International Civil Aviation Organization

MIDANPIRG/22 & RASG-MID/12 Meetings

(Doha, Qatar, 4 – 8 May 2025)

Agenda Item 5.3: ANS (AIM, PBN, AGA-AOP, ATM-SAR, CNS and MET)

PRODUCTION OF AERONAUTICAL CHART – ICAO 1:500 000

(Presented by Saudi Arabia)

SUMMARY

This Information Paper provides an overview of the production and maintenance of the Aeronautical Chart – ICAO 1:500 000 by the Kingdom of Saudi Arabia, in accordance with GACAR Part 175 and ICAO Annex 4 requirements. It highlights its scope, operational use, and contribution to aviation safety and efficiency within Saudi airspace.

Action by the meeting is at paragraph 3.

REFERENCE

- ICAO ANNEX 4
- ICAO DOC 8697
- GACAR PART 175
- GACA ADVISORY CIRCULAR AC-175-04

1. INTRODUCTION

1.1 The General Authority of Civil Aviation (GACA) of Saudi Arabia ensures the regular production, publication, and update of the Aeronautical Chart – ICAO 1:500 000, compliant with GACAR Part 175 and ICAO Annex 4 specifications. These charts are an essential element of the aeronautical information infrastructure and provide critical data for pre-flight planning, enroute navigation under Visual Flight Rules (VFR), and flight operations at low and intermediate altitudes.

1.2 The charts are designed to enhance situational awareness for pilots, improve operational safety, and support pilot training activities. They form part of the Kingdom's strategic efforts to align with international standards, support safe air navigation, and facilitate both domestic and international aviation operations within Saudi airspace.

2. DISCUSSION

2.1 Aeronautical Chart – ICAO 1:500 000

2.1.1 Supports Visual Flight Rules (VFR) operations, basic pilot training, and low/intermediate altitude navigation.

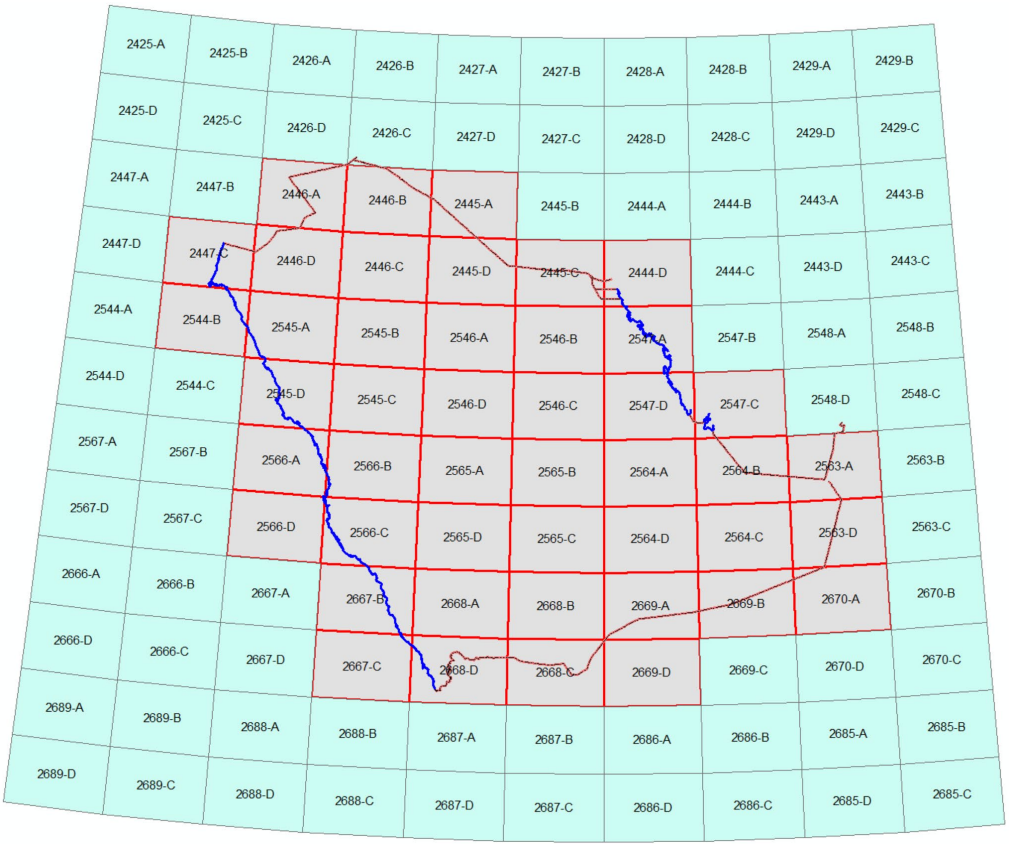
2.1.2 Comprises 45 sheets, each identified by the reference number of the corresponding World Aeronautical Chart – ICAO (WAC) 1:1 000 000 using quadrant-based suffixes (A: North-West, B: North-East, C: South-East, D: South-West).

2.1.3 Provides detailed topographical and operational data.

2.1.4 Supplements Area and Enroute Charts by offering essential visual navigation information.

2.2 Chart Coverage and Data Sources

2.2.1 Full Saudi Arabian airspace coverage:



2.2.2 Topographical data sourced from the General Authority for Survey and Geospatial Information (GEOSA).

2.2.3 Obstacles (height ≥ 100m) depicted on charts and detailed in KSA AIP ENR 5.4.

2.2.4 Maximum Elevation Figures (MEFs) calculated with an additional 200 feet safety margin and depicted on charts. The MEF must not be considered as a minimum safe altitude.

2.3 **Chart Maintenance and Updates**

2.3.1 Base charts revised approximately every 4 years and aeronautical data upon significant changes.

2.3.2 Users are reminded to cross-check with real-time information sources (e.g., NOTAMs).

2.3.3 Comments on charts can be reported via email to aip@gaca.gov.sa and aim@sans.com.sa

3. ACTION BY THE MEETING

3.1 The meeting is invited to note the information contained in this paper.

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