SECOND HIGH-LEVEL SAFETY CONFERENCE 2015 (HLSC 2015) PLANNING FOR GLOBAL AVIATION SAFETY IMPROVEMENT

Montréal, 2 to 5 February 2015

Theme 1: Reviewing the current situation

Topic 1.2: Emerging safety issues

TASK FORCE ON RISKS TO CIVIL AVIATION ARISING FROM CONFLICT ZONES WORK PROGRAMME PROGRESS REPORT

(Presented by the ICAO Secretariat)

SUMMARY

This working paper presents a report of initiatives undertaken to progress the work programme of the Task Force on Risks to Civil Aviation arising from Conflict Zones (TF RCZ). In particular, the initiatives presented in this paper are associated with the sharing of best practices and information used to assess risks associated with civil aviation operations over or near conflict zones. To date, a study has been conducted to determine the feasibility of making relevant information available through the existing Notice to Airmen (NOTAM) system. In addition, the TF RCZ has explored the need for a centralized global information sharing system in the future.

Action: The conference is invited to:

- a) note progress of the task force;
- b) urge States to share information related to conflict zones through a harmonized process;
- c) remind States of the security risk assessment guidance contained in the ICAO Aviation Security Global Risk Context Statement (RCS); and
- d) recommend that ICAO continue its work to develop solutions that enhance the sharing of best practices and information used to mitigate risks associated with operations over or near conflict zones.

1. **INTRODUCTION**

- 1.1 On 17 July 2014, Malaysia Airlines Flight 17 (MH17), a scheduled passenger flight, was en route from Amsterdam to Kuala Lumpur. The aircraft was operating at FL330 in the Dnipropetrovsk flight information region (FIR), above temporarily restricted areas. The flight disappeared from radar to the west of the radio navigation point TOMAK and communication with the crew was lost.
- 1.2 In response to this accident, ICAO hosted a special high-level meeting with the Directors General of the International Air Transport Association (IATA), Airports Council International (ACI) and the Civil Air Navigation Services Organisation (CANSO) on 29 July 2014. A joint statement resulting from this high-level meeting expressed both the strong condemnation of the use of weapons against civil

aviation and support for the establishment of a senior-level task force to address issues related to the safety and security of civil aircraft operating in airspace affected by conflict. The Task Force on Risks to Civil Aviation arising from Conflict Zones (TF RCZ) is a body established by the Secretary General and is expected to give advice to the Secretariat, which in turn will report to the Council.

- 1.3 As a means to start this work as urgently as possible with the Member States of ICAO, the Secretary General decided that the TF RCZ be convened immediately to address concerns related to the safety and security of civilian aircraft operating over or near conflict zones. In particular, the TF RCZ sought to determine how relevant information regarding operations over or near conflict zones can be effectively collected and shared.
- 1.4 The first two meetings of the TF RCZ resulted in the development of key objectives and a proposed work programme which is presented in the appendix. The ICAO Council endorsed the work programme in principle during its 203rd Session. Due to the urgency expressed during the meetings by Member States and the industry, several initiatives are already underway and are outlined below.

2. **DISCUSSION**

- States have the responsibility to ensure the safety of civil aviation operations in their sovereign and delegated airspace; and airspace users have the ultimate responsibility to decide where they are able to operate safely. This is consistent with Annex 19 Safety Management, which requires the mitigation of safety risks as an inherent activity of State safety programmes, as well as safety management systems implemented by aviation service providers. In addition, Annex 17 Security requires that each State shall keep under constant review the level of threat to civil aviation within its territory, and adjust relevant elements of its national civil aviation security programme accordingly, based upon risk assessment carried out by the relevant national authorities (Annex 17, paragraph 3.1.3 refers).
- 2.2 To fulfil these responsibilities, the TF RCZ identified the need to enhance the sharing of information including operational restrictions and prohibitions issued in response to risks associated with conflict zones. A State may issue a notification that restricts or prohibits all civil aviation operations within areas of its sovereign or delegated airspace. In addition, a State may restrict or prohibit its own operators from flying in areas outside of its sovereign or delegated airspace.
- 2.3 The TF RCZ also identified the possible need for a system to exchange reliable, timely and relevant information that States and service providers require to ensure the safety of aircraft operating over or near conflict zones. This is consistent with Annex 17, which requires each State to "...establish and implement procedures to share with other Contracting States threat information that applies to the aviation security interests of those States, to the extent practicable." (Annex 17, paragraph 2.4.3 refers).
- Annex 15 Aeronautical Information Services contains provisions related to the NOTAM system, which specify that "a NOTAM shall be originated and issued promptly whenever the information to be distributed is of temporary nature and short duration or when operationally significant permanent changes, or temporary changes of long duration are made at short notice...." (Annex 15, Chapter 5.1 refers). Accordingly, the existing NOTAM system was identified by the TF RCZ as a means of communicating the issuance of airspace use restrictions or prohibitions related to conflict zones.
- 2.5 In light of these requirements, States will need to address how to best use the NOTAM system for this purpose. Therefore, the TF RCZ requested that work on near-term initiatives begin through two pilot projects to address the urgent items of the work programme. Following these pilot projects, initiatives will continue in the mid- and long-term to implement these solutions.

2.6 **Near-term initiatives**

- 2.6.1 The working group of the TF RCZ, comprised of members from Australia, Canada, Japan, the United Kingdom, the United States, EUROCONTROL, CANSO, IATA and the International Federation of Airline Pilots' Associations (IFALPA), was first convened on 5 September 2014 to determine whether it is feasible to effectively distribute information concerning conflict zones by using the existing NOTAM system. The NOTAM system is intended to globally distribute information regarding operationally significant changes of a State's aviation infrastructure or a difference in a State's aeronautical information publication (AIP). The working group assessed how this system can be used to effectively consolidate and distribute notifications regarding restrictions and prohibitions on the use of airspace over or near conflict zones. (HLSC/15-WP/9 refers).
- The TF RCZ also considered the consolidation of available information as relates to conflict zones in a centralized system accessible to all relevant stakeholders, including States and industry. A second working group was established to determine the feasibility of implementing such a system. A key aspect of this is the identification of the types of information required for making reliable risk assessments. (HLSC/15-WP/10 refers). Input was provided by the Aviation Security Panel Working Group on Threat and Risk (WGTR), which has produced security risk advice from overflying conflict zones at cruising altitudes. This advice draws on the knowledge and access to information of members of the WGTR, and of the risk assessment methodology developed by the group for assessing global security risks to aviation as set out in the ICAO Aviation Security Global Risk Context Statement (RCS). The information contained in the RCS is intended to help Member States and industry better understand the possible threat scenario (e.g. an aircraft being shot down during overflight); threat likelihood (presence of weapons and hostile actors, their intent and capability, command and control being exercised, etc.); and mitigations in place; and therefore residual risks so they can perform their own risk assessments according to their preferred methodology.

2.7 **Mid-term initiatives**

- 2.7.1 For the mid-term, the TF RCZ considered the feasibility of implementing a centralized global information sharing system to enhance the distribution and use of any type of information to address risks related to conflict zones. An initial operational concept is under development to determine the scope and functionality of such a system. (HLSC/15-WP/13 refers).
- 2.7.2 A State letter was issued on 9 October 2014 (State letter SMM 1/4-14/74 refers), requesting States to share best practices on conducting and sharing risk assessments related to the operation of civil aircraft near or over conflict zones.

2.8 Long-term initiatives

2.8.1 The long-term initiatives will involve the implementation of systems that were determined as being feasible for the distribution and use of information on risks related to conflict zones. Furthermore, guidance material will be prepared based on the best practices shared by States for conducting and sharing risk assessments related to the operation of civil aircraft near or over conflict zones.

3. **CONCLUSIONS**

3.1 The TF RCZ has made significant progress in addressing the urgent tasks identified in the work programme developed during its second meeting. Two working groups continue the work of

determining how to effectively exchange airspace use restrictions and prohibitions through the NOTAM system, as well as any available information that may be used to support risk assessment processes.

3.2 The TF RCZ work programme also includes mid- and long-term initiatives. The future development of guidance for conducting risk assessments for civil aircraft operations conducted over or near conflict zones as well as a concept to enable the sharing of related information will be considered.

APPENDIX

TASK FORCE ON RISKS TO CIVIL AVIATION ARISING FROM CONFLICT ZONES (TF RCZ)

OBJECTIVES

The key objectives are to ensure that:

- a) robust arrangements are in place to identify, assess, share information on and respond to risks to civil aircraft from activities in conflict zones; and
- b) the arrangements apply and relevant information is available to assure the safety of passengers and crew on civil aircraft irrespective of which airline they are travelling with or which cities they are travelling between.

In order to achieve the above objectives the following work programme is proposed:

PROPOSED WORK PROGRAMME

No	Expected outcomes	Tasks	Lead Entity	Target date
1	Development of processes, including types of reliable, timely and relevant information that States require to effectively discharge their responsibilities in sovereign or delegated airspace and for the operation of their own operators outside of that airspace.	support harmonized risk assessment processes relevant to civil aircraft operations over or near conflict zones.	ICAO Secretariat supported by States, regional organizations and industry	15 October 2014

No	Expected outcomes	Tasks	Lead Entity	Target date
		d) Review and upgrade the existing Circular 330, Civil/Military Cooperation in Air Traffic Management for coordination between military and civil aviation authorities.		2015
		e) Reach out to other UN bodies to identify means to collect information on risk assessments.		
2	Consolidation of available information as it relates to conflict zones in a centralized system accessible to all relevant stakeholders, including States and industry.	 a) Determine feasibility of a centralized global information system through a pilot project with initial cooperation of the Agency for Aerial Navigation Safety in Africa and Madagascar (ASECNA), European Aviation Safety Agency (EASA), EUROCONTROL, Japan, the Netherlands and the United States FAA and any others wishing to participate. b) Develop a paper with an initial concept of operations for a centralized global information system to consolidate and share information, including the minimum information requirements. Note: Consideration should be given to 	ICAO Secretariat supported by States, regional organizations and industry	Actors to deliver joint reports to HLSC Feb 2015
		contradictory information that may be issued by States. c) Consider an implementation strategy beyond the pilot project. Note: The implementation plan may include different scenarios where States should input information to the centralized global		
		information system.		

No	Expected outcomes	Tasks	Lead Entity	Target date
3	Development of best practice guidance for conducting risk assessments for civil aircraft operations conducted over or near conflict zones, including consideration on how efforts can be assisted through cooperation on a regional basis, as appropriate; and the sharing of the results of these assessments with industry players in their States and regions.	a) Issue a State letter requesting States' best practices on conducting and sharing risk assessments.	ICAO Secretariat	September 2014
		b) Develop a new circular to assist States in conducting and sharing risk assessments for civil aircraft operations conducted over or near conflict zones, which includes a model risk assessment.	ICAO Secretariat supported by States, regional organizations and industry	June 2015
		c) Consider the requirements and the arrangements for implementing risk assessments on a regional basis.		
4	Development of modalities for the timely exchange of these risk assessments and supporting information with other States or with industry players from other regions; and recommendations as to whether this is best done bilaterally, regionally, through industry groupings, or via ICAO.	Depending on the outcome of 1 a) through d) and 2 b): Review and, as necessary, augment the ICAO Risk Management Workshop so as to provide guidance and mentoring to States on exchange of risk assessments and supporting information.	ICAO Secretariat supported by States, regional organizations and industry	June 2015
5	Identification of specific types of information, required from States by airspace users, ANSPs and airports relevant to civil aircraft operations over or near conflict zones.	a) Identify industry requirements for information relevant to operations related to conflict zones as well as best practices currently adopted by airspace users, ANSPs and airports.	Industry supported by States and ICAO Secretariat	31 October 2014
		b) See task c) associated to outcome 1 above.		

No	Expected outcomes		Tasks	Lead Entity	Target date
6	Improvement of processes to share operationally derived risk information taking into consideration ways in which safety occurrences are currently shared.	shar diss risk	ablish a centralized industry information ring framework/system to collect and seminate information regarding operational as associated with operations over or near afflict zones.	Industry supported by States and ICAO Secretariat	31 October 2014
		gov info ensi prov	resolidate best practices and create industry vernance provisions for the sharing of primation through this industry system to ure that any operational information wided is adequately protected and used ely for the intended purpose.		
		the	ntingent upon outcome 2, establish a link to centralized global information system to applete two-way communication.		
7	In order to enhance transparency, develop best practices on the provision of information to passengers and flight crew regarding the use of airspace over or near conflict zones.	trav rega	olish best practices for informing the velling public and flight crew on risks arding the use of airspace over or near flict zones.	Industry supported by States and ICAO	31 October 2014
	<u> </u>	cam	rough relevant committees and awareness apaigns, encourage air carriers to use the ctices referred in a) above.	Secretariat	
8	Reinforcing and clarifying the responsibilities of States under the framework of the Chicago Convention system for safe operations in their sovereign and delegated airspace and for the operation of their own operators outside of that airspace.	rela Inte othe stre the guid	view of the application of the provisions ating to conflict zones in the <i>Convention on ernational Civil Aviation</i> (Doc 7300) and the ICAO treaties, with a view to engthening the awareness and observance of obligations under these provisions. Relevant dance material for these provisions will be lated, if necessary.	ICAO Secretariat supported by States	June 2015

No	Expected outcomes	Tasks	Lead Entity	Target date
9	to aviation safety and security auditing and assessment programmes so as to ensure that accountabilities, including those related to contingency planning are properly discharged.	 a) Develop, as necessary, new USOAP and USAP protocol questions focusing on existing provisions related to risk assessments and sharing of information. 	ICAO Secretariat and industry	December 2014
		b) If new provisions are developed, the associated protocol questions will be incorporated into the audit programmes.		No later than effective date of new
		c) Revise, as necessary, industry audit protocols associated with operational risk.		SARPs
10	Development of a set of possible changes to ICAO Annexes, guidance and/or other materials so as to give effect to the recommendations made on enhancements of risk assessments for civil aircraft operations near or over conflict zones.	a) Identify if enhanced/new provisions are needed to enhance risk assessments for civil aircraft operations over or near conflict zones. The Attachment contains a list of potential documents to be amended.	ICAO Secretariat, supported by States and industry	Regular process Guidance material no later than the effective date of relevant SARPs
		b) Update, as necessary, Doc 9554, Manual Concerning Safety Measures Relating to Military Activities Potentially Hazardous to Civil Aircraft Operations.		2015
11	Building on the current provisions and guidance on contingency planning, expand so as to enable States to meet air traffic services needs of changes in traffic flows.	a) Update, as necessary, the relevant guidance material for these provisions.	ICAO supported by States and industry	Guidance material end of 2015
	I	b) Develop, as necessary, operational requirements for the development and promulgation of air traffic flow management contingency plans and	industry	Regular amendment process

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No	Expected outcomes	Tasks	Lead Entity	Target date
		aerodrome emergency plans for implementation in the event of armed conflict and the potential for armed conflict.		
		c) Encourage regional cooperation and training within regional groupings through the PIRGs.		2015
12	Recommendations for ICAO, States and industry action to support the agreed outcomes, including recommendations to ensure effective implementation of any new SARP, supported by the provision of assistance when necessary.	a) Develop roll-out and assistance strategy, including workshops, seminar, symposia and mentoring courses on risk assessments.	ICAO supported by States and industry	2015
		b) Enhancing existing mechanisms including continuous monitoring processes such as Mandatory Information Requests (MIR) and Significant Safety and Security Concerns (SSCs and SSCs) processes to facilitate the sharing of information regarding the effective implementation of relevant provisions.		Early 2015