Antarctic Aviation Workshop

15 & 16 July 2021, Toyama, Japan

Convened by the Council of Managers of National Antarctic Programs (COMNAP)

1. Background

Promoting operational safety in Antarctica is a key priority for COMNAP. In regards to air operations and air safety there is renewed opportunity to discuss increase in activity, changes in communications capabilities and improvements in technologies. The question of safety in Antarctic air operations is also a matter of current concern of the Antarctic Treaty Consultative Meeting (ATCM) and the Parties. The Final Report of ATCM XLII (2019) notes in paragraph 268 that "The Meeting welcomed information from COMNAP that it intended to convene a workshop on the practical and technical aspects of safe air operations, which would be open to all interested Parties and operators ." The working language for the workshop will be English-translation services are not provided. The workshop was originally planned to be held on 30-31 July 2020 in Hobart, Australia. On 18 March 2020, all Hobart 2020 meeting plans were cancelled.

COMNAP EXCOM, in consultation with the Antarctic Aviation Project Leader, with the Australian Antarctic Division and with our host for the COMNAP AGM 2021-Japan's National Institute of Polar Research, have decided to hold the Antarctic Aviation Workshop in the two days immediately following COMNAP AGM 2021 in Japan.

2. Objective of the Workshop

To present and share information in regards to current safety in air operations issues as required by COMNAP Members, for the Antarctic community, and in response to specific requests by the ATCM XLII (2019). The outcomes used to update and strengthen best practice advice on Antarctic aviation matters.

3. Proposed Outcomes

Given the increase in inter- and intra-continental air operations, and the diversification within that increase, *inter alia,* rotary-wing aircraft launched from vessels, non-governmental operators of fixed-wing aircraft and air-related infrastructure in Antarctica, the workshop focus on safety should provide the following outcomes (listed in no particular order):

- Understand current regulatory framework
    - Is the current framework robust enough to respond to identified safety challenges?
    - Are there gaps in the regulatory framework, and if yes, what are those and how can

those gaps be addressed?
    - What did the regulatory framework cover adequately that now, given recent changes in operations, the coverage is inadequate? What are these areas for improvement?
    - Focus on the ATS regulatory framework and provide suggestions to the ATCM for needed updates to the current regulations in the context of air safety in Antarctica. This specifically will inform COMNAP advice to the ATCM on ATCM Resolution 1 (2013) Air Safety in Antarctica.
    - In addition to the ATCM review of Resolution 1 (2013), provide advice to ATCM for any additional regulations needed.
- Understand technology innovations (technology audit)
    - Make recommendations to air operators on appropriate technologies to assist with deconfliction of active airspace in the Antarctic Treaty area.
    - Make recommendations on appropriate technologies and sharing arrangements in regards to flight tracking / flight following.
    - Refer to outcomes of the COMNAP Search and Rescue (SAR) Workshops and consider any innovative technologies identified in the recent Workshop that could improve our coordinated ability to respond.
    - Propose suggestions for mandatory inclusion and use of technology for real-time surveillance and tracking.
    - Explore usefulness of currently available tools, such as CATS and off-the-shelf applications, for situational awareness of Antarctic aviation.
- Other specific safety considerations
    - Recommendations for establishment of a combined Antarctic air incident reporting system.
    - Agree list(s) for minimal survival equipment on aircraft operating in the Antarctic Treaty area.
    - Agree points for consideration to establish RPAS no fly-zones or no-fly-times.
    - Agree policy position in regards to whether all air activity (RPAS, research balloons, etc.) should be equipped with transponders/ADS-B for complete air situational awareness
- Communications
    - Ensure e-AFIM is achieving its purpose and is in the hands of those who need it/use it.
    - Ensure procedures are in place to allow all Antarctic air operators to keep current and accurate their data/information that informs e-AFIM.
    - Agree a process to strengthen the procedure that Competent Authorities and other national authorising or permitting bodies' follow to improve effectiveness and efficiency in communications with COMNAP and IAATO.
    - Make recommendations to ensure continual improvement between COMNAP Member National Antarctic Programs, Governmental Air Operators and Non-governmental Air Operators in Antarctica.
    - Make recommendations for ATCM on Electronic Information Exchange System (EIES) enhancement to include robust information in relation to air operations and advance information exchange.
    - Make recommendations in relation to the NOTAM process and development of an Antarctic-specific system or use of existing global NOTAM system.

4. Workshop Organising Committee

The Workshop is the result of contributions from many people across the Antarctic community. The Workshop Organising Committee is:
John Guldahl, COMNAP Vice-Chair & DMNAP Norwegian Polar Institute
Paul Sheppard, Leader COMNAP Air Operations Expert Group & DMNAP US Antarctic Program
Michelle Rogan-Finnemore, COMNAP Executive Secretary
Gen Hashida, DMNAP National Institute of Polar Research
Charlton Clark, MNAP Australia Antarctic Division
David Rootes, Environmental Logistics and Sales Antarctic Logistics & Expeditions
Gabriel Sant, Air Antarctic Commander Argentine Air Force
Santjie White, Chief Aeronautical Rescue Co-ordination Centre (ARCC) South Africa

5. Agenda

The Workshop Agenda Items are as follows:

1. Opening, introductions, workshop background
2. Session 1: Regulatory Review
3. Session 2: Technology Innovations
4. Session 3: Safety
5. Session 4: Communications Initiatives
6. Reporting of key outcomes
7. Close

6. Overview of Programme

The Workshop will be held in four main sessions. Each session includes presentations, time for questions to presenters and a panel-led discussion with all participants. The Overview is as follows:

<table>
<tr><th></th><th>Day 1</th><th>Day 2</th></tr>
<tr><td></td><td></td><td></td></tr>
<tr><td>0900</td><td>Participants arrive/Registration</td><td>Participants arrive/Summary of key points day 1/Additional comments</td></tr>
<tr><td>0930</td><td>Welcome/background</td><td rowspan="4">Session 3: Safety</td></tr>
<tr><td>1000</td><td rowspan="3">Session 1: Regulatory Review</td></tr>
<tr><td>1100</td></tr>
<tr><td>1200</td></tr>
<tr><td>1300</td><td rowspan="2">Lunch</td><td rowspan="2">Lunch</td></tr>
<tr><td>1400</td></tr>
<tr><td>1500</td><td rowspan="3">Session 2: Technology Review</td><td rowspan="3">Session 4: Communications Initiatives</td></tr>
<tr><td>1600</td></tr>
<tr><td>1700</td></tr>
<tr><td>1800</td><td rowspan="2"></td><td>Discuss draft reporting/Next steps</td></tr>
<tr><td>1900</td><td></td></tr>
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