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Agenda Item 4: Asia/Pacific and Inter-Regional SAR Planning, Coordination and Cooperation

SHARING EXPERIENCE OF TOKYO RCC

(Presented by Japan)

SUMMARY

This paper presents information sharing on the experience of Tokyo RCC in particular Japan's watchstanding system and how to work the system at an initial stage of SAR response.

1. INTRODUCTION

1.1 Regarding Search and Rescue (SAR), it is critically important to quickly identify which aircraft is in a state of emergency and provide necessary information with concerned organizations for SAR. This paper introduces the watchstanding system in Japan in order to contribute to the enhancement and further development of capabilities of RCC.

2. DISCUSSION

Watchstanding system in Tokyo Search and Rescue Region (Tokyo SRR)

2.1 In Tokyo SRR (Fukuoka FIR), the regional offices of Japan Civil Aviation Bureau (JCAB) covering the destination airport of the flights have the function of the flight-watch. They conduct the services not only for SAR but also for the enhancement of safety and efficiency of flight operation for civil aviation network.

2.2 In order to facilitate further efficient and streamlined operation, JCAB has worked toward the centralization of the flight-watch system since last October. Several flight-watch offices have been consolidated into two offices which JCAB names "Tokyo FAIB" and "Kansai FAIB" (FAIB: Flight and Airport Information Base) respectively. In the near future, all civil flights, regardless of IFR or VFR flight, will be watched by Tokyo or Kansai FAIB 24-hours a day. (At present, there are several flight-watch offices in Japan other than FAIBs. For descriptive purposes, these flight-watch offices including FAIBs are hereinafter called as "FAIB" or "FAIBs" in this document.)

Means of flight-watch

2.3 Flight-watch begins when an aircraft departs from the airport or enters the Tokyo SRR (Fukuoka FIR) and ends when the aircraft safely lands at the destination airport or exits the SRR. As for the overflight through Tokyo SRR, when a diversion to an airport in Japan occurs, FAIB covering its destination airport has responsibility for the flight-watch.The communication between Air Traffic Services providers (ATS) and FAIBs is well maintained in Japan. As for IFR flight, when the flight declares an emergency (e.g. PAN-PAN or MAYDAY), the radar contact is lost or ATC detects the squawk 7700, or in case of flight irregularity which means that the original flight plan cannot be followed and the aircraft would divert to an alternate airport or return to the point of origin, the ATS will report FAIB no sooner than receiving or detecting such signals from the aircraft. After receiving the information from ATS, FAIB will start to collect necessary information such as the nature of emergency, the filed flight plan including all ATS messages to which FAIBs are always allowed to access, and persons on board and the relevant information. FAIB will also evaluate the information on the possibility of the force landing or ditching. When concluding that the event could escalate to an alert or a distress phase, FAIB will report to Tokyo RCC.

2.4 In accordance with the Japan Civil Aeronautics Act, pilots shall make the arrival report to FAIB when they land at the destination airport. As for VFR flight, FAIBs check all of overdue arrivals more than 30 minutes from the estimate time of arrival in addition to the event of the flight irregularity. In the case of overdue arrivals or when any other emergency situations are recognized by FAIB, the report will be made to Tokyo RCC immediately.

2.5 Some of flight irregularities or emergency flights could fall within the case of aircraft accident or serious incident depending on the extent of the aircraft system failure or the situation of the flight. Moreover, in case of the aircraft stopping on the runway at the destination airport due to hydraulic trouble for example, it could cause significant traffic delays and severely impact the air transport network. When such cases occur, FAIB will provide the relevant information with concerned organizations. FAIBs have various functions including the flight-watch for SAR and the initial response function for the accident investigation, and also contribute to the maintenance of the air transport network.

Initial response of Tokyo RCC

2.6 When Tokyo RCC receives the alert or distress information from ATS or FAIB, it will start to organize and analyze all of the necessary information for SAR activities. If the information is not sufficient, Tokyo RCC positively gathers necessary information from ATS, FAIB and aircraft operators.

2.7 Tokyo RCC has the coordinating function only. So as to conduct SAR mission appropriately, it highly relies on other organizations such as the Japan Coast Guard, Ministry of Defense, Police Agency and Fire Department, all of which have SAR units. Therefore, the coordination between Tokyo RCC and these organizations are crucial. Tokyo RCC has the agreement with these organizations and takes the initiative to maintain the close communication with each other in order to provide, receive and exchange the necessary information smoothly in the actual SAR mission.

Characteristics of Tokyo RCC

2.8 Tokyo RCC and Tokyo FAIB operate from the same location and with the same officials. This operation system can minimize the time loss of conveyance of information between Tokyo RCC and Tokyo FAIB. As above-mentioned, other flight-watch offices will be centralized into two FAIBs (Tokyo FAIB and Kansai FAIB that is designed to work as RSC and back-up facility of Tokyo FAIB), and the watchstanding operations and the initial response to SAR are expected to be further improved.

2.9 The flight-watch duty officers in FAIBs and Tokyo RCC are government officials. They are experts in the area of flight and airport operation. They have sufficient knowledge and skills regarding the comprehension of flight operation, aeronautical information services, airport operation, ATS system, aeronautical flight information services and SAR system.

Mandatory reporting system of filed flight plan

2.10 All filed flight plans without distinction of IFR or VFR must be reported to ATS reporting office in accordance with the Japan Civil Aeronautics Act. Flight plans including ATS messages such as DEP and ARR are quite important for the SAR activities and this mandatory reporting system and easy access to the ATS messages by FAIBs and Tokyo RCC are crucial portion of effective SAR activities.

Initial response

2.11 Well trained experts in the area of flight operation and air navigation services perform the watchstanding tasks and SAR coordinator. This can expedite the first response to an emergency phase.

Close coordination and communication with relevant organizations including ATS and SAR unit

2.12 All of civil aviation flights in Tokyo SRR are watched by FAIBs which can identify the occurrence of flight irregularity and a flight in a state of the emergency. Tokyo RCC can be off to a quick start of SAR activities with FAIBs, ATS, SAR organizations and aircraft operators.

2.13 According to the internal statistics in Tokyo RCC, the number of the SAR cases of civil aviation excluding ELT alerts are only around 40 cases in 2021. The establishment of the all-time flight-watch system contributes to maintaining the knowledge and skills, experiencing the handling various information in the event of flight irregularities, keep close communication between ATC, operator and other SAR organizations.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

a) note the information contained in this paper; and

b) discuss any relevant matters as appropriate.

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