



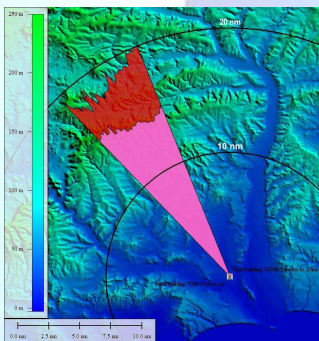
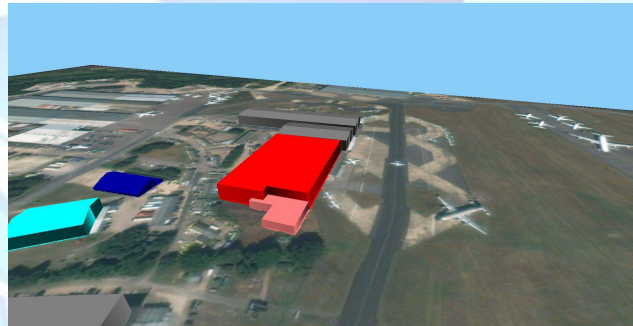
Principal Engineering Ltd

Independent Technical Analysis Capability Radar Safeguarding & Impact Analysis



Principal Engineering Ltd provides independent radar safeguarding and impact analysis services to support planning applications, infrastructure developments, and operational change within safety-critical air traffic management environments. Our assessments are designed to protect surveillance system performance while enabling informed, defensible decision-making by stakeholders.

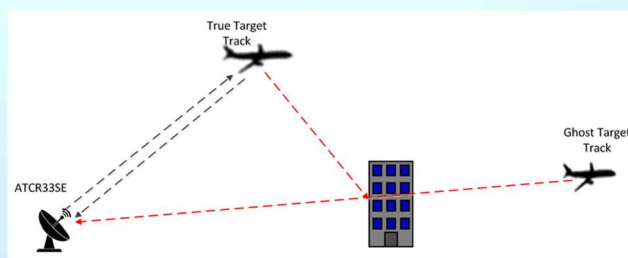
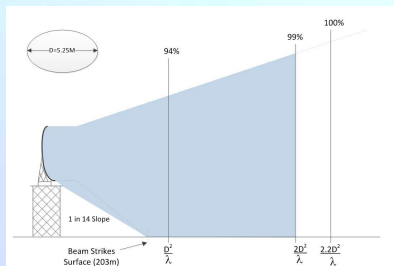
We deliver technically rigorous, evidence-based analysis for ANSPs, airport operators, developers, and planning authorities, with a clear focus on both Primary Surveillance Radar (PSR) and Secondary Surveillance Radar (SSR) performance.



Our independent technical analysis capability includes assessment of:

- Proposed new structures and infrastructure developments
- Existing or alternative radar site configurations
- Terrain, clutter, and obstacle environments
- Reflection, diffraction, and multipath mechanisms
- Infringements into radar safeguarding or sterile zones
- Impact on PSR and SSR detection, tracking, and coverage performance

All consultancy activities are delivered with independence and technical rigour, supported by clear analysis, traceable evidence, and professional reporting suitable for stakeholders, regulators, and planning authorities.



Principal Engineering Ltd enables clients to manage risk, protect safety margins, and maintain confidence in ATM system capability throughout change and development.

Principal Engineering Ltd

Independent Air Traffic Management & Radar Consultancy