JEPPESEN CHART MINIMUMS

Standard JEPPESEN Obstacle Clearance Criteria

Obstacles with reference point at or below 6000 ft MSL are cleared by 1000 ft
Obstacles with reference point above 6000 ft MSL are cleared by 2000 ft

GTC / GENERALIZED TERRAIN CONTOURS

Brown contour lines and gradient tints indicate elevation change in relation to sea level. Terrain contour information is useful for orientation and general visualization of terrain and should be used for that purpose only.

Obstacle clearance criteria — The terrain contour information depicted does not assure clearance above or around terrain or man-made structures. There may be higher uncharted terrain or structures. Furthermore, the absence of terrain contour information does not ensure the absence of terrain or structures.

MAA / MAXIMUM AUTHORIZED ALTITUDE

A published altitude representing the maximum usable altitude or flight level for an airspace structure or route segment.

Obstacle clearance criteria — (not applicable)

MCA / MINIMUM CROSSING ALTITUDE

The lowest altitude at certain fixes at which an aircraft must cross when proceeding in the direction of a higher MEA.

Obstacle clearance criteria — (not applicable)

MEA / MINIMUM SAFE ENROUTE ALTITUDE

The lowest published altitude between radio-fixes that meets obstacle clearance requirements between those fixes and in many countries assures acceptable navigational signal coverage.

Obstacle clearance criteria — (not specified)

MHA / MINIMUM HOLDING ALTITUDE

The lowest altitude prescribed for a holding pattern which assures navigation signal coverage, communications, and meets obstacle clearance requirements.

Obstacle clearance criteria — standard Jeppesen

MOCA / MINIMUM OBSTRUCTION CLEARANCE ALTITUDE

The lowest published altitude in effect between radio fixes on VOR airways, off-airway routes, or route segments which meets obstacle clearance requirements for the entire route segment and in the USA assure acceptable navigational signal coverage only within 22 NM of a VOR.

Obstacle clearance criteria — (not specified)

MORA / MINIMUM OFF-ROUTE ALTITUDE

The MORA provides reference point clearance within 10 NM of the route centerline (regardless of the route width) and end fixes.
The GRID MORA provides reference point clearance within the section outlined by latitude and longitude lines.

Obstacle clearance criteria — standard Jeppesen

MRA / MINIMUM RECEPTION ALTITUDE

The lowest altitude at which an intersection can be determined.

Obstacle clearance criteria — (not applicable)

MSA / MINIMUM SAFE ALTITUDE

Altitude depicted on an Instrument Approach Chart and identified as the minimum altitude which provides a 1000 ft obstacle clearance within a 25 NM radius from the navigational facility upon which the MSA is predicated. If the radius limit is other than 25 NM, it is stated.

This altitude is for EMERGENCY USE only and does not necessarily guarantee NAVAID reception.
When the MSA is divided into sectors, with each sector a different altitude, the altitudes in these sectors are deferred to as "Minimum Sector Altitudes".

Obstacle clearance criteria — Obstacles are cleared by 1000 ft even for terrain or structures higher than 5000 ft