

Disabled aircraft removal

Civil Aviation Bureau Japan

AOP/SG/9

Bangkok, Thailand, 30 June to 4 July 2025

1. Introduction

1.1 With increasing demand for air travel, once an event occurs such as disabled aircraft happened, it could result in closure of the runway or even closure of the entire airport, as a result it would affect airport users or other aircraft operators.

1.2 To resume airport operations quickly, it is important to implement necessary plans in coordination with relevant parties at the airport (aircraft operators, airport operator, accident investigation authority, etc.) prior to the occurrence of an incident and to promptly remove the disabled aircraft when the incident occurs.

1.3 In this regard, the 229th session of the ICAO Air Navigation Commission discussed the amendment of the SARPs regarding the removal of disabled aircraft, and it was indicated that the main purpose of the proposed provisions in Annex 14 Volume I and PANS-Aerodromes (Doc 9981) is to support the establishment of disabled aircraft removal plans and to coordinate actions among all airport stakeholders.

1.4 In addition to the above, the proposed amendment of the SARPs would provide for responsibilities related to the removal of disabled aircraft, training for the removal of disabled aircraft, and other matters.

2. Discussion

2.1 In Japan, in 2021, a runway was closed at Niigata Airport for approximately seven hours due to disabled aircraft, resulting in the cancellation of 18 flights including scheduled flights and affecting many airport users.

On 18 July 2021, a private aircraft (Piper PA-28R-201T) landed on B Runway (RWY 28) and during the landing run, a flat tyre occurred on the right main landing gear and the aircraft veered to the right. The aircraft was unable to self-propel and it took 6 hours 44 minutes before the runway operations resumed.



Challenge

- Clarification of the coordination scheme for the removal of small aircrafts
- Need for prompt liaison and coordination with the Transport Safety Board
- Facilitate prior coordination on the establishment of partnerships and cooperation among airport stakeholders
- Necessity of prior agreement with the causal party (aircraft operators) on the response in the event of an incident
- Conducting drills for airport operator and stakeholder against runway closure incidents

2. Discussion

2.2 In Japan, following several incidents of disabled aircraft, a study group was established by aircraft operators, airport operators, and the Civil Aviation Bureau for early recovery. Based on the discussion in the study group, the domestic standards were revised and guidance was prepared to strengthen the measures related to the removal of disabled aircraft.

Runway closure incident at Kumamoto Airport caused by a airline

On 14 October 2021, a commuter airlines aircraft was unable to run on the runway after completing take-off abort training, the runway was closed and it took approximately 6 hours to clear.

challenge

- **Clarification of the removal plan in the absence of a mechanic at the airport concerned.**
- **Response to incidents by aircraft operators not usually operating at the airport concerned (including preparation of equipment and parts).**
- **Obtaining consent for removal in cases where the relationship between aircraft owner and operator is complicated, such as outsourcing or leasing**
- **Preparation of removal plans for airport operators including various circumstances.**
- **Preparation of removal implementation plans for aircraft operators, including spare parts procurement times, per airline and per incident.**
- **Preparation and maintenance of manuals for providing information by airport operator.**

2. Discussion

2.3 The main points of the revision of the domestic standards are to review the following seven points.

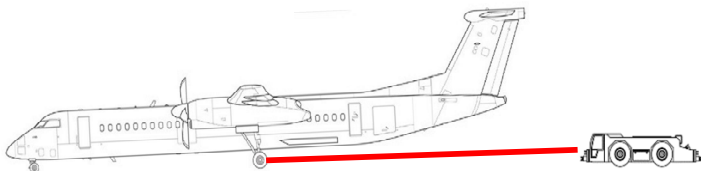
- Defines the types of disabled aircraft removal work into three categories (Aircraft debogging, Aircraft recovery, Aircraft salvage) according to the severity of the incident, and regulates that preparation and removal operations shall be carried out according to the above categories.

Aircraft debogging. The removal of an aircraft following an aircraft excursion event where the aircraft has become bogged down but has relatively little or no damage

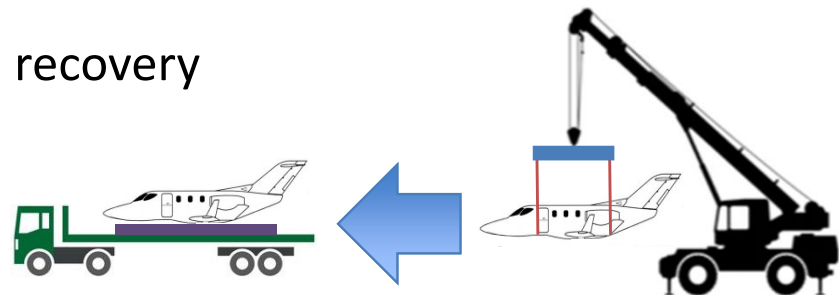
Aircraft recovery. The removal of any disabled aircraft that is unable to move under its own power or through the standard towing procedures specified in the aircraft type documentation

Aircraft salvage. The removal of any aircraft following an accident or incident in which the aircraft sustains substantial damage, and the insurer considers the hull a total loss

debogging



recovery

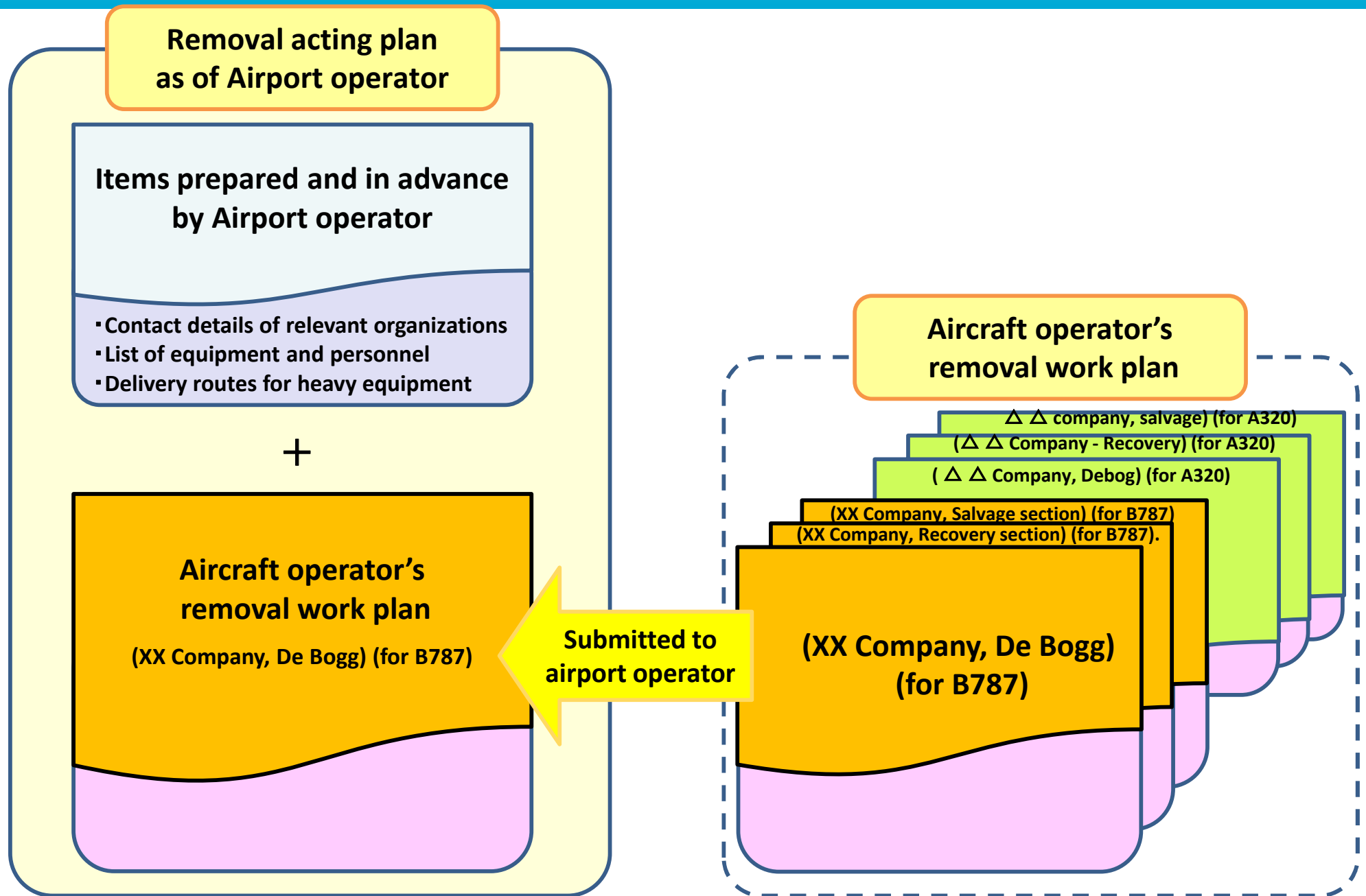


2. Discussion

2.3 (continued)

- Regulates that the airport operator shall clarify the list of equipment that can be provided and the removal capability of airport, and clearly indicate this information to the aircraft operator.
- Regulates that the aircraft operator be required to submit an “Removal disabled aircraft plan” before operating the aircraft.
- The aircraft operator is responsible for removing the disabled aircraft basically, but the airport operator may remove the disabled aircraft by themselves if it is determined that the existing disabled aircraft will have a significant impact on airport operations. So, for that it also regulates that agreement form for removing the disabled aircraft must be submitted to airport operator in advance, and that a cooperative implementation structure as each airport for removing disabled aircraft shall be established.

2. Discussion



2. Discussion

2.3 (continued)

- Regulates that the airport operator shall promptly inform aircraft operators and other stakeholders of the status of runway closures, etc., and the prospects for resumed operations.
- Regulates that procedures be prepared in advance so that the relationship between the location of the incident and the surface that needs to be secured for the continuation of operations can be quickly determined.
- Regulates that the preparation status for the disabled aircraft removal shall be checked and disabled aircraft removal training shall be carried out at least once a year.

2.4 The above domestic standards are to be applied by October 1, 2025, and each airport in Japan is in the process of establishing an implementation structure and preparing a removal of disabled aircraft plan.

2. Discussion

2.5 In addition, recovery tools will be deployed at some airports in Japan in preparation for cases when airport operators need to assist in removal of the disabled aircraft. In March 2025, a removal training was conducted at Kagoshima Airport using the actual aircraft (Cirrus SR22) and the recovery tools.

Classroom training was provided on how to use the recovery tools.



Training was conducted to move the actual aircraft (Cirrus SR22) using the recovery tool.

We set the recovery tool on the aircraft and pushed the aircraft to move it.



2.6 This recovery tools which can be placed under the aircraft landing gears allow horizontal movement of aircraft in the event of excursions from the movement area or aircraft stopped in areas with few steps away from the paved areas caused by flat tires or any gear trouble. It allows the fastest and safest removal of the disabled aircraft without requiring the time-consuming process of jacking up or changing tires and so on, contributing to reduced runway closure time.

3. Action by the Meeting

The meeting is invited to:

- a) note the information contained in this paper;
- b) encourage member States to collaborate by sharing and exchanging their best practices and challenges encountered in the removal of the disabled aircraft procedures; and
- c) discuss any relevant matters as appropriate.

Thank You

Aviation Safety and Security Department
Air Navigation Services Department