Additional COMNAP advice in regards to ATCM review of Resolution on Air Safety in Antarctica

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Resolution 1 (2013) no longer current; now Resolution 6 (2021)

Background

ATCM XLII (2019) Final Report (paragraph 259) says, “The Meeting agreed that it would begin a process of reviewing and updating the operative paragraphs of ATCM Resolution 1 (2013).” To assist Parties in this process, COMNAP revisited the Resolution’s operative paragraphs and offered preliminary, technical and practical, advice in COMNAP WP008 ATCM XLIII (2021). That WP noted that the outcomes of the COMNAP Antarctic Aviation Workshop would likely provide further advice. The ATCM reviewed Resolution 1 (2013) and deemed it no longer current. The current Resolution on Air Safety in Antarctica is now Resolution 6 (2021). The COMNAP Antarctic Aviation Workshop was held as a virtual workshop from 15 February through 15 March 2022 (see COMNAP IP006 for report from that workshop). In this Working Paper COMNAP provides advice as a result of the workshop to the ATCM on operative paragraphs 4, 5 and 8 of Resolution 6 (2021) which were carried over from the previous Resolution. We also suggest a new operative paragraph for ATCM consideration.

ATCM Resolution 6 (2021) Air Safety in Antarctica

**Operative paragraph 4** reads:

“4. that, for the purpose of ensuring mutual awareness of current air operations and exchanging information about them, Parties should designate:

1. Primary Air Information Stations (“PAIS”), which coordinate their own air information and information from their Secondary Air Information Stations (if any) for the purpose of notifying current air operations to other PAIS. These PAIS should have adequate communication facilities able to transmit “hard copy” information by appropriate and agreed means; and
2. Secondary Air Information Stations (“SAIS”) which comprise stations/bases (including field bases and ships), which provide air information to their parent coordinating PAIS;”

Advice: The COMNAP Antarctic Aviation Project asked whether the concept of PAIS and SAIS was still considered useful and relevant for the purpose of mutual awareness of current air operations and information exchange. The conclusion is that these do remain relevant. Therefore, our advice is that this operative paragraph is important and should remain as is except for one minor modification. That modification is, we suggest delete the two words “hard copy” from final sentence of paragraph 4a.

**Operative paragraph 5** reads:

“5. that, for the purpose of avoiding air incidents in areas beyond the range of very high frequency (“VHF”) radio coverage of PAIS and SAIS, aircraft outside the areas covered by PAIS and SAIS should use a specific radio frequency to apply the Traffic Information Broadcast by Aircraft (“TIBA”) procedure, laid down in Annex 11 to the Convention on International Civil Aviation;”

Advice: The COMNAP Antarctic Aviation Project asked whether the ICAO TIBA procedure was still relevant. The conclusion is yes, this is still relevant. The specific radio frequency is published in the AFIM. Therefore, our advice is that operative paragraph 5 remain unchanged.

Advice: Discussion of improved technology (see Annex 1 of COMNAP IP59 (2021)) at the COMNAP Antarctic Aviation Workshop led to agreement that, at the very minimum, all aircraft should operate with their transponders turned on. Inclusion of an operative paragraph 5b could cover this. Our suggestion is therefore to renumber 5 to 5a and include an additional operative sub-paragraph 5b.

Additional operative sub-paragraph 5b: that, in addition, transponders in all aircraft must be switched on at all times during flight in the Antarctic Treaty area.

Advice: Discussion of improved technologies also indicated that ADS-B In was highly recommended in addition. Our suggestion is therefore to include an additional operative sub-paragraph 5c.

Additional operative sub-paragraph 5c: that, in addition, operators should strongly consider the installation and use of ADS-B In technology in all aircraft operating in the Antarctic Treaty area.

**Operative paragraph 8** reads:

“8. that, for the purpose of ensuring effective communications between PAIS, Parties should ensure that their PAIS have adequate facilities for communicating with other PAIS;”

Advice: This operative paragraph remains valid. Our suggestion is to add “and other operators” after the word “Parties” to read “…Parties and other operators should ensure…”.

Advice: We note that since operative paragraph 4 is about PAIS, we suggest moving entire paragraph 8 to a new 4c in operative paragraph 4 just for clarity.

**New operative paragraph suggestion**

The COMNAP Antarctic Aviation Project considered recommendations for minimal survival gear aboard aircraft. The initial recommendations are available, will be reviewed regularly through the COMNAP Air Operations Expert Group and will be regularly published, likely in each e-AFIM release.

We therefore suggest a new operative paragraph: “that, to improve survival in the event of an air accident, the operators of all personed aircraft should ensure that, at least, recommended minimal survival equipment are maintained and carried onboard their aircraft. Such recommended minimal survival equipment to be based on a risk-based approach that considers type of aircraft, number of persons onboard and proposed specifics of the operations, such as whether the operations are intra-Antarctica or inter-Antarctic. The list of recommended minimal survival equipment, shall be maintained through COMNAP and reviewed regularly by all operators.”

Recommendation

Given the COMNAP Antarctic Aviation Project, which included the Antarctic Aviation Workshop that was open and inclusive, COMNAP requests the ATCM to consider the above advice during their continuing review of ATCM Resolution 1 (2013), no longer current, now ATCM Resolution 6 (2021) Air Safety in Antarctica.

In summary, the advice is:

1. Operative paragraph 4 one minor change to remove words “hard copy”.
2. Operative paragraph 5 no change to the current operative paragraph but consider the addition of a new operative sub-paragraph 5b in regards to requiring transponders be turned on in all aircraft operating in the Antarctic Treaty area and an additional new operative sub-paragraph 5c in regards to strongly recommending ADS-B In on all aircraft operating in the Antarctic Treaty area.
3. Operative paragraph 8 one minor change to add the words “and other operators” and a suggestion to move this operative paragraph closer to the other operative paragraph on PAIS just for clarity.
4. New operative paragraph to refer to minimum recommended survival equipment on-board aircraft.