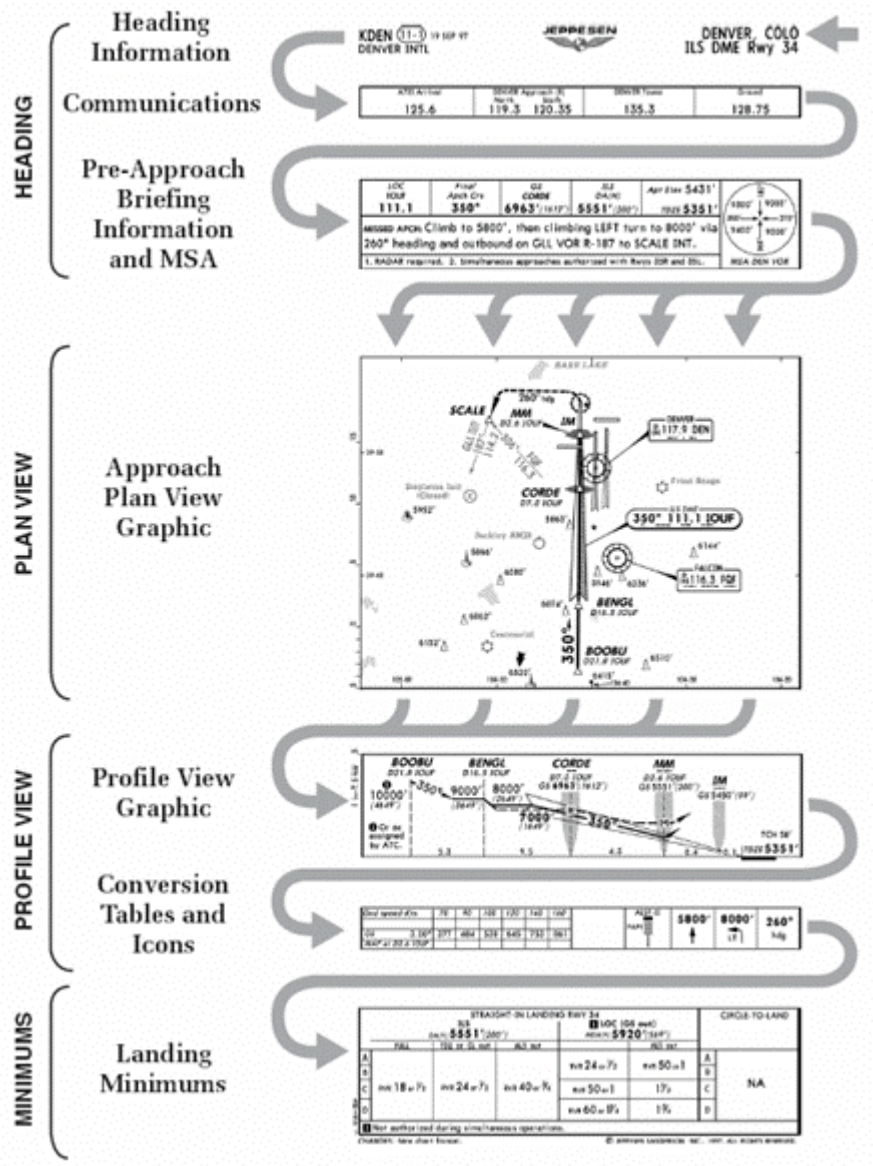
JEPPESEN CHART INFORMATION

GENERAL LAYOUT



APPROACH CHART HEADING

Approach chart heading information consists of the following:

❶ Jeppesen NavData (ICAO) identifier.

❷ Index number. Charts are sequenced by runway number within a similar type.

❸ Airport name.

❹ Location name.

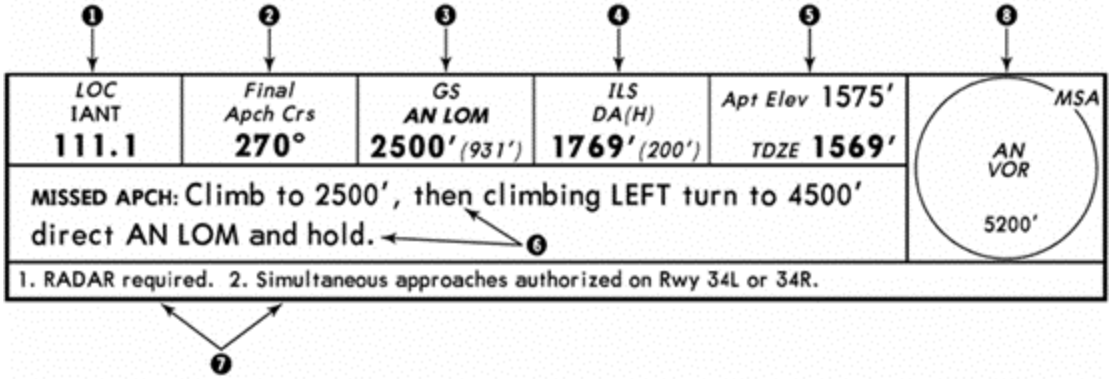
❺ Procedure identification.

COMMUNICATIONS

Communications for arrival use are listed in the order of normal use.

ATIS Arrival	ANYTOWN Approach (R)	ANYTOWN Tower	Ground
125.6	119.3	118.1	121.9

PRE-APPROACH BRIEFING INFORMATION



Information for the pre-approach briefing is listed in the following sequence:

❶ Primary Navaid frequency and identifier.

❷ Final Approach Course.

❸ Glide slope altitude at OM for precision approaches, Minimum altitude at the Final Approach Fix (or equivalent) for non-precision approaches.

❹ Lowest DA(H) or MDA(H).

❺ Airport Elevation and TouchDown Zone/Threshold Elevation.

❻ Missed Approach instructions.

❼ Notes applicable to the approach procedure. Notes may include:

Altimeter setting information.

Transition Altitude and Level.

Barometric Pressure Equivalent for QFE altimeter setting.

Equipment/crew requirements for the approach.

Informational or descriptive notes applicable to the procedure.

The Note box may be omitted when there are no applicable notes.

❽ Minimum Safe or Sector altitude (MSA). Altitudes are protected to a 25 nautical mile radius unless specified otherwise.

APPROACH CHART PLAN VIEW

NAVAIDS

ILS, LOC, LDA, SDF, or MLS

LOC Back Course

Offset Localizer

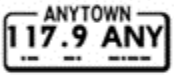
Marker

Marker with Locator or NDB

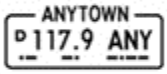
Marker with co-located intersection or DME fix

NAVAID INFORMATION BOXES

Navaid information boxes contain the Navaid name, identifier, frequency and Morse code.



Shadowed box indicates the primary Navaid for the approach.

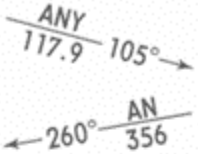


"D" indicates DME capability.

BEARINGS

090° Magnetic course

090°T True course



VOR Radials forming a position or fix. VOR Radials are bearing from the Navaid, NDB bearing are to the Navaid.

AIRPORTS

Civil or Joint use Airport

Airport with rotating beacon

Military Airport

Heliport

Seaplane Base

Closed Airport

SPECIAL USE AIRSPACE

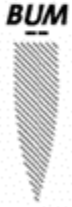
Restricted Area

Prohibited Area

PROFILE VIEW

PROFILE SYMBOLS

VOR, NDB, or Waypoint.



Fan Marker with name/ code.

Fan Marker and NDB co-located.

Fix with name or DME distance.

PROFILE ALTITUDES

All altitudes in the profile view are minimum altitudes above mean sea level, unless otherwise specified.

5200′ Minimum Altitude (MIM).

MANDATORY 5200′ Mandatory altitude at specified position or fix.

MAXIMUM 5200′ Maximum altitude (MAX) at specified position or fix.

RECOMMENDED 5200′ Recommended altitude.

(4169′) Height above airport, runway end, or touchdown zone.

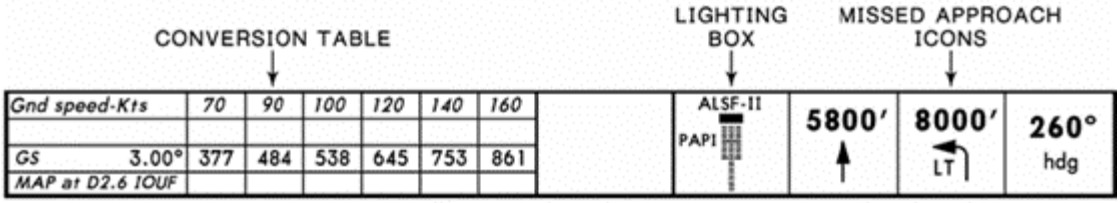
Altitudes in the profile will be in **Bold** type when the altitude is at the:

- FAF on non-precision approaches
- ILS Glide Slope Intercept altitude
- ILS Glide Slope altitude at the outer marker

CONVERSION TABLE, LIGHTING BOX, AND MISSES APPROACH ICONS

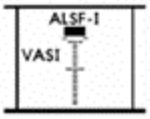
CONVERSION TABLE

Conversion tables, Lighting Box and Missed Approach Icons are located below the profile view.

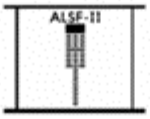


LIGHTING BOX

The lighting box displays the approach lights (ALS), visual approach slope lighting (VASI or PAPI), and runway end lights (REIL) for the straight-in landing runway. The lighting box is omitted when ALS, VASI, PAPI or REIL not installed.



Approach lights and VASI. (VASI and PAPI are depicted in their relative position; Left, Right or Both sides of centerline).



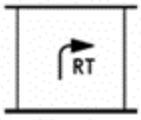
Approach lights.

Approach lights. (Configuration unknown)

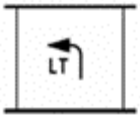
REIL and VASI.

MISSED APPROACH ICONS

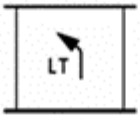
Missed Approach Icons include a wide variety of initial action instructions. A representative sample of Icons are shown below;



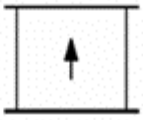
Right Turn (greater than 45°)



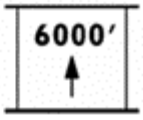
Left Turn (greater than 45°)



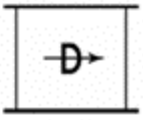
Left Turn (less than 45°)



Climb

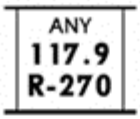


Climb to altitude



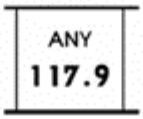
Direct

Fly Heading

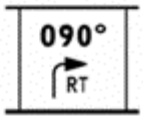


Track Radial

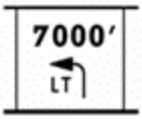
To specified Fix



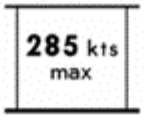
To specified Navaid



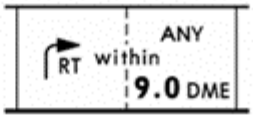
Turn to specified Course



Turn to specified Altitude



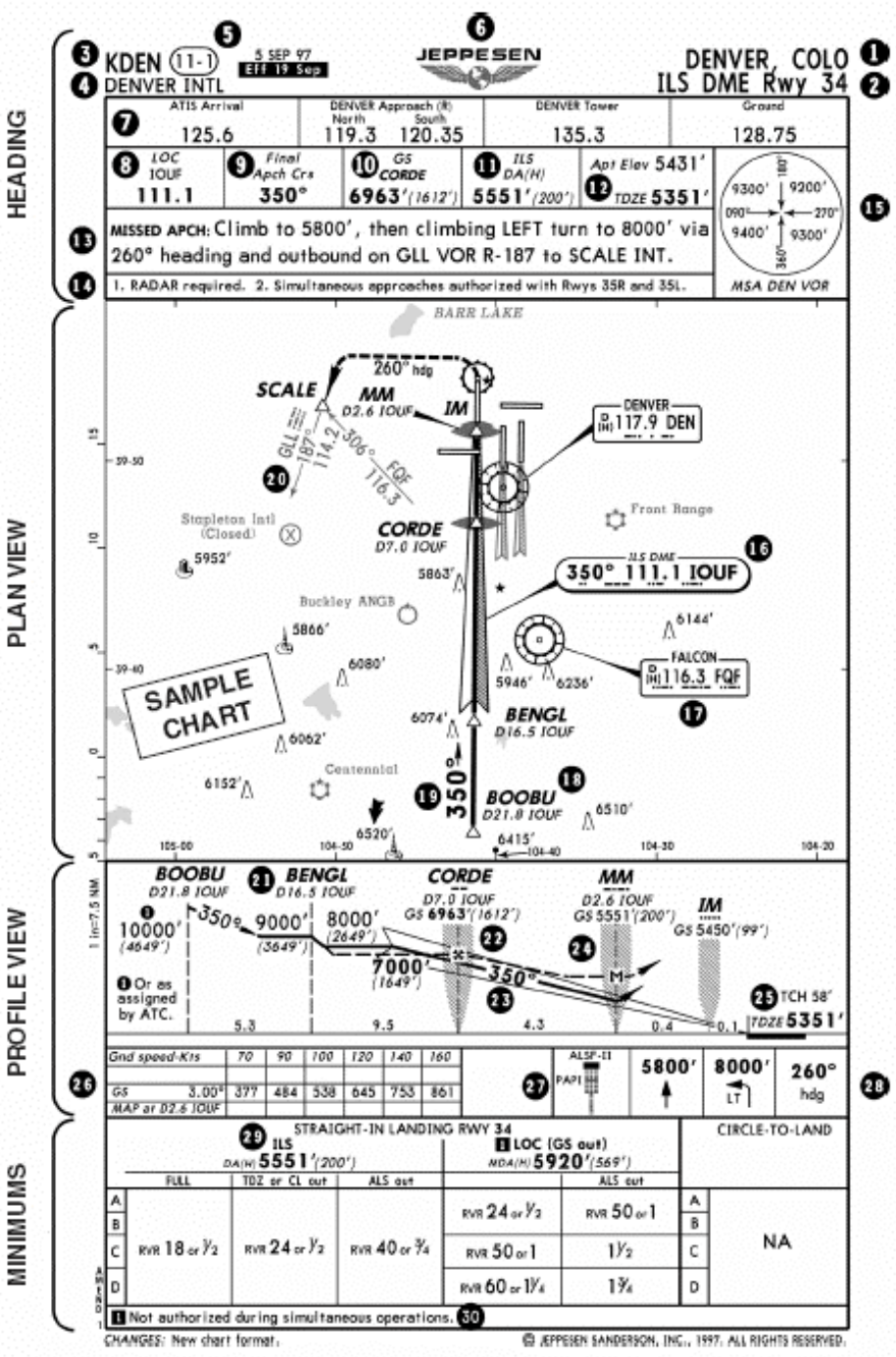
Airspeed limit



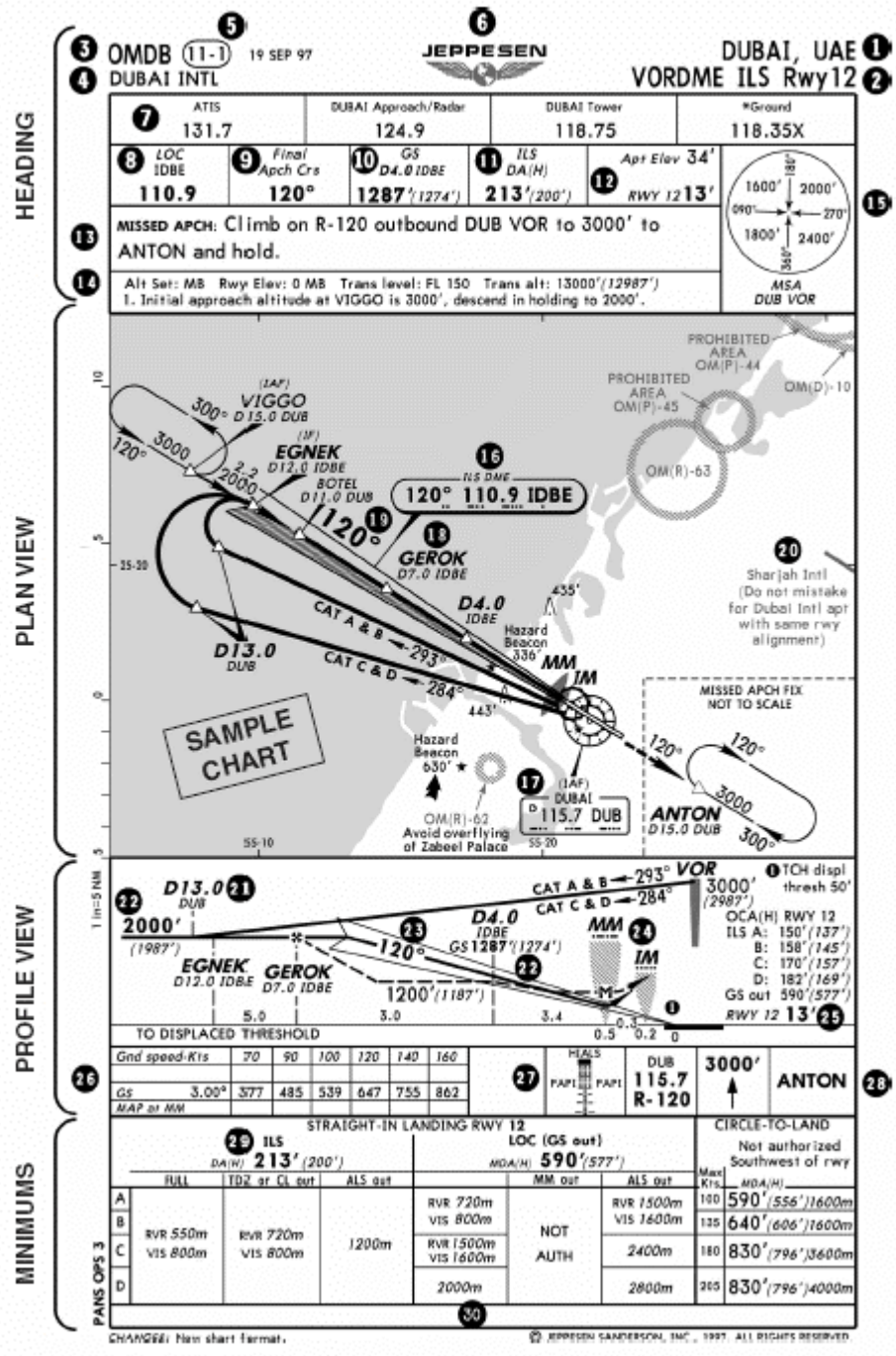
Right turn with Limit

NOTE: Missed Approach Icons provide for initial actions only. Always refer to the Missed Approach instructions in the PRE-APPROACH BRIEFING section and the plan view for complete instructions.

SAMPLE CHART - DENVER



SAMPLE CHART – DUBAI



Explanation of Features

The following paragraphs provide more detailed information on the approach chart format. Selected paragraphs are keyed to round, numbered ballflags, as depicted on the Overview of Features, and sample charts for both Denver and Dubai. For example, ballflag 1, 1, means City/Location and State/Country names. Wherever a ballflag is shown, you can refer to your choice of either Denver or Dubai pages if you desire.

HEADING

Arrangement of information on the chart concerns how pilots review and use the chart data. For example, the upper right corner is accessed first by most pilots. The flow is then right to left as pilots first select the chart from the binder by using the location name. The main feature of the briefing strip arrangement is to place basic information in a common location for more convenient use during the pre-approach briefing. However, it is important to mention that pilots should always review the entire chart for complete information.

HEADING INFORMATION

1 **City/Location and State/Country names**. The location name (city, state, country) is prominently depicted in the upper right corner in the usual location.

2 **Procedure identifier**. The location name and the procedure identifier are grouped together in the upper right corner of the chart to help quickly identify and retrieve the approach to be briefed and flown.

3 **Jeppesen NavData/ICAO airport identifier**. Next, to verify the selected chart is correct and current, pilots move to the left to review the grouping of the Jeppesen NavData/ICAO identifier, the airport name, chart index number, and date. The arrangement of heading information is designed to keep it visible even when the chart is clipped to the control column. The NavData/ICAO airport identifier is enlarged for easy recognition.

4 **Airport name**. The Jeppesen NavData/ICAO airport identifier and the airport name are located together in the upper left corner, directly across from the associated location name and procedure identifier.

5 **Index number, revision and effective dates**. The chart index number, as well as the revision and effective dates are positioned on the left side of the heading next to the airport identifier. At a location, charts are grouped (indexed) by similar procedure type (ILS, VOR, NDB, etc.). Within a group of procedures, charts are sequenced according to runway number, lowest to highest (Example: VOR Rwy 18 before VOR Rwy 36).

6 **Heading data arranged to avoid coverage by control column clip**. The position allows all of the heading data to remain visible, even when the chart is clipped to a control column. Arrangement of heading information is based on in-cockpit usage patterns.

COMMUNICATIONS

7 **Communications frequencies arranged horizontally**. Pilots typically refer to the next rows from top to bottom to set up and brief the approach. The communications section is arranged horizontally in the top row, just inside the neatline of the heading section. Notice that the frequencies are listed left to right in the normal sequence of use, from arrival to touchdown.

PRE-APPROACH BRIEFING INFORMATION AND MSA

8. **Primary navigation aid**. The next section of the chart heading contains the pre-approach briefing information, such as the primary navigation aid, final approach course, and appropriate altitudes, including the full text of the missed approach procedure. The minimum safe altitude (MSA) graphic is to the right, and the appropriate procedural or altimetry notes are in the last row in the heading section. The first box of the pre-approach briefing section contains the information on the primary navigation aid used for the approach. It includes the navaid type, identifier, and the associated frequency. For example, on ILS approaches, this will be the localizer.

9. **Final approach course bearing**. The final approach course bearing is located in this box of the pre-approach briefing section. Final approach course information is also found in the plan view and profile view.

10. **Glide Slope altitude at OM position (or equivalent) for Precision approaches or, minimum altitude at Final Approach Fix (FAF) for Non-Precision approaches**. Here pilots will find the glide slope crossing altitude at the outer marker (or equivalent position) for precision approaches. The name or identification of the associated navaid or fix will be included in this box. For non-precision approaches, the depicted altitude is the minimum crossing altitude at the final approach fix (or equivalent position). Step-down fixes may exist between the FAF and MAP. Refer to the profile view for complete information.

11. **Decision Altitude DA(H) or Minimum Descent Altitude MDA(H) for straight-in landing.** This box contains the lowest minimum altitude/height for the straight-in landing. For this example, it lists the decision altitude/height, or DA(H), for the ILS. This figure is based on a straight-in landing with all equipment operating. For non-precision straight-in landings, this box contains the lowest minimum descent altitude, or MDA(H). For approaches which have conditional situations, or do not have a straight-in landing, or apply to more than one runway, this box will contain a note referring you to the minimums section for the appropriate information. For Category II and III ILS approaches, additional boxes may be added, as appropriate. You should always review the minimums section for complete information.

12. **Airport and touchdown zone/runway end elevation**. The airport elevation and the touchdown zone or runway end elevation are found in this box. On the original chart format, only the airport elevation is found in the heading.

13. **Complete instructions for missed approach procedure**. The textual description of the missed approach procedure has been moved into the heading section. It is placed here because the entire missed approach procedure is typically referenced during the pre-approach briefing. Additionally, missed approach information is shown in graphical form in the plan view.

14. **Common placement of notes applicable to the procedure**. When applicable, general equipment or procedural notes associated with the approach are found together in this area of the new format. Altimetry information also is found here. If there are no notes associated with the approach, this row may be omitted. On the original format, notes may be found in various locations around the chart.

15. **Minimum Safe Altitude (MSA) graphic placed in a consistent location**. The minimum safe altitude information is placed in its new location for quick and convenient reference. The bearings and radials are oriented “to” the point of origin. A minimum safe or sector altitude (MSA) is applicable to a 25 nautical mile radius unless specified otherwise.

PLAN VIEW

16. **Primary navaid information enlarged and made bold**. The primary navigation aid information is shown using big and bold type and a shadow box for easy recognition.

17. **New style for all navaid box outlines and leader arrows**. Slight style changes in navaid boxes and arrows have been made to improve visual appearance. The leader arrows are thinner than the original chart format and contain no arrowhead.

18. **Names and idents of airspace fixes associated with the approach procedure are enlarged and made bold**. Big and bold text used in the plan view helps with recognition and visual identification of airspace fix names and idents.

19. **Final approach course bearing is enlarged and made bold**. Depiction of the final approach course is enlarged and made bold for easy recognition.

20. **Formation radials and secondary airports are screened to reduce visual congestion**. A “layered look” intended to improve visual contrast and reduce visual congestion is provided by shading formation radials and secondary airports.

PROFILE VIEW

The arrangement of the Profile View information improves the connection between the profile view graphic and the initiation of a missed approach procedure. It provides the time to the missed approach point, information about lighting systems in the landing environment, and initial actions for missed approach if you don’t see the runway environment.

PROFILE VIEW AND GRAPHIC

21. **Names and idents of airspace fixes associated with the approach procedure are enlarged and made bold**. Big and bold text is used to enhance appearance and usability for airspace fix names and idents.

22. **Glide Slope altitude at OM position (or equivalent) or minimum altitude at Final Approach Fix (FAF) is enlarged and made bold**. Altitude information is contained in the profile view graphic. For purposes of visual reference, the glide slope altitude/minimum altitude at the OM or FAF equivalent position is made bold. (This altitude corresponds to the one shown in the briefing strip.) The profile view graphic also shows the existence of any step-down fixes and altitudes between the FAF and MAP.

23. **Final approach course bearing is enlarged and made bold**. The final approach course is made bold for visual recognition.

24. **Symbols for navaids and fixes are screened to reduce visual congestion**. Chart clarity and recognition of surrounding chart data is enhanced through the use of screens, or shading.

25. **Touchdown zone/runway end elevation is enlarged and made bold**. The touchdown zone or runway end information is shown in the same location in the profile view. Big and bold type is used.

CONVERSION TABLES AND ICONS

26. **Conversion tables positioned below profile view for improved usability**. The position of the conversion table reinforces the relationship between the profile graphic and the conversion table information.

27 **Graphic depiction of applicable approach light system (ALS) and/or visual descent lighting aid**. When REIL, VASI, or PAPI is available, these also are shown on the appropriate side of the runway. An explanation of the symbols used for approach lights is found in the Approach Chart Legend.

28 **Initial pilot actions ("up and out") for missed approach are symbolized**. Located below the profile view graphic is a series of symbols which represent initial pilot actions in the event of a missed approach. They provide symbolic information about the initial "up and out" maneuvers only. Always refer to the missed approach instructions in the heading section and the plan view graphic for complete information about the missed approach procedure.

MINIMUMS

29 **Decision Altitude DA(H) or Minimum Descent Altitude MDA(H) for straight-in landing are enlarged and made bold**. The DA(H) and MDA(H) are located in the landing minimums section in big and bold type. All authorized minimums and applicable conditions for each approach procedure are provided within the chart minimum table.

30 **Notes applicable to landing minimums commonly located below minimum band**. These notes are located below the landing minimums section.