



Technical Guidance Material

on the Implementation of Apron Management Services

Advisory Circular

SUBJECT: GUIDANCE ON THE IMPLEMENTATION OF APRON MANAGEMENT SERVICES

EFFECTIVE DATE: 27 JANUARY 2017

REFERENCE:

- i. CARs Part 139
- ii. CATS 139
- iii. ICAO Doc 9137 – AN/898 Part 8 Airport Operational Services
- iv. ICAO Doc 9476 – AN/927 Manual of Surface Movement Guidance and Control Systems

1. APPLICABILITY

The information and guidance material is applicable to all licensed aerodromes.

2. PURPOSE

This Guidance Material is issued to provide guidance on the implementation of Apron Management Services at all licensed aerodromes. This guidance material must be read in conjunction with CARs and CATS 139.

3. REQUIREMENTS

Aerodrome licensed holders is required to regulate the activities and movement of aircraft, vehicles and personnel on the apron in accordance with CARS 139.

Apron management is an essential task at any aerodrome. However, the need to establish a dedicated apron management service is dependent upon three main operational factors. They are:

- a) the traffic density;
- b) the complexity of the apron layout; and
- c) the visibility conditions under which the aerodrome authority plans to maintain operations.

The purpose of the guidance document is to provide guidance on how licensed aerodromes must establish rules and procedures related to the operation of aircraft and ground vehicles on the aprons in order to meet regulatory requirements.

Such procedures must be documented in the aerodrome manual which must be submitted to the Civil Aviation Authority (CAA) for acceptance /approval as per Part 139.02.3 (n).

4. OPERATING THE APRON MANAGEMENT SERVICE

- 4.1 Apron management services may be provided by the air traffic service unit, by a unit set up by the aerodrome authority, or by co-ordinated control between Air Traffic Services (ATS) ATS and the aerodrome authority.

- 4.2 A preferred system of operating aprons is to set up a traffic management control procedure in which a single unit takes over the responsibility for aircraft and vehicles at a pre-determined handover point between the apron and the manoeuvring area. Generally, the edge of the manoeuvring area represents the handover point. In any event, the handover point should be clearly indicated on the ground and on appropriate charts, for example the aerodrome chart, for the benefit of aircraft / vehicle operators. The apron management unit will then assume responsibilities for managing and co-ordinating all aircraft traffic on the apron, issuing verbal instructions on an agreed radio frequency, and managing all apron vehicle traffic and other apron activities in order to advise aircraft of potential hazards within the apron area. By arrangement with the aerodrome ATS unit, start-up and taxi clearance to the handover point will be given to departing aircraft where the ATS unit assumes.
- 4.3 One form of the co-ordinated apron management service is where radio communication with aircraft requiring start-up or push-back clearance on the apron is vested in the air traffic service unit, and the control of vehicles is the responsibility of the aerodrome authority or the operator. At licensed aerodromes, ATS instructions to aircraft are given on the understanding of safe separation between the aircraft and vehicles.
- 4.4 The apron management service maintains close communication with the aerodrome control service and is responsible for aircraft stand allocation, dissemination of movement information to aircraft operators by monitoring ATC frequencies, and by updating basic information continuously on aircraft arrival times, landings and take-offs.
- 4.5 The apron management service should ensure that the apron area is kept clean by aerodrome maintenance and that established aircraft clearance distances are available at the aircraft stand. A marshalling service and a "follow-me vehicle" service may also be provided.

5. RESPONSIBILITIES AND FUNCTIONS

Whichever method of operating an apron management service is provided at licensed aerodromes, the need for close liaison between the aerodrome authority, aircraft operator and ATS is paramount. The operational efficiency and safety of the system depends very largely on this close co-operation. The following items are of importance to both ATS and the aerodrome authority:

5.1 Aircraft stand allocation

Over-all responsibility for aircraft stand allocation is normally retained by the aerodrome operator although for operational convenience and efficiency a system of preferred user stands may be established. Instructions should clearly state which stands may be used by which aircraft or groups of aircraft. Where considered desirable, a preferred order of use of stands should be laid down. Apron management staff should be given clear guidance on the stand occupancy times to be permitted and the steps to be taken to achieve compliance with the rules.

5.2 Aircraft arrival/departure times

Knowledge of arrival and departure times scheduled, estimated and actual is required by ATS, apron management, terminal management and the operators. A system should be established to ensure that this information is passed between all interested parties as quickly and efficiently as possible.

5.3 Start-up clearances

Normally these are given by the ATS unit. Where an apron management service operates its own radio communication on the apron area procedures will need to be established between the apron management service and the ATS unit to ensure the efficient co-ordination and delivery of such clearances.

5.4 Dissemination of information to operators

A system should be established to ensure the efficient distribution of relevant information between apron management, ATS and operators. Such information could include notification of work in progress, non-availability of facilities and low visibility procedures.

5.5 Security arrangements

In addition to normal security arrangements there are security requirements which are of interest to many parties who operate on the apron. These would include contingency plans for such eventualities as baggage identification on the stand, bomb warnings and hijack threats.

5.6 Availability of Safety Services

The rescue and fire fighting services (RFF) are normally alerted to an incident on the movement area by ATS. However, at aerodromes where aircraft on the apron area are controlled by the apron management service, a communication system needs to be established to alert the RFF when an incident occurs in the apron area of responsibility.

5.7 Aerodrome Safety department

The safety department shall be responsible for ensuring compliance by all parties with regulations relating to the apron.

5.8 Aircraft parking/docking guidance system

The apron guidance system provided will depend upon the accuracy of parking required and the types of aircraft operating on the apron. Guidance on apron markings is given in the Aerodrome Design Manual, Part 4. The apron management service should monitor all paint markings to ensure that they are maintained in a clean condition to retain maximum visibility. Where more accurate parking/docking is required then one of the guidance systems conforming to the specifications in Annex 14, Chapter 5 must be installed. Details of these systems are given in the Aerodrome Design Manual, Part 4 -Chapter 12. The apron management service should monitor these systems and associated guidance lights to ensure that they are inspected at least weekly to maintain high standards of serviceability.

5.9 Marshalling service

An aerodrome marshalling service should be provided where parking or docking guidance systems do not exist or are unserviceable or where guidance to aircraft parking is required to avoid a safety hazard and to make the most efficient use of available parking space. Proper training should exist for marshallers and only those who have demonstrated satisfactory competence should be permitted to marshal aircraft. Where aerodrome marshalling is provided, comprehensive instructions should be written for marshallers including:

- a) the absolute necessity for using only authorised signals (copies of these should be displayed at suitable points);
- b) the need to ensure that prior to using the authorised signals the marshaller shall ascertain that the area within which an aircraft is to be guided is clear of objects which the aircraft, in complying with his signals, might otherwise strike;
- c) the circumstances in which one marshaller may be used and the occasions when wing walkers are necessary;
- d) the action to be taken in the event of an emergency or incident involving an aircraft and/or vehicle occurring during marshalling, e.g. collision, fire, fuel spillage;
- e) the need to wear a distinctive reflective waistcoat or jacket at all times; and
- f) the action to be taken when re-positioning of aircraft is to be carried out by tractor and signalling is necessary to close down engines.

6. SPECIAL PROCEDURE FOR LOW VISIBILITY CONDITIONS

The procedures required for low visibility operations vary with each aerodrome. The low visibility procedures developed for an aerodrome must take into account local conditions; however, the basic factors that follow will need to be considered.

- a) All drivers and other personnel authorised to operate on the movement area are adequately trained in these procedures and are aware of the additional responsibilities placed upon them in low visibility.
- b) A record is maintained by the ATS of persons and vehicles on the manoeuvring area (ref. PANS-RAC, Part V).
- c) All non-essential vehicles and personnel, e.g. works contractors and maintenance parties must be withdrawn from the manoeuvring area.
- d) Essential vehicles permitted to enter the manoeuvring area are kept to a minimum and must be in RTF communication with ATC.
- e) Where the possibility of inadvertent entry onto the manoeuvring area exists and where physical closure is not practical, e.g. between aircraft maintenance areas and manoeuvring areas, entry points should be manned. If an opening is too wide for visual surveillance, then it should be fitted with intruder detection equipment and those areas with intensive vehicular movement adjacent to the manoeuvring area and with no traffic control should be regularly patrolled.


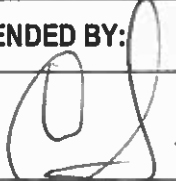

- f) All unguarded gated entrances to the movement area are kept locked and inspected at frequent intervals.
- g) There is adequate provision for alerting airlines and other organisations with movement area access of the introduction of low visibility procedures. This is particularly important where companies exercise control over their own apron areas and maintenance facilities adjacent to the manoeuvring area.
- h) All personnel whose presence on the movement area is not essential to the operation should be withdrawn.
- i) Appropriate emergency procedures must be developed

7. TRAINING

The functions of the apron management service require that its staff be appropriately trained and authorised to carry out their respective responsibilities. Aircraft marshalls require training to ensure that they are properly qualified to direct aircraft movements. Their training should focus on:

- a) signalling;
- b) aircraft characteristics, both physical and operating that relate to manoeuvring of aircraft within the confines of the apron; and
- c) personal safety around aircraft and particularly engines.

At aerodromes where leader vans - "follow me" vehicles are in use, drivers must be suitably qualified in RTF procedures, know visual signals and have a suitable knowledge of taxiing speeds and correct aircraft /vehicle spacing. Leader vans must be clearly marked with illuminated "follow me" signage and signal lighting.

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