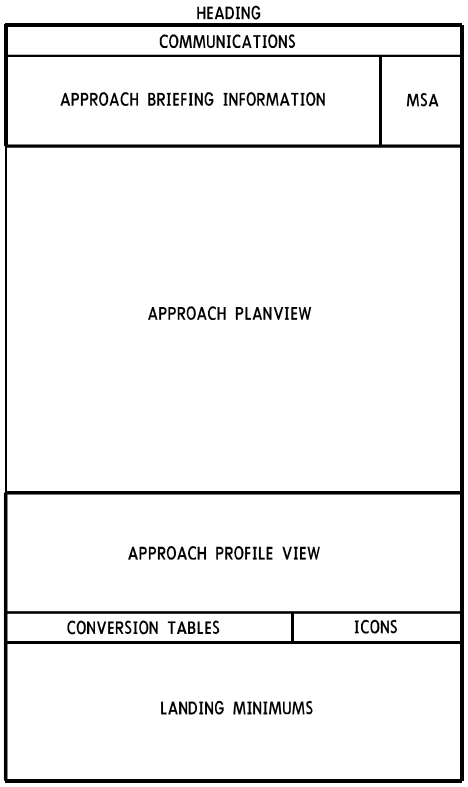
APPROACH CHART LEGEND

NOTE: This section of the Jeppesen legend provides a general overview regarding the depiction of approach procedures.

Approach charts are graphic representations of instrument approach procedures prescribed by the governing authority. The following briefly explains the symbology used on approach charts throughout the world. Not all items explained apply to all charts. The approach chart is divided into specific areas of information as illustrated below.

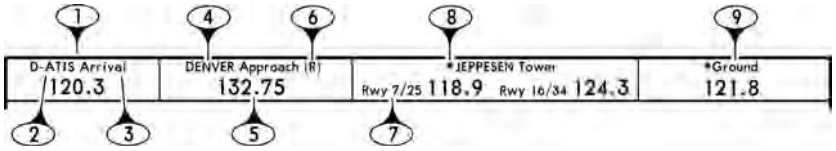
FORMAT



HEADING

1 — ICAO indicators and IATA airport identifiers.
2 — Airport name.
3 — Index number. Charts are sequenced by runway number within similar type approaches.
4 — Chart revision date.
5 — Chart effective date.
6 — Procedure identification.
7 — Geographical location name.
8 — Jeppesen company logo.

COMMUNICATIONS



1 — Communications are shown left to right in the order of normal use.

2 — Communication service, call sign is omitted when the service is broadcast only.

3 — Functionality of the service is shown when applicable.

4 — The service call sign is shown when transmit & receive or transmit only operations are available.

5 — All available primary frequencies are depicted.

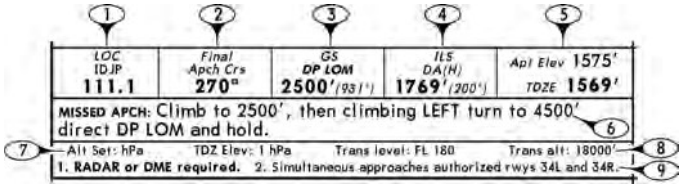
6 — Indicates that radar services are available.

7 — Sectors are defined for each frequency when applicable.

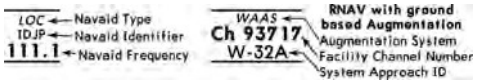
8 — Indicates the service is part time.

9 — When the service is a secondary function, the call sign is omitted.

APPROACH BRIEFING INFORMATION

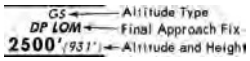


1 — Approach primary Navaid.



2 — Final approach course bearing.

3 — Crossing altitude at the FAF. Glide slope crossing altitude for precision approaches. Procedure altitude (Vertical Descent Altitude or Minimum Crossing Altitude) for non-precision approaches.



4 — Lowest DA(H) or MDA(H).

5 — Airport Elevation and Touchdown Zone/Threshold Elevation.

6 — Textual description of the Missed Approach Procedure.

7 — Altimeter Setting Information, Barometric Pressure Equivalents are included.

8 — Airport/Procedure Transition Level and Altitude.

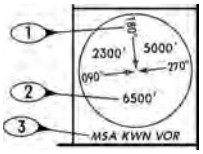
9 — Notes applicable to the Approach Procedure.

MINIMUM SAFE or SECTOR ALTITUDE (MSA)

1 — Sector defining Radial/Bearing, always depicted to the Navaid/Fix or Airport Reference Point (ARP).

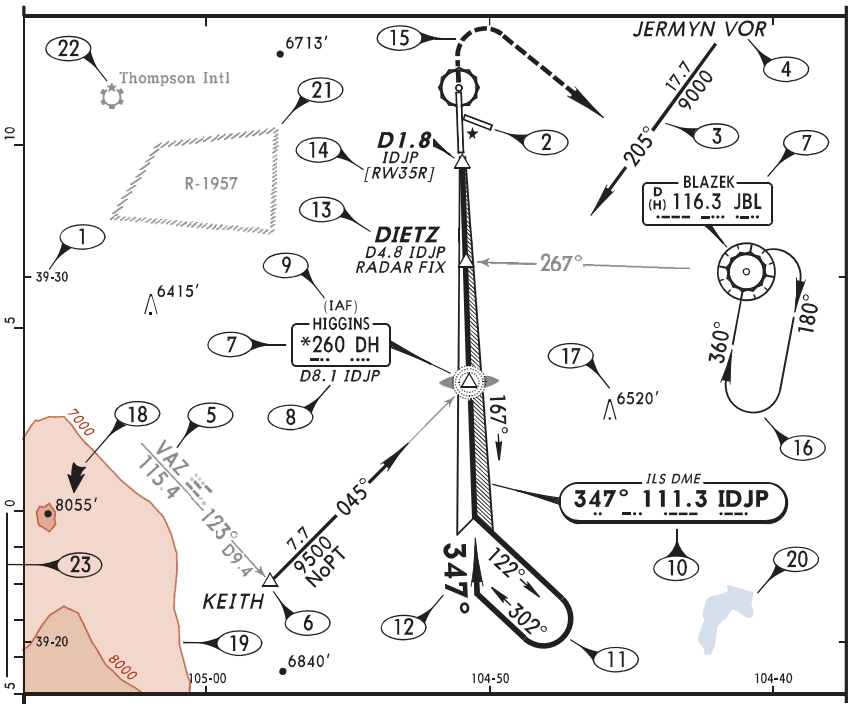
2 — Minimum safe/sector altitude.

3 — Navaid/Fix/ARP the MSA is predicated on.



NOTE: Normal coverage is a 25 NM radius from the forming facility/fix. If the protected coverage is other than 25 NM, that radius is depicted below the forming facility/fix.

APPROACH PLANVIEW



1 — The planview is a graphical "To Scale" depiction of the approach procedure. Latitude and longitude tics are shown in 10 minute increments along the neatline.

2 — Complete runway layout is depicted for the primary airport.

3 — Approach transitions are depicted with a medium weight line. The bearing is normally inset within the track with the mileage and associated altitude placed along the track.

4 — Off-chart origination navaid/waypoint name. Navaid frequency, ident, and Morse code is shown when required for fix formation.

5 — VOR cross radials and NDB bearings used in forming a fix. DME formation distances are shown when applicable. Navaid frequency, ident, and Morse code shown as required.

6 — Airspace fixes depicted using several different symbols according to usage.

7 — Navaid boxes include the navaid name, identifier, Morse code, and frequency. A letter "D" indicates DME capability with an asterisk indicating part time.

8 — Substitute fix identification information located below facility box when applicable.

9 — Initial Approach Fixes and Intermediate Fixes are labeled as (IAF) and (IF) respectively.

10 — A shadowed navaid box indicates the primary navaid upon which lateral course guidance for the final approach segment is predicated.

11 — The final/intermediate approach course is indicated with a heavy weight line.

12 — The final approach course bearing shown in bold text, with a directional arrow as needed.

13 — Airspace fix names are shown near or tied to the fix, formational info is placed below name.

14 — Jeppesen-derived database identifiers are depicted when different from State-supplied name.

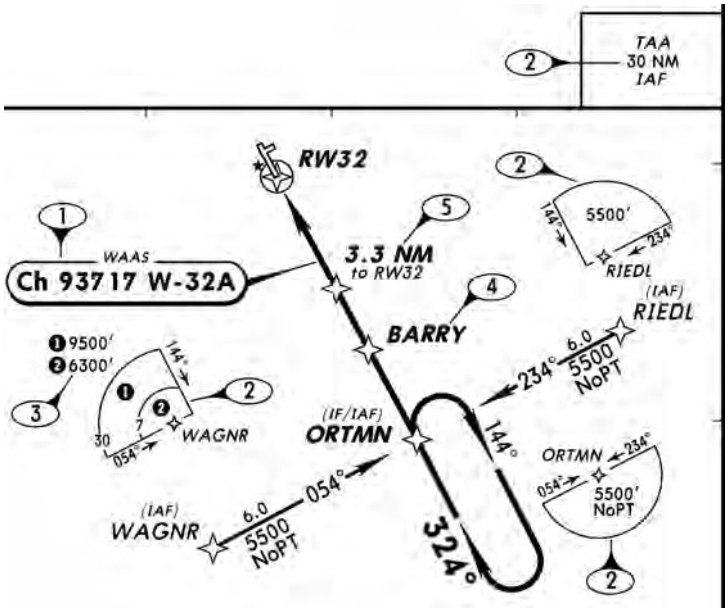
15 — The missed approach segment is shown with heavy weight dashed line work.

16 — Holding/Racetrack patterns are shown with both inbound and outbound bearings. Restrictions are charted when applicable, heavy weight tracks indicate the holding/racetrack is required.

17 — Some, but not all, terrain high points and man-made structures are depicted along with their elevations. Generally only high points 400' or more above the airport elevation are shown.

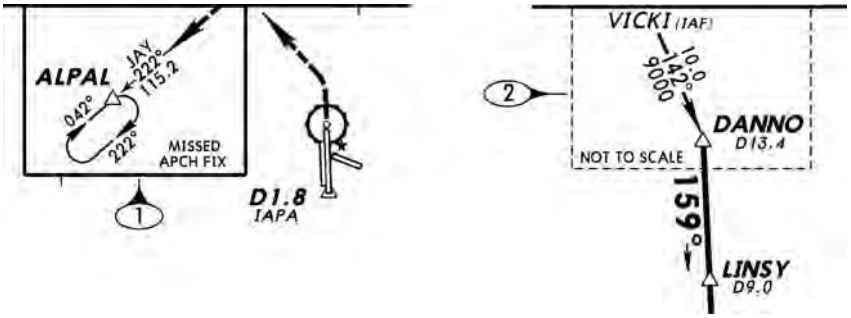
18 — Arrow indicates the highest of the portrayed high points within the planview area only.
19 — Generalized terrain contours may be depicted based on several geographic factors.
20 — Rivers/large water bodies are shown. Smaller and seasonal water areas are not depicted.
21 — Some, but not all, Special Use Airspace boundaries and identifiers are depicted.
22 — All secondary IFR airports, and VFR airports that lie under the final approach, are depicted.
23 — Charting scale used is indicated along the left side of the planview.

APPROACH PLANVIEW — RNAV PROCEDURE DIFFERENCES



1 — A primary navaid box is shown for RNAV approach procedures augmented by ground based facilities. The system type, channel, and system approach ID are shown.
2 — Some RNAV procedures utilize Terminal Arrival Area/Terminal Area Altitude (TAA). A graphical depiction of each TAA sector is placed within the planview in the corresponding area. The TAA's foundational waypoint is depicted along with the forming bearings, arrival altitudes, and applicable NoPT labels. Generally the TAA replaces the MSA as indicated in the MSA box.
3 — When the normal TAA coverage of 30 NM (25 NM ICAO) from the base waypoint is modified, the segmented areas are depicted with the applicable altitudes indicated.
4 — Due to the required use of a database, only waypoint names are shown. Formations and coordinates are omitted.
5 — Along track distances, normally to the next named waypoint, are shown per source for un-named waypoints.

APPROACH PLANVIEW — NOT TO SCALE INSETS

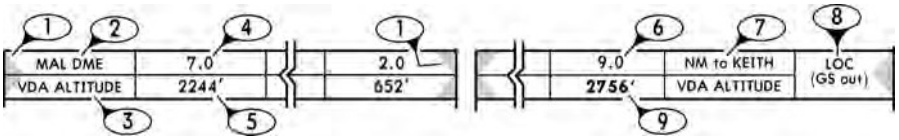


Insets are used to portray essential procedural information that falls outside of the planview boundary. The use of insets facilitates larger scales for depicting core segments of the procedure.

1 — A solid line is used to outline the inset when the information has been remoted from the associated "To Scale" tracks. Labels inside the inset indicate the usage of the contained procedural information.

2 — A dashed line is used to outline the inset when the information remains in line with the associated "To Scale" tracks. A NOT TO SCALE label is included inside the inset.

NON-PRECISION RECOMMENDED ALTITUDE DESCENT TABLE



General Description: The Recommended Altitude Descent table, shown to facilitate the CDFA technique, contains "check" altitudes that correlate directly to the Vertical Descent Angle (VDA) used in conjunction with the final approach segment of the procedure. When the State Authority has not supplied this information, Jeppesen will derive the altitudes based on the procedure VDA.

1 — The direction of the Recommended Altitude Descent table, top of descent down, is sequenced in the same direction as the flight tracks in the profile. A grey arrow indicates this left-to-right or right-to-left direction.

2 — The source for the DME "checkpoints" is indicated by the navaid ident. When the table is Jeppesen-derived, DME is used whenever possible for the establishment of the checkpoints.

3 — The row of recommended altitudes is labeled to indicate their associated use with the VDA.

4 — The DME distance that defines each checkpoint is depicted in whole and tenths of a NM.

5 — A recommended altitude, (which is defined by a position along the VDA at a given point) is supplied corresponding to each checkpoint in the table.

6 — When DME is not available, each checkpoint will be defined by a distance to a fix along the final approach course. This distance is shown in whole and tenths of a NM.

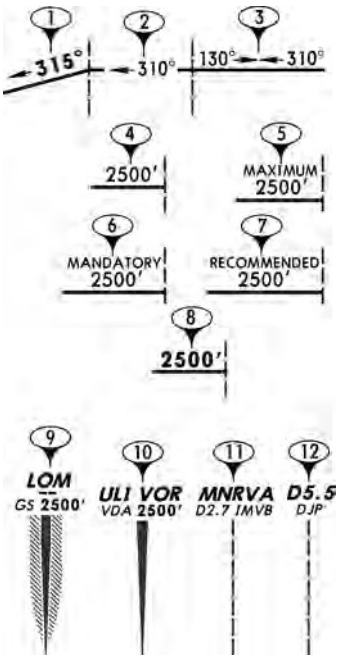
7 — The "to" waypoint is indicated when checkpoints are defined by a distance to a fix.

8 — When a Non-Precision approach is combined with a Precision approach, a qualifier is added to indicate that the depicted recommended altitudes relate to the non-precision approach only.

9 — Bold text indicates the altitude is charted in the FAF altitude box within the Briefing Strip.

APPROACH PROFILE VIEW

The Profile View graphically portrays the Final/Intermediate segments of the approach. A Not To Scale horizontal and vertical cross section is used.



1 — All procedure bearings are shown. Bold text is used to emphasize the Final Approach Course. Arrowheads are added as needed to indicate direction of flight.

2 — Bearings are placed either above, below, or inset in the track.

3 — Both inbound and outbound bearings are depicted for procedure holding/racetrack patterns.

4 — All altitudes depicted in the profile view are MINIMUM altitudes unless specifically labeled otherwise. All altitudes are above mean sea level in feet (AMSL).

5 — Maximum altitudes: may be abbreviated "MAX".

6 — Mandatory altitudes: abbreviations are not used.

7 — Recommended altitudes: abbreviations are not used.

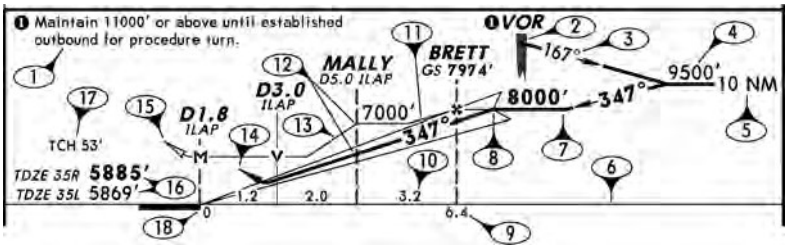
8 — Bold text is used to emphasize the procedure altitude at the FAF or the GS intercept altitude at the FAP/FAF. This is also the altitude shown in the Briefing Strip.

9 — The type of navaid is indicated. Identifying Morse code is shown for all markers. When known, glide slope crossing altitudes are included.

10 — The navaid ident or name is included where confusion may occur. The crossing altitude of the Vertical Descent Angle (VDA) is included whenever applicable.

11 — All fix names are shown along with any DME formations. The ident of the source DME is included when multiple DME sources are charted.

12 — Stand-alone DME fixes are depicted similar to named waypoints.



1 — Procedure notes that relate directly to information portrayed in the profile view are charted within the profile view, normally placed in the upper right or left corners.

2 — A "broken" navaid or fix symbol indicates that it does not fall directly in line with the final approach track.

3 — Outbound bearings associated with procedure turns are included for situational awareness.

4 — Minimum altitude while executing the procedure turn.

5 — The distance to remain within while executing the procedure turn. Distance is measured from the initiating navaid/fix unless otherwise indicated.

6 — Profile view "ground line". Represents an imaginary straight line originating from the runway threshold. No terrain high points or man-made structures are represented in the profile view.

7 — Procedure flight tracks are portrayed using a thick solid line. Multiple separate procedures using the same altitudes are represented by a single line.

8 — Final Approach Point (FAP). Beginning of the final approach segment for precision approaches.

9 — Nautical Mile (NM) distance to the "0" point. Not included at DME fixes.

10 — Nautical Mile (NM) distance between two navaids and or fixes.

APPROACH CHART LEGEND

11 — Final Approach Course bearing. Only repeated if a change in course occurs.

12 — Tracks are placed relative to each other based on the corresponding crossing altitudes.

13 — Non-precision procedure flight tracks that deviate from the Glide Slope and or the Vertical Descent Angle are depicted as a light solid line.

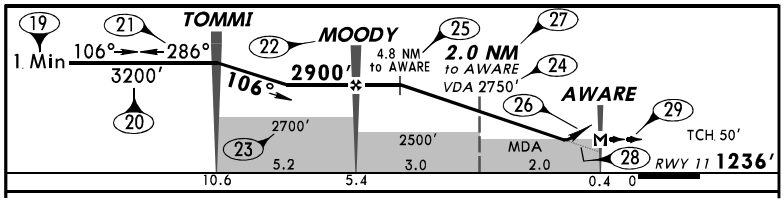
14 — Pull-up representing the DA/MDA or when reaching the descent limit along the GS/VDA.

15 — Pull-up arrow associated to a non-precision approach not using a CDFA technique.

16 — Touchdown zone, runway end, or threshold elevation labeled accordingly.

17 — Threshold crossing height associated to the charted glide slope or vertical descent angle.

18 — Runway block symbolizing the runway. The approach end represents the runway threshold.



19 — Time limit applicable to the outbound leg of the procedure holding/racetrack.

20 — Minimum altitude while executing the procedure holding/racetrack.

21 — Outbound and inbound bearings associated to the procedure holding/racetrack.

22 — RNAV waypoints are identified by their five character identifier only.

23 — Segment Minimum Altitudes (SMA) are represented by a shaded rectangle bordered by the two defining fixes. The minimum altitude is shown along the top edge of the sector.

24 — Altitudes that correspond to the VDA.

25 — Nautical miles to the next fix is supplied for the “Top of Descent” when not at a fix.

26 — Pull up along the VDA at the DA/MDA is depicted relative to the missed approach point.

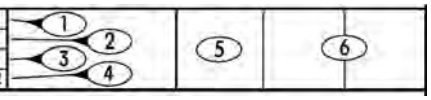
27 — Nautical miles and name of "to" fixes are supplied for all along track distance fixes.

28 — A dotted gray line illustrates the VNAV path from the FAF to the Landing Threshold Point (LTP) TCH. The VNAV path supports CDFA flight techniques between the FAF and MAP only. The VNAV path is NOT intended to be used below the DA/MDA. In accordance with FAA and ICAO regulations, descent below DA/MDA is strictly prohibited without visual reference to the runway environment.

29 — Visual flight track is shown when the missed approach point is prior to the runway threshold.

DESCENT/TIMING CONVERSION TABLE — LIGHTING BOX — MISSED APPROACH ICONS

Gnd speed-Kts		70	90	100	120	140	160
GS	3.00°	377	484	538	646	753	861
VDA	3.10°	384	494	548	658	768	878
FAF to MAP	6.3	5:24	4:12	3:47	3:09	2:42	2:22



1 — Indicates Ground Speed in Knots for several common aircraft approach speeds.

2 — For precision approaches, Glide Slope angle is shown in degrees along with relative descent rates in feet per minute.

3 — For non-precision approaches, Vertical Descent Angle is shown, when applicable, in degrees along with relative descent rates in feet per minute.

4 — The location of the Missed Approach Point is defined, the distance and associated timing is included only when applicable.

5 — Installed approach lights, visual approach slope indicators, and runway end identification lights (REIL) are depicted for the straight-in landing runway.

6 — Missed approach Icons which symbolize the initial “up and out” actions associated with the missed approach procedure are depicted. The complete missed approach instructions are shown in textual form in the Briefing Strip.

APPROACH CHART LEGEND

LANDING MINIMUMS (Eff Jan 2020)

Publication of landing minimums does not constitute authority for their use by all operators. Each individual operator is responsible for ensuring that the proper minimums are used based on authorization specific to the type of operation.

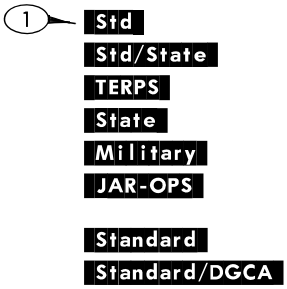
Landing minimums are supplied for all approach procedures and known approach conditions. When the Governing State Authority has not provided landing visibilities for a particular approach procedure, they will be derived by Jeppesen based on ICAO Doc 9365 Manual of All Weather Operations. For landing minimums rules and tables refer to AIR TRAFFIC CONTROL — Aerodrome Operating Minimums JEPPESEN.

A "Std" label in the upper left corner of the minimums box indicates that the published visibilities are ICAO Doc 9365 compliant. Other labels, as described below, indicate compliance with other regulations.

Visibilities that have been derived by Jeppesen for straight-in procedures are all RVR, State provided VIS or CMV values will be labeled as such. Visibilities for circling procedures are always VIS. Operators using these visibilities should be aware of this. If ATC does not report RVR, pilots have to convert the reported meteorological VIS into a CMV, to compare it against the charted RVR (refer to the table at the end of this section and to AIR TRAFFIC CONTROL — Aerodrome Operating Minimums JEPPESEN).

Visibility values are reported and thus depicted in the form of nautical/statute miles, feet, meters and kilometers.

1 — Minimums Label: Indicates that landing minimums are compliant with a specific regulation, but never below State published values.



Std – Minimums are based on tables and rules from ICAO Doc 9365 (Manual of All Weather Operations). No comparison has been done to any other landing minimums criteria.

Std/State – Minimums are based on tables and rules from a State Regulation which is similar/close to ICAO Doc 9365 (e.g. EASA AIR OPS, Indian CAR), refer also to AIR TRAFFIC CONTROL — Aerodrome Operating Minimums JEPPESEN for identified differences to ICAO Doc 9365. No comparison has been done to any other landing minimums criteria.

TERPS – Minimums are based on TERPS change 20 or later. U.S. OPSPEC requirement for non-CDFA penalty applies. No comparison has been done to any other landing minimums criteria.

State – Minimums are shown as supplied by the State (unknown rules and tables). State minimums may be supplemented (e.g. for ALS out condition) by visibilities based on ICAO Doc 9365 but not below the State supplied minimums. No comparison has been done to any other landing minimums criteria.

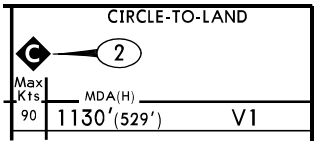
Military – Minimums are shown as supplied by a State Military. No comparison has been done to any other landing minimums criteria.

JAR-OPS – Minimums are based on tables and rules from JAR-OPS 1. No comparison has been done to any other landing minimums criteria.

No label indicates that the landing minimums are **not** yet converted to the new Jeppesen Standard AOM and are still based on ECOMS rules and tables (refer to www.jeppesen.com/aom).

A **Standard** or **Standard/DGCA** label indicates that the minimums are based on EASA AIR OPS, EU-OPS/CAR-OPS or Indian CAR, but are **not** yet converted to the new Jeppesen Standard AOM. During conversion to the new Standard AOM the new **Std/State** label and the new layout will be applied, the visibilities will remain unchanged. No comparison has been done to any other landing minimums criteria.

2 — Indicates that the published Circle-To-Land minimums are based on TERPS 8260.3B change 21 or later version. Expanded circling approach areas apply. For expanded circling approach area radii refer to AIR TRAFFIC CONTROL — United States — Rules and Procedures. The "C" is also depicted for circling minimums outside of the United States if applicable.



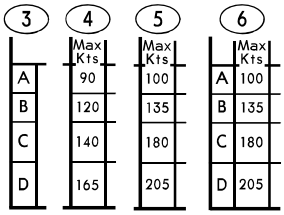
APPROACH CHART LEGEND

3 — Aircraft approach categories.

4 — TERPS **maximum** circling speeds.

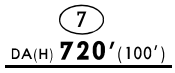
5 — ICAO **maximum** circling speeds.

Note: Known deviations from the TERPS or ICAO maximum circling speeds will be shown. For countries that do not supply maximum circling speeds, aircraft approach categories will be shown.

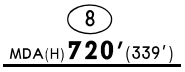


6 — For Circle-To-Land only approaches, both the aircraft approach categories and the maximum circling speeds are shown just prior to the circling minimums.

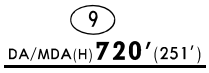
7 — Decision Altitude (Height) label, Decision Altitude and Decision Height for Precision approach and APV operations.
A charted DA(H) on Non-precision approaches which are converted to the new AOM Standard (**State** label) indicates that the DA(H) is published by the State, and only in this case a height loss might be incorporated by the State.
Note: A charted "DA(H)" on older Non-precision approaches with "Standard" minimums will be replaced by "DA/MDA(H)". On those charts a height loss is not incorporated, neither in charted DA(H) nor in the charted DA/MDA(H).



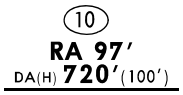
8 — Minimum Descent Altitude (Height) label, Minimum Descent Altitude and Minimum Descent Height for Non-precision approach operations. The MDA(H) is shown for non-CDFA minimums or if the State has supplied an MDA(H) on the procedure source.



9 — DA/MDA(H) label is shown, when either Decision Altitude (Height) or Minimum Descent Altitude (Height) can be used on Non-precision approaches depending on operational approval. This label is normally associated with CDFA minimums.
Note: Jeppesen charted DA/MDA(H) values do not include a height loss adjustment. Pilots have to check their operator's policy for the application of add-ons.

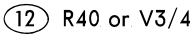


10 — Radio Altimeter height, associated with CAT II precision approaches. In some cases a specific Radio Altitude is supplied by the State as part of CAT III State minimums.

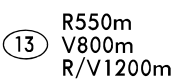


11 — Nautical or Statute mile VIS are depicted in whole and fractions of a mile. No units label is shown. A specified visibility of "V3/4" means "3/4 mile", "V2 1/2" means "2 1/2 miles".

12 — Equivalent Runway Visual Range (RVR) values associated with nautical/statute mile VIS represent readings in hundreds of feet, "R40" means RVR 4000ft. Equivalent RVR values are shown when supplied or authorized by the State, applicable to a specific approach procedure.



13 — Visibilities in meters are labeled with an "m" while values in kilometers are labeled with a "km". There are only RVR values shown, except if a VIS is provided by the State. An RVR is labeled "R", a VIS value is labeled "V". An "R/V" label indicates that the charted value is either RVR or VIS.



APPROACH CHART LEGEND

14 — The particular condition is **Not Authorized**. If necessary it will be abbreviated by "NA".

(14) NOT AUTHORIZED
NA

15 — The particular condition does **not apply**.

(15) NOT APPLICABLE

16 — Indicates that a ceiling is required as part of the overall landing minimums. Ceilings are shown as a height above ground level in feet or meters depending on the unit used for reporting.

(16) CEILING REQUIRED

17 — When required, ceilings are depicted prior to the associated visibility. Ceiling is always shown in smaller size in front of the RVR or VIS.

(17) 1000′- V2
105m- R2000m

State	(21) STRAIGHT-IN LANDING				(23) CIRCLE-TO-LAND 2	
	ILS A: 245′(230′) DA(H) BC: 265′(250′) D: 285′(270′)		(18) LOC (GS out) CDFA (25) 1 DA/MDA(H) 390′(375′)		(22) DAY Not authorized South of airport	NIGHT
	(19) FULL	ALS out		ALS out	Max Kts — MDA(H) (24)	
A	R600m	R1000m	R900m	R1500m	100 — 430′(415′) V1500m	NA
B			R1000m		135 — 520′(505′) V1600m	
C				R1800m	180 — 620′(605′) V2400m	
D	R650m	R1200m	R1400m	R2000m	205 — 720′(705′) V3600m	

1 VNAV DA(H) in lieu of MDA(H) depends on operator policy.
2 Circling heights based on rwy 24 thresh elev of 15′. (20)

18 — Type of approach is indicated when multiple types are shown in minimums box.

19 — Known conditions or requirements that affect the minimums are shown above the visibilities.

20 — Notes that only apply to the charted minimums are shown within the minimums box.

21 — Label for straight-in minimums. The straight-in runway number is only shown if more runways are affected, for example if the State supplies side-step landing minimums.

22 — Notes that apply to a given set of minimums are shown above the affected values.

23 — The set of minimums applicable when a circling maneuver is required are labeled as such.

24 — The MDA(H) label for circle-to-land minimum descent altitudes and the associated height is shown at the top of the column.

25 — CDFA indicates that the minimums require the use of CDFA flight technique.

A charted "non-CDFA" indicates that the approach does not meet the CDFA criteria. Where the State regulation ("Std/State" label) requires an add-on, the 200m for CAT A & B and 400m for CAT C & D are incorporated into the charted visibility values.

ICAO DOC 9365 **does not** require the add-on, therefore the visibilities in minimums boxes with the "Std" label are charted as provided in Table 6-3 (refer to AIR TRAFFIC CONTROL — Aerodrome Operating Minimums JEPPESEN).

APPROACH CHART LEGEND

Labels used in conjunction with landing visibility values

R — An “R” label indicates that the associated value is an RVR.

When the State Authority has supplied landing visibilities, and has indicated that the value supplied is an RVR, the “R” label is applied.

Since all straight-in visibility values in ICAO Doc 9365 are in the form of an RVR, all values depicted when the State Authority has not supplied visibilities will be labeled with an “R”. This does not depend on the availability of RVR transmissometer. How these values are used is dependent on each individual operator’s regulations.

V — A “V” label indicates that the associated value is a metric or nautical/statute mile meteorological VIS. For straight-in procedures only VIS that have been supplied by the State Authority will be labeled with a “V”. Circling visibilities are always VIS and therefore labeled with a “V”.

R/V — An “R/V” label indicates that the associated value can be either an RVR or met VIS depending on what is reported by ATC. Only RVR/VIS values that have been supplied by the State Authority will be labeled with an “R/V”.

C — A “C” label indicates that the associated value is a converted meteorological visibility (CMV). A CMV is equivalent to an RVR and is derived from the meteorological visibility which is reported by ATC. Only CMV values that have been supplied by the State Authority will be labeled with a “C”.

Guide for Visibility Label Usage

Charted Visibility Label	Reported by ATC	Probable Pilot action (Note 1)
R or **C**	RVR	Reported RVR is compared directly to the R or C value on the chart.
	Met VIS	Reported met VIS is converted into CMV and then compared to the R or C value on the chart. **(Note 2)**
C	RVR	RVR in ft needs to be converted to sm, then compared directly to the V value on the chart. A metric RVR is compared directly to the V value on the chart.
	Met VIS	Reported met VIS is compared directly to the V value on the chart.
R/V	RVR	Reported RVR is compared directly to the R value on the chart.
	Met VIS	Reported met VIS is compared directly to the V value on the chart.

Note 1: Refer to AIR TRAFFIC CONTROL — Aerodrome Operating Minimums JEPPESEN for conversion factors depending on available approach and runway lights during day and night.

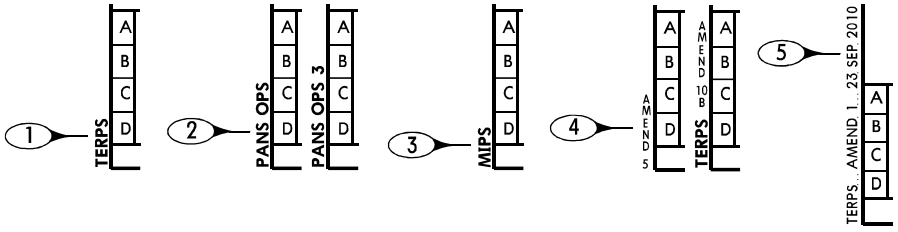
Note 2: An operator must ensure that a conversion of a reported met VIS to RVR/CMV is not used for take-off, for calculating any other required RVR minimum less than 800m, or when a reported RVR is available.
Conversion of met VIS to RVR may depend on individual operator's regulations.

Depiction of Landing Minimums based on ECOMS tables and rules

Refer to www.jeppesen.com/aom

APPROACH CHART LEGEND

CHART BOUNDARY LINE INFORMATION



1 — Label indicates the State has specified that the approach procedure complies with the United States Standard for Terminal Procedures criteria as it relates to aircraft handling speeds and circling area development.

2 — Labels indicate the State has specified that the approach procedure complies with the ICAO PANS-OPS criteria as it relates to aircraft handling speeds and circling area development.

3 — Label indicates the MIPS design criteria when it is known that the procedure is designed according to Military Instrument Procedures Standardization, which is the short form for AATCP–1, NATO Supplement to ICAO Document 8168-0PS/611 Volume II.

4 — Shown when procedure source amendment information has been supplied by the State (USA).

5 — Currently only shown on U.S. approach procedures, the Procedure Amendment Reference Date is supplied on charts with an Effective Date later than 22 OCT 2009. This reference date is used to establish electronic database currency.

6— A brief summary of the changes applied to the chart during the last revision.

7 — Jeppesen Copyright label.

END OF APPROACH CHART LEGEND