55th CONFERENCE OF DIRECTORS GENERAL OF CIVIL AVIATION ASIA AND PACIFIC REGIONS

Denarau Island, Nadi, Fiji 22 — 26 October 2018

AGENDA ITEM 3: AVIATION SAFETY

CIVIL-MILITARY COOPERATION FOR PROACTIVE SAFETY MANAGEMENT

Presented by the Republic of Korea

SUMMARY

Since the adoption of Assembly Resolution A10-19, Joint Civil-military use of airspace and air navigation facilities and series, ICAO has been playing a significant role in promoting civil-military cooperation to improve both safety and efficiency of the international civil aviation. In recent years, however, ICAO has placed a greater attention on "efficiency" in civil-military cooperation to meet a fast-growing demand in airspace use,

Meanwhile, challenges in civil-military cooperation have surfaced in the field of safety management, as safety management advances and matures in many Member States where the military is identified as a key stakeholder of the State Safety Programme (SSP). The Republic of Korea (ROK) believes this rising issue is a universal concern that has been experienced by many States. This discussion paper emphasizes the need of greater attention to agendas on safety management within the framework of the civil-military cooperation policy of the ICAO.

CIVIL-MILITARY COOPERATION FOR PROACTIVE SAFETY MANAGEMENT

1. INTRODUCTION

- 1.1 In many States, a series of aeronautical resources such as airspace, airports and air navigation facilities are shared by both civil and military authorities. In this regard, although the Article 3 (a) of the Convention on International Civil Aviation (Doc 7300, hereinafter, referred to as "Convention") excludes military aircrafts from the application of the ICAO regulation, ICAO has been promoting civil-military cooperation to ensure safe and orderly growth of the International Civil Aviation to achieve its aims and objectives in accordance with Article 44 of the Convention. To date, the ICAO has attained considerable achievements related to this agenda which has been contributing to both safety and efficiency of the air transport. In recent years, however, ICAO has placed a greater attention on "efficiency" in civil-military cooperation, to meet a fast-growing demand in airspace use.
- 1.2 Be that as it may, we should be constantly reminded that "safety" is another key element that requires a close Civil-Military cooperation in many States. With the State Safety Oversight System (SSOS) transitioning toward the State Safety Programme (SSP), the importance of concerted efforts has become more crucial than ever as safety management activities are based on safety data and safety information. Collaborative activities, based on safety data and safety information sharing with the military, are essential to proactive safety management, not only for a single State but also for the community as a whole. With such consideration in mind, this discussion paper invites the conference for greater attention to agendas on safety management within the framework of the civil-military cooperation policy, regionally and globally.

2. DISCUSSION

2.1 **PAST:** Achievements of the ICAO

- 2.1.1 The first step taken by ICAO to address the issue in question involves the Assembly Resolution A10-19, *Joint Civil-Military use of airspace and air navigation facilities and services*, adopted in 1956. States were urged to encourage "co-ordination" with the military in conducting their various aeronautical activities in order that the common use of airspace, certain facilities and services is so arranged that the safety, regularity and efficiency of international civil air navigation will be safeguarded.
- 2.1.2 Supports on improving safety have been focused on aircraft identification and separation in the Air Traffic Management (ATM) field, which are the most basic yet highly important service for the safe operation of civil aircraft in that area. Even though the *Convention* does not apply to military aircraft (or state aircraft), the Article 3 (d) of the Convention and its related Standards and Recommended Practices (SARPs) expanded in Annex 2 Rules of the Air (provision 3.3.1.2) and Annex 11 Air Traffic Service (provision 2.18 and 2.19) require States civil-military coordination for the safety of navigation of civil aircraft.
- 2.1.3 While the Assembly Resolution A10-19 aims to achieve multiple objectives, "efficiency" has lately become the main agenda on civil-military cooperation, responding to the increasing demand in global air traffic. By virtue of the united efforts of the community, the technologies, regulations and procedures related to airspace capacity and air traffic flow management (ATFM), such as flexible use of airspace (FUA) and collaborative decision making (CDM), have been continuously developed to stay abreast of the growing air transport demand. In line with such progress, A10-19 has evolved multiple times by the assembly, expanding its scope of activity from "co-ordination" to "cooperation", and was lastly consolidated by the Assembly Resolution A38-12 Appendix I, Consolidated statement of continuing ICAO policies and associated practices related to specifically to air navigation coordination and cooperation of

civil and military air traffic. A new guidance material (Doc 10088) is also being developed and expected to be published in the near future, to address practical procedures and practices in pursuit of efficiency, following the result of the 38th Assembly Session.

2.2 Present: Emerging safety management issues

- 2.2.1 Even though the jointly-used aeronautical resources, such as the airspace and airports, are managed through appropriate coordination procedures between the civil and military, unexpected new /latent hazards, which pose a risk to aircraft operation, could arise within the joint operating environment, on account of the different objectives of the authorities concerned.
- 2.2.2 We should be constantly reminded of the Malaysia Flight 17 (MH 17) accident on July 2014, a tragedy involving 298 fatalities. The result of the investigation called for ICAO to adopt two safety recommendations as follows, in dealing civil-military cooperation issues (ref. AN-WP/9145):
 - a) Incorporate, in Standards, that States dealing with an armed conflict in their territ ory shall at an early stage publish information regarding the nature and extent of threats of that conflict and consequences for civil aviation; and
 - b) Updated SARPs related to the consequences of armed conflicts for civil aviation, and convert the relevant Recommended Practices into Standards so that States will be able to take unambiguous measures if the safety of civil aviation may be at issue.
- 2.2.3 Based on these safety recommendations, SARPs for safety risk assessment and mitigation on potentially hazardous activities within each States' territory are under review by the ICAO (Annex11 Air traffic services and Annex15 Aeronautical Information Service). The civil-military cooperation is considered a key to its proper implementation in many States. Within the SSP framework, the provisional SARPs (Annex 11 and Annex 15) could be regarded as an important step forward in regulations related to proactive safety management.
- 2.2.4 In addition, the necessity of civil-military cooperation for safety management is not limited to what mentioned above. As to the implementation of airspace safety assessment and of incident report investigation in accordance with the Doc 4444, *Air Traffic Management (PANS-ATM, provision 2.3 and 16.3)*, civil aviation authorities in some States are required to coordinate and cooperate with the military to fulfil its responsibility.
- 2.2.5 Furthermore, regional forums have recognized that civil and military surveillance data sharing can facilitate the enhancement of safety nets and investigations. In support of such recognition, ROK is convinced that civil-military cooperation will undoubtedly be presented as an important element of the safety data collection and processing systems, which is stipulated in Chapter 5 of the Annex 19 *Safety Management*, in identifying systemic and cross-cutting hazards at the national, in a regional and global level. In line with the growing maturity of safety management, the applicability of civil-military cooperation is likely to be expanded for various components of the SSP and SMS.

3. CHALLENGES

3.1 To date, it is assumed that the extent of civil-military coordination or cooperation procedures for many states were limited to the SSOS related activities, falling far short of what is needed for an effective SSP implementation. To achieve the abovestated safety management activities, more active and broader scope of cooperation between the two authorities is of paramount significance. Familiarization on the SSP and the development of new working procedures for both could be the starting points.

3.2 A set of actions, including but not limited to, safety reporting, sharing safety data and safety information, safety risk assessment, and safety culture promotion could be the new items for civil-military cooperation to implement the safety management related SARPs and the *Global Aviation Safety Plan (GASP*, Doc10004). However, owing to the possible conflicts between SARPs and non-ICAO requirement, challenges are expected in reaching a general consensus on the need for the civil-military cooperation on safety management issues in civil aviation. As such, the ROK requests the Conference to place heightened attention to agendas on safety management related to civil-military cooperation, to support States and Regions faced with challenges in civil-military cooperation for effective implementation of safety management.

4. ACTION BY THE CONFERENCE

- 4.1 The Conference is invited to:
 - a) note the information on emerging issues on safety management related to civilmilitary cooperation;
 - b) recognize that civil-military cooperation on safety management issues is essential for effective implementation of SSP;
 - c) request the ICAO Asia-Pacific Regional Office (APAC) to consider to place higher attention to agendas on civil-military cooperation issues related to safety management; and
 - d) encourage Regional Member States to actively share experiences on civil-military cooperation not only limited to efficiency matters but also to safety management in regional and global forums and on-line, such as regional civil-military cooperation workshop and safety management implementation website.