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-CFDA 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 published 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 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-CFDA 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 CDA 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.

<table>
<thead>
<tr>
<th></th>
<th>Max Kts</th>
<th>Max Kts</th>
<th>Max Kts</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90</td>
<td>100</td>
<td>A 100</td>
</tr>
<tr>
<td>B</td>
<td>120</td>
<td>135</td>
<td>B 135</td>
</tr>
<tr>
<td>C</td>
<td>140</td>
<td>180</td>
<td>C 180</td>
</tr>
<tr>
<td>D</td>
<td>165</td>
<td>205</td>
<td>D 205</td>
</tr>
</tbody>
</table>

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

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

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.

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.

<table>
<thead>
<tr>
<th>State</th>
<th>21 STRAIGHT-IN LANDING</th>
<th>22 CIRCLE-TO-LAND</th>
<th>23 NIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>A: R600m</td>
<td>R900m</td>
<td>100</td>
<td>430' (415') V1500m</td>
</tr>
<tr>
<td>B: R1000m</td>
<td>R1500m</td>
<td>135</td>
<td>520' (505') V1600m</td>
</tr>
<tr>
<td>C: R1000m</td>
<td>R1800m</td>
<td>180</td>
<td>620' (605') V2400m</td>
</tr>
<tr>
<td>D: R650m</td>
<td>R1400m</td>
<td>205</td>
<td>720' (705') V3600m</td>
</tr>
</tbody>
</table>

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).
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

<table>
<thead>
<tr>
<th>Charted Visibility Label</th>
<th>Reported by ATC</th>
<th>Probable Pilot action (Note 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>R or C</td>
<td>RVR</td>
<td>Reported RVR is compared directly to the R or C value on the chart.</td>
</tr>
<tr>
<td></td>
<td>Met VIS</td>
<td>Reported met VIS is converted into CMV and then compared to the R or C value on the chart. (Note 2)</td>
</tr>
<tr>
<td>C</td>
<td>RVR</td>
<td>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.</td>
</tr>
<tr>
<td></td>
<td>Met VIS</td>
<td>Reported met VIS is compared directly to the V value on the chart.</td>
</tr>
<tr>
<td>R/V</td>
<td>RVR</td>
<td>Reported RVR is compared directly to the R value on the chart.</td>
</tr>
<tr>
<td></td>
<td>Met VIS</td>
<td>Reported met VIS is compared directly to the V value on the chart.</td>
</tr>
</tbody>
</table>

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
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-OPS/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