



International Civil Aviation Organization

MIDANPIRG/20 and RASG-MID/10 Meetings

(Muscat, Oman, 14-17 May 2023)

Agenda Item 5.3: AGA-OPS

AUTHORISATION OF LANDING AREA

(Presented by OMAN)

SUMMARY

This paper presents the proposed Guidance Material to be developed by Oman CAA for the authorisation of landing area in the Sultanate of Oman.

Action by the meeting is at paragraph 3.

REFERENCES

- CAR 139, Part 1, Aerodrome Certification, Design and Operation,
- CAR 139, Part 2, Heliports\Water Aerodromes,
- ICAO Annex 14 Vol I, Aerodrome Design and Operations,
- ICAO Annex 14 Vol II, Heliports,
- ICAO Doc 9774, Manual on certification of aerodromes.

1. INTRODUCTION

1.1 The fundamental mission of Oman CAA is to provide safe, secure, efficient, and environmentally sustainable civil aviation services in the Sultanate of Oman, whilst ensuring the protection of public aviation interest, and promoting Oman's economic and social development. Oman CAA strives to achieve this by implementing international standards and best practices, investing in modern infrastructure, fostering a culture of innovation and continuous improvement, and collaborating with national and international stakeholders in a transparent and accountable manner.

1.2 In the same vein, the Oman CAA is working to improve the safety of aerodromes in the Sultanate. Oman CAA has certified 08 airports, 03 of which are used for international operations (Muscat, Salalah and Suhar). Moreover, all certified aerodromes went through the certification process as per the local regulatory requirements established in Oman and are operated under any conditions and requirements set out in the aerodrome certificate.

1.3 Article 14 of Royal Decree of the Sultanate of Oman No. (76/2019) states that "Aircraft are prohibited from landing at undeclared airports, except in cases of emergencies or with the consent of the Competent Authority". This means that any undeclared aerodromes may be used for landing or take off of aircraft if authorized by the CAA. Further, terms such as 'landing place' or 'landing area' might be part

or have the same definition of undeclared airports or aerodromes, and they are not used in the regulations. Only the term of 'landing site' is used in ICAO Doc 9774, Chapter 4, 4.3.2.

1.4 In line with best practices adopted by other States., Oman is working on developing its first-time Guidance Material for the authorization of landing area to be used by aeroplane.

2. DISCUSSION

2.1 ICAO Annex 14 Vol 1, Aerodrome Design and Operations defines the Aerodrome as "a defined area on land or water (including any buildings, installations and equipment) intended to be used either wholly or in part for the arrival, departure and surface movement of aircraft". Moreover, the operations of aircrafts differ significantly from those conducted on land or in water.

2.2 Considering that:

- (a) the specifications of ICAO Annex 14, Volume I apply only for aerodromes open for public use, and
- (b) the specifications of ICAO Annex 14, Volume II apply to all heliports intended to be used by helicopters in international civil aviation.

2.3 And in the absence of Guidelines for aeroplane landing areas, it is considered of paramount importance to develop GM for the authorisation of a landing area and put them into use in accordance with local needs in order to maintain the safety of air navigation.

2.4 As long as there is no clear definition of a landing area, Oman CAA expands the types of aerodromes as follows:

- (a) Airport,
- (b) Heliport,
- (c) Helideck,
- (d) Water aerodrome,
- (e) Landing area or Landing site,
- (f) STOLport,
- (g) Etc.

2.5 Furthermore, Oman CAA established the minimum requirements to be considered when authorizing operations in a landing area as at **Appendix A**.

2.6 Oman CAA is planning to approve the operation of commercial flights to the 'Halanyet Islands' which achieves optimum utilization of existing facilities in the Sultanate of Oman considering the minimum requirements at para 2.5. Furthermore, Oman CAA is working to develop and provide recommended criteria which will set out the factors that may be used to determine the suitability of an area for the landing and taking-off of aeroplanes, based largely in line with the approach adopted by other States

Further, Oman is planning to assist AOs when determining the suitability of a place to safely take off and land, as well as the aerodrome operator for the prior preparation of the used area.

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the contents of this Paper.

Appendix A

Minimum requirements to be considered when authorizing operations in a LANDING AREA

I. PHYSICAL CHARACTERISTICS			
Item	Specifications	Required	Optional
1. Runway		<input checked="" type="checkbox"/>	<input type="checkbox"/>
Length	A runway length equal to or greater than that specified in the aeroplane's Approved Flight Manual (AFM) or approved performance charts for the prevailing conditions is required. Both take-off and landing requirements need to be considered for both directions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Width	A minimum width of 18 metres is required for runways.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Longitudinal slope	The longitudinal slope between the runway ends should not exceed 2%.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Transverse Slope	The transverse slope should not exceed 2%.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Surface testing	The surface of the runway shall be assessed to determine its effect on aeroplane control and performance.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Runway Strip	A minimum length of 30m and width of 30m is recommended to be available.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Taxiway	The taxiway width should be a minimum of 7.5 m wide.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
II. Obstacle Limitation surfaces			
1. Approach surface	Specifications are under development.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Take off surface		<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Transitional surface		<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Inner horizontal surface		<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Conical surface		<input checked="" type="checkbox"/>	<input type="checkbox"/>
III. Visual Aids for Navigation (<i>day operations</i>)			
1. Marking	It is highly recommended to provide markings similar to those found at aerodromes open for public use. If markings are provided, they should follow the specifications set out in CAR 139, part 1.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Wind direction indicator	It is the preferred method to be provided at landing areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
IV. Aerodrome operational services, facilities and equipment			

1. Suitability of the aerodrome	A pilot shall not use an aerodrome unless the aeroplane is clear of all persons, animals, vehicles or other obstructions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Airport operations safety plan	The aerodrome operator shall develop a plan for the safety operations of the aircraft.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Aerodrome security program	It is highly recommended to provide an aerodrome security program. Fencing might be the preferred method to be provided.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Aerodrome emergency plan	An aerodrome emergency plan shall be established at the aerodrome, commensurate with the aircraft operations and other activities conducted at the aerodrome.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Coordination with ATC	It is highly recommended to provide a coordinator for the exchange of operational information with air traffic control units.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Safety of the runway	The aerodrome operator shall confirm the safety of the runway before it is used for take-off and landing.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
V. AERONAUTICAL STUDY/RISK ASSESSMENT			
1. Aeronautical study/Risk assessment	It is the responsibility of the aerodrome operator/Aircraft operator to develop a risk assessment for the use of the aerodrome with the presence of all stakeholders involved in the operation (Air Navigation Services, etc.). Items to be discussed but not limited to are as follows: <ul style="list-style-type: none"> - Geographic location, - Environmental considerations, - Aerodrome data, - Air Navigation Services requirements, - Etc. 	<input checked="" type="checkbox"/>	<input type="checkbox"/>