

Area 4

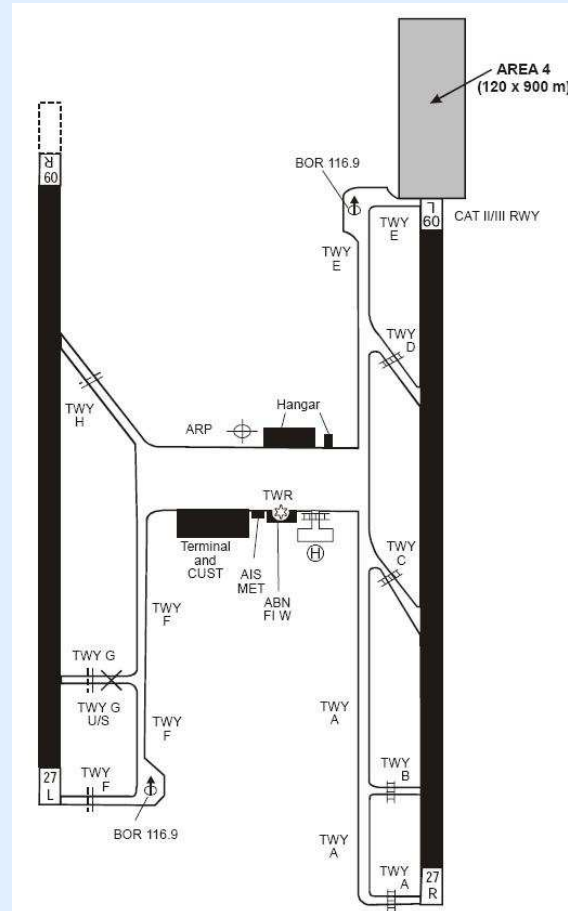
SARPS₍₁₎

- Area 4 data is needed for the Precision Approach Area:
 - Therefore, only needed for CAT II/III runways.
- Covers the area immediately before the threshold:
 - 60m either side of extended centreline;
 - 900m in advance of threshold.
- Only terrain is needed and is collected in accordance with the Area 4 numerical requirements.

- Area 4 Numerical Requirements:

Area 4 Terrain Numerical Requirements
0.3 arc second / 9m post spacing;
1m vertical accuracy;
0.1m vertical resolution;
2.5m horizontal accuracy;
90% confidence level;
1 x 10 ⁻⁵ integrity level (Essential);
To be maintained as required.

Area 4 SARPS – Graphical Portrayal



Findings of Research

- Area 4 would provide an electronic version of the terrain profile currently provided by way of the Precision Approach Terrain Chart (PATC).
- Needed to support CAT II/III approaches.
- However, only terrain is required which seems a deficiency:
 - Objects (obstacles) may be present on the PATC;
 - Not necessarily present in another data set.

Proposals for Change₍₁₎

- The only proposal for change for this area is that an obstacle data set is also provided for this area:
 - Allows digital data sets to replace the PATC.
- Numerical requirements proposed would match those for terrain:
 - Principle that exists for Area 1 to 3.

Proposals for Change₍₂₎

- Proposed Area 4 Obstacle Numerical Requirements:

Area 4 Obstacle Numerical Requirements

1m vertical accuracy;

0.1m vertical resolution;

2.5m horizontal accuracy;

90% confidence level;

1×10^{-5} integrity level (Essential);

To be maintained as required.