

CHARTS AND NAVIGATION

JEPPESEN FLIGHT CREW TRAINING COURSE LAYOUT & SYLLABUS

COURSE LAYOUT

INTRODUCTION

This course will train professional aviation personnel on charts and navigation to ensure a practical knowledge of airspace, navigation systems, and Jeppesen Charts. The course emphasizes practical concepts and critical decision-making to enable students to retain and use the information in the real world.

BACKGROUND

Per the Code of Federal Regulations Title 14 Parts 91 (§ 91.1065 and § 91.1101) and 135 (§ 135.345 and § 135.351), initial, transition, recurrent, and upgrade ground training for pilots must include instruction in at least the following, as applicable to their duties:

- Navigation and the use of navigational aids, including instrument approach procedures.

COMPONENTS

Following the regulatory requirements and parameters described above, the Charts and Navigation course covers the following lessons.

- Airspace
- Jeppesen Charts
- Navigation Systems

DURATION

The course takes an average student approximately 2.25 hours to complete including the required exam.

CHARTS AND NAVIGATION

COURSE LAYOUT *(CONTINUED)*

FEATURES & FUNCTIONS

It is the ultimate goal of Jeppesen to provide courseware that increases efficiencies. Thus this module is designed in an interactive, engaging and practical fashion using scenarios that emphasize critical decision-making in operations.

There are multiple topics within a lesson and multiple lessons within the course (see details below). Within each topic, students answer optional questions and answers in order to determine their level of understanding. Students may also quit a lesson or an exam in the middle and return to the same location at a later time. Finally, students may review the content as many times as is desirable during the subscription year.

At the end of the course, there is a required exam. The exam presents multiple randomized questions from a pool of possible questions. To pass, the student must score 80% or better. At the end of the exam, the student and his or her manager may review the exam at the question level in order to make the exam correctable to 100%.

CERTIFICATE OF COMPLETION

The Jeppesen Learning Center automatically generates a certificate of completion once the student completes all instructional material and passes the exam at 80% or better. The system sends the certificate via email and the student has access to it online as well.

LEARNING MANAGEMENT SYSTEM & ADMINISTRATION

The Jeppesen Learning Center maintains training history records for students and their managers. You may run a training history report at any time during your subscription year to validate your training records.

ENROLLMENT

To enroll in the course, please contact your local Jeppesen Regional Sales Manager (RSM). If you do not know your Jeppesen RSM, please contact:

The Americas

800.553.7750 or 303.3284244 or e-mail captain@jeppesen.com

Europe and Asia

+49 6102 5070 or e-mail fra-services@jeppesen.com

CHARTS AND NAVIGATION

COURSE SYLLABUS

LESSON 1: AIRSPACE

After completing the lesson on Jeppesen charts, you will be able to:

- Describe airspeed limitations
- Outline the airspace classes
- Explain special use airspace
- Describe the Air Defense Identification Zone (ADIZ)
- Explain Temporary Flight Restrictions (TFR)

Topics include:

- Airspeed limitations based on airspace
- Minimum safe airspeed
- Airspace class requirements
- ADIZ regulations
- The seven types of TFRs

LESSON 2: JEPPESEN CHARTS

After completing the lesson on icing, you will be able to:

- Interpret Jeppesen charts

Topics include:

- Airport charts including SMGCS charts
- Departure charts including Obstacle Departure Procedures (ODPs) and Standard Instrument Departures (SIDs)
- Enroute charts:
 - Navigation databases
 - RNAV routes
 - GPS Minimum Enroute Altitudes (MEAs)
 - Severe Weather Avoidance Plan (SWAP) routes
- Arrival charts including Standard Terminal Arrival Routes (STARs)
- Approach charts including RNAV charts
- Airport qualification and familiarization charts

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LESSON 3: NAVIGATION SYSTEMS

After completing the lesson on navigation systems, you will be able to:

- Describe your responsibilities in keeping your database accurate and current
- Explain how GPS integrity is maintained
- Determine how to reduce position errors
- Identify that there might be limitations to your current system and what those limitations are
- Describe how the flight management system (FMS) derives position information from the sources such as VOR/DME, LOC, VLF/Omega, and GPS

Topics include:

- GPS Integrity
- GPS Accuracy
- Wide Area Augmentation System (WAAS)
- WAAS NOTAMs
- GPS Approach
- The inner workings of the FMS
- The navigation and performance databases
- LNAV and VNAV
- Common mistakes in using the FMS and how to avoid them