



INTERNATIONAL CIVIL AVIATION ORGANIZATION

**TWENTY NINTH MEETING OF THE ASIA/PACIFIC
AIR NAVIGATION PLANNING AND IMPLEMENTATION REGIONAL
GROUP (APANPIRG/29)**

Bangkok, Thailand, 3 to 5 September 2018

Agenda Item 2: Global and Inter Regional Activities**RISK ASSESSMENT FOR CIVIL AIRCRAFT OPERATIONS OVER OR NEAR
CONFLICT ZONES – COMPREHENSIVE GUIDANCE MATERIAL AND PRACTICES
FOR STATES, OPERATORS, AND ANSPs**

(Presented by the Secretariat)

SUMMARY

This paper provides information on *Risk Assessment Manual for Civil Aircraft Operations Over or Near Conflict Zones* (Doc 10084). Doc 10084 has been amended to expand the advice for States, aircraft operators and other service providers regarding the risks from surface-to-air missiles (SAMs) and key risk factors to be considered for their own risk assessments.

1. INTRODUCTION

1.1 In response to the downing of Malaysia Airlines Flight 17 (MH17) on 17 July 2014, the International Civil Aviation Organization (ICAO) took several initiatives, the first of which was to host a special high-level meeting on 29 July 2014 with the Directors General of the Airports Council International (ACI), the Civil Air Navigation Services Organisation (CANSO), and the International Air Transport Association (IATA). This meeting issued a joint statement expressing both the strong condemnation of the use of weapons against a civil aircraft and support for establishing a senior-level task force to address issues related to the safety and security of civil aircraft in airspace flying over or near conflict zones. The Secretary General of ICAO established the Task Force on Risks to Civil Aviation arising from Conflict Zones (TF RCZ) to advise the Secretariat and, in turn, report to the Council.

1.2 As a contribution to the work of the TF RCZ, the Aviation Security Panel Working Group on Threat and Risk (WGTR) drafted advice to the Secretariat on the risks for civil aviation of flying over conflict zones at cruising altitudes. The advice was initially drafted under the title *Civil Aircraft Operations Over Conflict Zones*. It provided the basis for discussion of this subject at the Second High-level Safety Conference in 2015 (HLSC 2015) and covered the risks from both deliberate and unintentional attacks on civil aircraft. The *Civil Aircraft Operations Over Conflict Zones* (Restricted) document was first published in November 2016 and reissued in April 2017 with a document number (Doc 10084 - Restricted).

1.3 The Air Navigation Bureau (ANB) and the Air Transport Bureau (ATB) have combined their efforts in a joint project, resulting in the second edition of Doc 10084 under the new name *Risk Assessment Manual for Civil Aircraft Operations Over or Near Conflict Zones*. Doc 10084 has been further amended to expand the advice for States, aircraft operators and other service

providers regarding the risks from surface-to-air missiles (SAMs) and key risk factors to be considered for their own risk assessments. The enhanced guidance material in the revised manual is based on existing ICAO provisions and industry practices related to:

- a) references to responsibilities for States, operators and other service providers within States;
- b) reflection of significant regulatory developments and existing practices since the downing of flight MH17 in 2014;
- c) consolidated source material for conducting risk assessments;
- d) outlining risk information sharing mechanisms;
- e) providing guidance to States and operators on handling threat and risk information; and
- f) existing mechanisms for State-to-operator and/or State-to-State sharing of information.

1.4 In order to make the guidance material in Doc 10084 more accessible, ICAO amended its classification from restricted to non-restricted, considering the second edition does not contain any sensitive security information.

2. DISCUSSION

2.1 Doc 10084 focuses primarily on the risk posed by long-range SAMs as they are currently considered to pose the most significant risk to civil aircraft operating over or near conflict zones. Since the decision to whether civil aircraft fly through airspace that could otherwise be considered unsafe relies on various parties involved (i.e. the State responsible for the airspace, aircraft operators, air navigation service providers, the State of the Operator, ICAO, regional civil aviation authorities, and other stakeholders), the new manual describes the roles, responsibilities and/or activities of such parties, which are largely based on the applicable provisions contained in Annex 6 – *Operation of Aircraft*, Annex 11 – *Air Traffic Services*, Annex 15 – *Aeronautical Information Services*, Annex 17 – *Security*, Annex 19 – *Safety Management*, and several related work in progress amendments in Annex 6, 11, and 15. The manual also takes into consideration the following guidance material in its current form or planned updates: (*ICAO Aviation Security Global Risk Context Statement* (Restricted) (Doc xxx), the *Aeronautical Information Services Manual* (Doc 8126), the *Aviation Security Manual* (Doc 8973) (Restricted), the *Air Traffic Services Planning Manual* (Doc 9426), the *Manual concerning Interception of Civil Aircraft (MICA)* (Doc 9433), the *Manual Concerning Safety Measures Relating to Military Activities Potentially Hazardous to Civil Aircraft Operations* (Doc 9554), the *Safety Management Manual (SMM)* (Doc 9859), the *Air Traffic Management Security Manual* (Doc 9985), and the *Manual on Civil-Military Cooperation in Air Traffic Management* (Doc 10088) (in preparation). The new edition also describes the risk assessment processes leading to final decision-making and provides best practice examples drawn from States and industry.

2.2 As mentioned before, the guidance in the manual is largely based on existing ICAO provisions. The combination of both security and safety-related provisions in one document is new, it also takes into account the work in progress of several important amendments to these provisions that were missing in the existing ICAO framework, and existing industry practices. The added value of combining this information allows to describe the roles of all parties involved and the existing mechanisms and interactions related to the risk assessment process associated with civil aircraft operation over or near conflict zones.

2.3 Since the manual is largely based on existing provisions and industry practices, many States, operators and other service providers have implemented these provisions; for these parties the manual serves as a reference. For the parties that have not implemented the existing provisions or are in the process of implementing them, the manual provides comprehensive guidelines and existing practices, including amendment to provisions that are in progress. However, based on the different roles parties have and/or take, the availability of resources, the implemented practices and the mechanisms used, it is obvious there is no such thing as one size fits all.

2.4 The second edition of Doc 10084 is an important milestone for ICAO. Part of the work programme on conflict zones is associated with a number of related future amendments of ICAO provisions. ANB has taken the project as a pilot within its new structure of project management; an important goal is to combine the implementation of the associated work in progress of security and safety provisions at the same time, which are currently separated, thereby improving efficiency. ICAO is developing a plan for the implementation of the project, including resources, since this project was not accommodated for in the 2017 – 2019 budget.

2.5 Initial analysis suggests that preparatory work delivered through a series of regional workshops may be needed to inform States, operators, air navigation service providers and industry parties of the new edition and its content. ICAO promoted the document through information papers, (electronic) flyers and/or presentations to the appropriate planned venues and the Regional Offices as part of the implementation plan for 2018, see **Appendix A**.

2.6 With the feedback received from the Regional Offices and venues, ICAO may conduct workshops or training exercises depending on the needs identified, also in line with the future related Annex amendments that are planned to be effective in November 2020.

2.7 The ICAO Regional Offices, States concerned, and stakeholders are requested to study the content of the manual and to address areas for improvement for their regional plans, meanwhile monitoring in their region how States, operators, air navigation service providers, and other industry parties, implement the provisions in the manual, using the guidance extracted from the 2nd Edition of ICAO Doc 10084 and explained in **Appendix B** and insert the results in **Appendix C** and report back the completed, before 1 November 2018.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information in this paper;
- b) provide feedback on the regions needs as request in para 2.6; and
- c) complete **Appendix C** for the APAC Region by November 2018.

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APPENDIX A
DATES AND VENUES 2018

Dates and venues 2018	Stakeholders	Delivery
19-23 March: 29th Aviation Security Panel meeting (AVSECP/29) meeting, ICAO HQ Montréal	AVSEC Panel	Information Paper (AVSECP/29-IP/3 Restricted 19/3/18 Revision No. 1)
18 April: IATA Safety and Flight OPS (SFO) Conference, Montréal	Operators	Doc 10084 takeaways
1 Oct: IATA AVSEC World Conference, Athens, Greece	AVSEC, Operators, Airports	PPT intro new manual + best practice
9-19 Oct : ICAO 13th Air Navigation Conference, ICAO HQ Montréal	States and aviation stakeholders	Information Paper (AN-Conf/13-WP/33)
26-28 Nov, ICAO AVSEC Symposium, ICAO HQ Montréal	AVSEC, ATM, Operators, Airports, States	PPT Doc 10084 takeaways and practice examples

Appendix B

INVENTORY OF RISK ASSESSMENT MECHANISMS

INTRODUCTION

States play a major role in decision-making processes related to conflict zones because they usually have more possibilities for aggregating intelligence than do aircraft operators, ANSPs and other concerned organizations. Operators and ANSPs normally choose from the available flight routes. The differences between States are characterized by two extreme mechanisms as illustrated in Figure C-1. One extreme involves States in which the authorities do not, or virtually do not, provide any guidance for the aircraft operators and ANSPs; while the other extreme involves States in which the authorities play a profoundly regulatory role. In between, there are States that go no further than (informally) providing operators with information and States that issue recommendations. There are, broadly speaking, four types of mechanisms:

- (1) No/limited guidance;
- (2) Provision of information;
- (3) Recommended actions; and
- (4) Regulations.

More information about these mechanisms can be found in the 2nd Edition of Doc 10084, Appendix C.

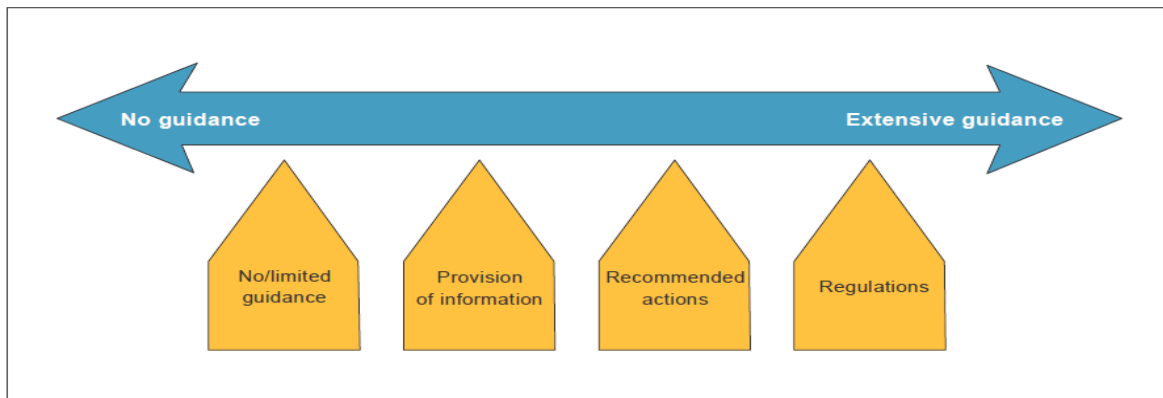


Figure C-1. Differences between authorities in the degree of guidance they offer
[source: Dutch Safety Board]

APPENDIX C

INVENTORY OF RISK ASSESSMENT MECHANISMS FOR APAC

Legend of the columns in the table

A: Region C: Contact person E: Type of mechanism
B: State D: Contact details F: Amendment of Contingency Plan needed

A	B	C	D	E	F
Region	State	Contact person	Contact details (e-mail and telephone)	Mechanism (1,2,3,4)	Amendment of contingency plan needed (Y/N)
APAC					
1	Afghanistan	Raza Gulam	rgulam@icao.int, tel.: +1 514 954-8219 (24/7)	1	N
2	Australia	Kas Beumkes	kbeumkes@icao.int, tel.: +1 514 954-8219 (24/7)	4	Y
3					
Etc					
ESAF					
1					
2					
Etc					
EUR					
1					
Etc					
NAT					
1					
Etc					
MID					
NACC					
SAM					
WACAF					

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