

INTERNATIONAL FEDERATION OF AIR TRAFFIC CONTROLLERS' ASSOCIATIONS

Agenda Item: C.6.8

WORKING PAPER

WP No: 159 IFATCA'24

POLICY REVIEW LM 7.5 UNSAFE AIRSPACE/AERODROME

Presented by PLC

SUMMARY

In 2006 the UNSAFE AIRSPACE/AERODROME policy was formulated and revised in 2022. The policy states that IFATCA should issue warnings to relevant stakeholders when airspace poses a risk to air traffic safety. In the paper, there are several issues raised such as Unclear responsibility for issuing warnings, Ambiguity in whom and how the warning should be issued, Lack of clarity in defining "unsafe airspace", Concerns regarding safety accountability and responsibilities. The discussion proposes alternatives, suggesting that responsibility for assessing and managing risks should lie with states and organizations with established Safety Management Systems (SMS). The paper will attempt to determine if the policy should be kept or if the policy is irrelevant and should be deleted from the TPM.

1. INTRODUCTION

1.1. The IFATCA Technical and Professional Manual (TPM) (v 66.0 October 2023) contains the following policy ('the policy'):

LM 7.5 – UNSAFE AIRSPACE/AERODROME

IFATCA should issue a warning to airlines, air navigation service providers and all other relevant bodies concerning the aviation industry and users of the risk of operating in unsafe airspace when it is demonstrated that an airspace of defined dimensions poses a risk to the safety of air traffic.

- 1.2. The policy was formulated in 2006 (<u>WP 164</u>, Kaohsiung, 2006) with several editorial amendments made in 2022 (WP 77, Virtual Conference, 2022).
- 1.3. The rationale for the policy in the original working paper appears to be for situations where unqualified Air Traffic Control Officers (ATCOs) or unlicensed personnel are directed to provide an air traffic service in airspace for which they were not endorsed. The paper argues this results in 'unsafe airspace' and, accordingly, IFATCA should issue a warning to affected stakeholders.

1.4. Although it does not appear as policy, a definition of what is 'deemed unsafe' appears before the policy above.

An airspace/aerodrome is deemed unsafe whenever there is an unacceptable risk to the safety of aircraft.

1.5. The purpose of this working paper is to determine if the policy, and the sentence before it are still relevant and fit-for-purpose.

2. DISCUSSION

- 2.1. There are a number of issues with the way the policy is expressed in the TPM:
 - it's not clear who should issue the warning;
 - it's not clear to whom and in what format is the information issued;
 - the definition of 'unsafe airspace' is not clear as it differs between the policy and the preceding sentence in the TPM; and
 - Safety accountability and responsibilities.
- 2.2. Each of these points will be discussed separately.

Who issues the warning?

- 2.3. The policy says that 'IFATCA' should issue the warning. It is not clear if the intent of this is that the Executive Board (EB) acts as a collective to issue the warning to the affected stakeholders. If so, this would mean the EB would have to continually monitor and evaluate situations that may meet the threshold of 'unsafe airspace' and then issue warnings accordingly. It is not clear if the EB, or a nominee, has the capacity or the training to do this.
- 2.4. If it is the intent of the policy that ATCOs issue the warning, then it's not clear how they will be made aware of the existence of any 'unsafe airspace'. Will 'IFATCA', through the EB, issue a directive to ATCOs? If so, how will such a directive co-exist with an ATCO's existing duty to provide a flight information service (FIS)?
- 2.5. A Flight Information Service (FIS) forms part of the air traffic service provided by, amongst others, ATCOs.¹ FIS is a service provided for the purpose of giving advice and information for the *safe* and efficient conduct of flights (emphasis added).² Within controlled airspace and at controlled aerodromes, the relevant air traffic control units, through ATCOs, are responsible for providing a FIS.
- 2.6. Most States and Air Navigation Service Providers (ANSPs) have well established processes for the timely and accurate dissemination of FIS. Placing a burden on ATCOs to pass information on airspace IFATCA has deemed 'unsafe' may put them into conflict with those existing and established processes.
- 2.7. If ATCOs are responsible for the provision of a FIS, and that information is for the purpose of providing the safe conduct of flight, the definition of unsafe airspace becomes critically important.

To whom and in what format is the warning issued?

¹ ICAO Doc 4444 – PANS-ATM, at 1-4.

² Ibid, at 1.9.

- 2.8. The policy requires the warning be given to airlines, air navigation service providers and all other relevant bodies concerning the aviation industry and users. While airlines and ANSPs are relatively easy to identify, no method to identify 'all other relevant bodies concerning the aviation industry and users' is presented. Even if a method were determined (i.e. a press release), it's not certain IFATCA has the necessary means to ensure that all relevant parties can be included.
- 2.9. Closely related is the format in which it is issued. PANS-ATM details how FIS is provided to ensure affected airspace users receive it and includes directed transmission, general calls, broadcasts or data link.³ ANSPs and airspace users have well established processes to ensure the relevant information is distributed in an efficient manner. There is no such assurance that information provided by IFATCA of 'unsafe airspace' will reach the parties potentially affected by it.
- 2.10. Annex 15 to the Convention on International Civil Aviation (Chicago Convention) requires that a NOTAM be issued for the 'significant changes in operation of aeronautical services' including ATS.⁴ A declaration by IFATCA that airspace is unsafe could easily be seen to fall into this category but there is no mechanism for IFATCA to publish a NOTAM.
- 2.11. Aeronautical data originators are 'considered parties in the State's legislation and associated regulatory framework'.⁵ In disseminating aeronautical data, IFATCA may be seen to represent themselves as an 'aeronautical data originator' and thus subject to the responsibilities of Annex 15 and Doc 8126 Aeronautical Information System Management. These require States to regulate the provision and distribution of aeronautical information (or data).
- 2.12. ICAO Doc 8126 provides an extensive list of requirements that States must impose on aeronautical data providers to ensure the integrity of the information made available to affected airspace users. By not being subject to these processes, IFATCA could be seen as distributing unregulated aeronautical information, and could even be in breach of State regulatory requirements.

'Unsafe airspace'

- 2.13. The sentence before the policy says that airspace is 'deemed unsafe' when there is an unacceptable risk to the safety of the aircraft. The policy itself says IFATCA should issue a warning 'of the risk of operating in unsafe airspace when it is demonstrated that an airspace... poses a risk to the safety of air traffic'. These two statements raise several issues.
- 2.14. The first step in applying the policy is to identify an unacceptable risk. Annex 19 is the authoritative document to assist States in managing aviation safety risks.⁶ ANSPs are required to implement a Safety Management System (SMS) to safely manage risks.⁷
- 2.15. States are also required to:
 - a) Establish and maintain a process to identify hazards collected from safety data;⁸

³ Ibid, at para 9.1.3.1.1.

⁴ Annex 15 to the Convention on International Civil Aviation (Chicago Convention), 6.3.2.3.b).

⁵ ICAO Doc 8126 – Aeronautical Information Services Manual, 7th ed, 2.2.3.

⁶ See Foreword

⁷ Annex 19 to the Convention on International Civil Aviation (Chicago Convention), 3.3.2.1 e).

⁸ Ibid, 3.3.4.1.

- b) Develop and maintain a process that ensures the assessment of safety risks associated with identified hazards;⁹ and
- c) Establish mechanisms for the resolution of safety issues.¹⁰
- 2.16. There is no assurance that IFATCA applies the principles of Annex 19 in assessing whether a risk is unacceptable in the context of the policy. Considerable effort would need to be invested to ensure these principles were applied correctly and that there were suitably trained people to administer it. Until this happens, arguably there is not sufficient assurance the process applied by IFATCA to 'deem' airspace as unsafe is in accordance with Annex 19.
- 2.17. Indeed, States have probably implemented their own SMS, albeit with varying degrees of effectiveness. Therefore, it's more likely the State (or ANSP/regulator assigned by the State) would assess potential aviation risks, including the risk of an airspace being 'unsafe', in accordance with the principles of Annex 19 than IFATCA.

Safety accountability and responsibilities

- 2.18. Annex 19 requires that when implementing an SMS, a number of conditions must be met regarding the accountability and responsibilities of executives, management and employees including:
 - a) identify the accountable executive who, irrespective of other functions, is accountable on behalf of the organisation for the implementation and maintenance of an effective SMS;
 - b) clearly define lines of safety accountability throughout the organisation, including a direct accountability for safety on the part of senior management;
 - c) identify the responsibilities of all members of management, irrespective of other functions, as well as of employees, with respect to the safety performance of the organisation;
 - d) document and communicate safety accountability, responsibilities and authorities throughout the organisation; and
 - e) define the levels of management with authority to make decisions regarding safety risk tolerability.¹¹
- 2.19. In deeming airspace 'unsafe', it's not clear how these safety accountabilities and responsibilities are distributed amongst IFATCA's office holders and volunteers. Ultimately, someone has to take responsibility for declaring unsafe airspace and they would be accountable for that decision. It's not clear if there is a process in place to acquit these principles.

Policy alternatives

2.20. An alternative to deeming airspace unsafe and distributing information to affected airspace users is to continue to do what is most commonly done now. That is to make those responsible for maintaining the SMS in the affected States (regulators, ANSPs, operators, pilots, etc.) aware of what IFATCA believe are potential hazards to aviation

⁹ Ibid, 3.3.4.2.

¹⁰ Ibid, 3.3.5.1.

¹¹ Ibid, Appendix 2, 1.2.

safety. It would then be the responsibility of the State to assess and classify those risks and disseminate them accordingly.

- 2.21. For example, the rationale for the policy in the original working paper appears to have been for situations where unqualified Air Traffic Control Officers (ATCOs) or unlicensed personnel are directed to provide an air traffic service in airspace for which they were not endorsed. IFATCA has a very clear policy on this (TRNG 9.4.2). Where ANSPs are in breach of this policy, IFATCA can and does make States, regulators and affected airspace users aware of this. The onus of assessing potential risks and acting accordingly then falls to them to manage using their existing, and presumably regulated, SMSs.
- 2.22. Although this may not always result in a satisfactory outcome for IFATCA or its Member Associations, it is preferable to the risks IFATCA would assume in assessing and distributing unregulated aeronautical information directly to affected airspace users.

3. CONCLUSION

- 3.1. Assessing and disseminating information on what IFATCA deems 'unsafe airspace' without a defined process and clear lines of accountability and responsibility presents an organisational risk to IFATCA.
- 3.2. It is the responsibility of States that are signatories to the Chicago Convention to ensure that risks are managed in accordance with an established SMS in accordance with Annex 19.
- 3.3. Organisations with established SMSs are in a better position to assess and manage risks acting on information provided by IFATCA.
- 3.4. Therefore, it is recommended that the policy be deleted.

4. DRAFT RECOMMENDATIONS

4.1. Delete the following policy including the lead-in sentence:

LM 7.5 – UNSAFE AIRSPACE/AERODROME

An airspace/aerodrome is deemed unsafe whenever there is an unacceptable risk to the safety of aircraft.

IFATCA should issue a warning to airlines, air navigation service provides and all other relevant bodies concerning the aviation industry and users of the risk of operating in unsafe airspace when it is demonstrated that an airspace of defined dimensions poses a risk to the safety of air traffic.

3. **REFERENCES**

ICAO Doc 4444 – PANS-ATM, at 1-4. Annex 15 to the Convention on International Civil Aviation (Chicago Convention), 6.3.2.3.b).

ICAO Doc 8126 – Aeronautical Information Services Manual, 7th ed, 2.2.3. Annex 19 to the Convention on International Civil Aviation (Chicago Convention), 3.3.2.1 e).

IFATCA. (2022). Technical and professional Manual, 65th Ed. Montreal, Canada: IFATCA.

IFATCA 45th ANNUAL CONFERENCE in Kaohsiung, Taiwan 2006 wp 164 "OPERATING IN UNSAFE AIRSPACE".

IFATCA 45th ANNUAL CONFERENCE in Kaohsiung, Taiwan 2006 wp 163 "Review Policy on Use of Unqualified Personnel"

ICAO annex 11- AIR TRAFFIC SERVICES - 2.2

-=END=-