

## 9 CHARTS MANUALS AND NAVIGATION DATABASES

Riyadh Air utilizes 3<sup>rd</sup> party aeronautical products, including charts, manuals, and FliteDeck Pro X in its operations. These tools provide our flight crews and dispatch personnel with up-to-date navigational data and operational procedures.

### 9.1 DIGITAL CHARTS PROVISIONS

All navigational charts, including drift down charts, are provided exclusively in a digital format. Digital charts offer real-time updates, interactive functionalities, and integrated flight planning features. They are accessible through Riyadh Air issued portable Electronic Flight Bags (EFBs) and the Jeppesen FliteDeck Pro X application. Flight crew, aircraft dispatchers and operational personnel can access these charts and manuals via a their assigned portable EFB or web-based application.

#### 9.1.1 Digital Charts Amendment Cycle

Aeronautical charts used by Riyadh Air's flight crew and dispatch personnel are updated based on the AIRAC cycle. This frequency ensures that all the navigational data, including approach, departure and airport charts are kept up to date with the latest information.

Updated terminal charts and manuals are distributed through the Jeppesen FliteDeck Pro X application. Crew members will receive notifications about these updates, prompting them to download and synchronize the latest charts for their EFB devices.

**Note:** It is the responsibility of the flight crew and dispatch personnel to ensure that their EFB devices are updated with the latest version of the terminal charts before each flight. No person may operate a flight without valid and current charts for the route to be flown.

#### 9.1.2 Digital Charts Errors

Flight crew and dispatch personnel are expected to be vigilant in identifying any discrepancies, errors, or outdated information in digital charts. This includes, but is not limited to, inconsistencies in airport layouts, navigational aids, airspace structures, and approach/departure procedures.

Upon identification of a potential error, the crew member or dispatcher should immediately document the discrepancy and notify the Electronic Flight Bag (EFB) Manager.

The report should include specific details of the error, such as the chart's title, date, affected area, and a thorough description of the discrepancy. If possible, supporting evidence like screenshots or references to other navigational sources should be included.

Reports should be submitted through direct email communication with the Navigation Charting Manager or via an ASR when deemed appropriate.

9	CHARTS MANUALS AND NAVIGATION DATABASES
9.2	PAPER CHARTS PROVISION

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## 9.2 PAPER CHARTS PROVISION

Paper charts may only be issued under exceptional circumstances, such as the failure of all EFB devices or EFB data corruption. This contingency measure is in place to ensure uninterrupted access to navigation information, in the unlikely event of a complete digital systems failure.

**Note:** No other paper charts, apart from those approved and issued in exceptional circumstances, are authorized for use by flight crew, aircraft dispatchers or operational personnel. If applicable, a SCB will be provided.

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## 9.3 Route Manual

The Route Manual is an extensive resource, encompassing a wide array of global data pertinent to Riyadh Air operations. This manual is structured by geographic region to provide comprehensive information, organized into several key sections, including:

1. Enroute: Detailed information on airways and flight routes.
2. Radio Aids: Guidance on navigational radio aids.
3. Meteorology: Meteorological information for flight planning.
4. Tables and Codes: Reference tables and aviation codes.
5. Air Traffic Control: Procedures and communication protocols.
6. Emergency: Emergency procedures and guidelines.
7. Airport Directory: Comprehensive airport data.
8. Terminal: Terminal procedures.

This manual is an essential tool for flight crew, aircraft dispatchers, and other operational personnel.

9	CHARTS MANUALS AND NAVIGATION DATABASES
9.4	JEPPESEN FLITEDECK PRO X

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## 9.4 JEPPESEN FLITEDECK PRO X

FliteDeck Pro X is an electronic flight bag (EFB) application used by Riyadh Air's flight crews, aircraft dispatchers and other operational personnel. It provides access to operational manuals, procedures, charts, and navigational information across various routes, airports, and areas. This application is customized to meet the specific needs of Riyadh Air, ensuring that our flight crews and aircraft dispatchers have tools tailored to our operational requirements.

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9.5	MANDATORY USAGE POLICY

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## 9.5 MANDATORY USAGE POLICY

Riyadh Air mandates that flight crew, aircraft dispatches and other operational personnel exclusively use FliteDeck Pro X and aeronautical charts and manuals for all flight operations. Printed documents are not authorized for use, except in accordance with 9.2.

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9.6	FLIGHT MANAGEMENT SYSTEM NAVIGATIONS DATABASE

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## 9.6 FLIGHT MANAGEMENT SYSTEM NAVIGATIONS DATABASE

The Flight Management System (FMS) Navigation Database utilizes aeronautical data. This data is coded in accordance with ARINC 424 standards. The sourced data is then converted by the FMS manufacturer into a format that is readable by the FMS. This database is consistently updated following a 28-day AIRAC cycle, ensuring that the navigation information remains current and accurate.

### 9.6.1 Navigation Database Selection

Flight crew must manage the transition between navigation database cycles, in accordance with the AIRAC cycle. The changeover to a new database should occur on the effective date of the new AIRAC cycle as described in Chapter 8.2.2.

**Note:** Flight crew should select the current FMC/ FMS navigation database if departing prior to 0000 UTC on the AIRAC effective date. If departing after 0000 UTC on the effective date, flight crew should load and use the new database.

### 9.6.2 EGPWS Terrain Database Validation

Riyadh Air maintains a process for the management of the Terrain Awareness and Warning System (TAWS) database, ensuring compliance with GACAR OPS-1 regulations. This process encompasses updating the database with the latest Terrain and Obstacle data, within the Enhanced Ground Proximity Warning System (EGPWS).

#### Responsibility:

The Manager Navigation Services (MNS) is responsible for ensuring the EGPWS terrain database's accuracy. The MNS is tasked with the regular review of the database to confirm its currency and applicability to Riyadh Air's operational routes and airports, performing updates as necessary.

#### Scope:

The MNS initiates a validation check of the EGPWS terrain database 20 days before the release date as stipulated by the data provider. This timeframe ensures adequate opportunity for thorough review and application of any necessary updates.

### 9.6.3 Navigation Database Errors

Navigation database discrepancies will be relayed to flight crew and aircraft dispatchers through the issuance of a company NOTAM, or a Crew Alert included in the operational flight plan.

**Note:** Flight crew shall always refer to the latest NOTAMs for changes related to aeronautical data.