions are taken to ensure the safety and security of the aircraft on the intended route. The risk assessments should consider the routings from the aerodrome of departure to the aerodrome of arrival, as well as the intended take-off, destination and enroute alternate aerodromes.
- 3.3 In planning the conduct of operations through areas of armed conflict, or with the potential for armed conflict, operators should give due regard (but not be limited) to:
- a) Any additional fuel required for in-flight diversion out of the conflict area;
 - b) Any deferred item in accordance with the minimum equipment list, if applicable for take-off and departure from the conflict zone without refuelling;
 - c) Consideration of emergency and non-normal procedures, such as depressurisation and engine failure;
 - d) Alternate communication and navigation methodologies to account for the potential of conflict-associated jamming or electric interference that disrupts normal aircraft communications and navigation;
 - e) Availability and serviceability of aircraft equipment needed to facilitate identification of the aircraft by military units;
 - f) Use of procedures and means to ensure that the pertinent authorities are advised of the flight plan; and
 - g) Ensuring monitoring of the appropriate frequencies.
- 3.4 The absence of any restrictions in foreign airspace should not preclude the air operator from making its own determination on the safety and security risks of the airspace to be flown through. Air operators are responsible for conducting detailed risk assessments customised to their operational geography, types of operations, and the extent of their activities.

4 Conclusion

- 4.1 CAAM advises against operating in the airspace of Tehran, Beirut, and Tel Aviv. Additionally, effective risk assessment and mitigation strategies are equally essential for ensuring the safety of civil aviation operations near or over active conflict zones.
- 4.2 As the International Civil Aviation Organization (ICAO) continues to actively coordinate with the authorities concerned on matters which could impact flight safety, CAAM will continue to monitor the situation and will notify its aviation stakeholders accordingly should there be any development.



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