

International Civil Aviation Organization

MIDANPIRG/22 & RASG-MID/12 Meetings

(Doha, Qatar, 4 - 8 May 2025)

Agenda Item 4.2: Outcomes of the RASG-MID Groups (ASPIG Meeting)

SAUDI ARABIA WATER AERODROME CERTIFICATION, AUTHORIZATION AND OPERATIONS

(Presented by Saudi Arabia)

SUMMARY

This Paper presents Saudi Arabia (GACA) continued support and implementation of international standards, along with the efforts to strength civil aviation aerodrome safety regulations, aligned with the ICAO Standards and Recommended Practices (SARPs).

To enhance aerodrome safety regulations, GACA has developed standalone regulations for the certification, authorization and operations of water aerodromes in Saudi Arabia.

This Paper shares the practical experience of KSA in the certification and operation of Water Aerodromes and identifies the main challenges faced during its incipient phases, to be discussed with the RASG Member Sates.

REFERENCE

- ICAO Annex 14
- ICAO PANS-Aerodrome DOC 9981
- GACAR PART-137
- ICAO APAC Regional Office Guidance on Requirements for The Design and Operations of Water Aerodromes for Seaplane Operations

1. Introduction

- 1.1 The General Authority of Civil Aviation (GACA) of Saudi Arabia has been proactively implementing ICAO requirements concerning the establishment of Safety Management Systems (SMS) at aerodromes. In alignment with the Kingdom's Vision 2030, Saudi Arabia is currently developing more than nine water aerodromes in the Red Sea and AMAALA regions to support sustainable, highend tourism through enhanced air connectivity via seaplane services.
- 1.2 To support this initiative, GACA launched a pilot project to develop regulatory provisions for water aerodromes in Saudi Arabia. This project was guided by sample guidelines and requirements provided by the ICAO Asia and Pacific (APAC) Office. As of January 2022, GACA has implemented a certification and authorization framework for water aerodromes, aimed at ensuring the safety of seaplane and water-based aviation operations. This initiative is expected to play a significant role in enhancing operational safety and fostering the growth of water aerodrome infrastructure in the Kingdom.

2. DISCUSSION

KSA regulatory framework for the certification and authorization of water aerodromes

2.1 In line with the ICAO-APAC guidance, GACA has developed the Kingdom's first regulatory framework for the certification and authorization of water aerodromes, specifically for the forthcoming developments in the Red Sea Islands. In support of this framework, GACA has adopted a series of measures to facilitate its implementation.

GACAR PART 137

2.2 Following the promulgation of GACAR Part 137 – Certification, Authorization and Operation of Water Aerodromes, GACA has granted regulatory acceptance for the establishment of five water aerodromes along Saudi Arabia's western coastline. Furthermore, the certification of two water aerodromes located at Ummahat and Sheybarah Islands has been successfully completed.

GACA Collaborative efforts with ICAO

- 2.3 GACA is a member of ICAO Water Aerodromes WG and seeks to collaborate with the ICAO Air Navigation Commission (ANC) by sharing its research and experiences, with the aim of contributing to the development of comprehensive Standards and Recommended Practices (SARPs) that enhance safety at water aerodromes both at regional and global level.
- 2.4 Through its active participation in the ICAO Working Group on Water Aerodromes (WGWA), GACA aims to contribute to the development of SARPs that address the design, certification, operational management, SMS implementation, and safety reporting requirements specific to water aerodromes.
- 2.5 While ICAO Annex 14 defines an aerodrome as a designated area on land or water intended for aircraft operations, it does not distinguish between land-based and water-based surfaces. However, aircraft operations conducted on water differ significantly from those on land, and the physical characteristics of water aerodromes require tailored safety provisions. Given the global rise in the number of public-use water aerodromes, there is a growing need to establish internationally recognized requirements and regulatory frameworks that ensure the safe design and operation of water aerodromes.
- 2.6 Despite ongoing efforts to promote and disseminate regulation and guidance for Water Aerodromes Certification, Authorization and Operations, challenges were identified during its implementation. The Kingdom of Saudi Arabia (KSA) seeks support on how to address some of these challenges in Section 3.1 of this Working Paper (WP).

3. ACTION BY THE MEETING

- 3.1 The meeting is invited to:
 - a) Note the information contained in this paper;
 - b) To discuss the challenges related to the implementation of National Water Aerodromes Civil AVIATION regulations without ICAO related SARPS:
 - c) To address the challenges related to the implementation of Safety Management System at Water Aerodromes and Small Aerodrome Operations;

- d) To highlight the challenges related to the implementation of Water Aerodrome Wildlife Hazard Management;
- e) To find solutions related to the challenges of the implementation of Water Aerodromes Emergency Response and Water Aerodromes Rescue and Firefighting.