



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 various NOTAMs on 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) 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 these region present unique challenges due to their unpredictability and rapidly evolving nature. The primary risk to civil aircraft operating near or over active conflict zones include long-range surface-to-air missiles (SAMs), coordination irregularities and risk of miscalculation or misidentification by air defence systems. 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 within and in the regions with 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 Effective risk assessment and mitigation strategies are essential for ensuring the safety of civil aviation operations near or over active conflict zones. 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.



DATO' CAPTAIN NORAZMAN BIN MAHMUD

Chief Executive Officer
for Civil Aviation Authority of Malaysia

15 April 2024