



# Counter Terrorism and Search-Position Ranking and Analysis System

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## OVERVIEW

CTS-PRAS assists in the protection of targets from stand-off threats such as Man Portable Air Defence Systems (MANPADS), lasers, rockets, mortars, RPGs and snipers. Using data about key potential targets, key infrastructure, buildings, flight paths, taxiways, terrain and weapon types, the software quickly identifies and prioritises the threat from each of these weapons from attack points around airfields. The software can then be used to plan the mitigation of the identified threat, including management of systematic searches of areas by Search Teams.

## KEY FEATURES

- Calculate Direct and Indirect Fire sites, with Audit Trail of decisions
- Calculate MANPADS footprint for multiple combinations of flight paths
- Import military and civilian mapping formats.
- Create a database of surveyed sites and carry out low-level intelligence gathering
- Plan and visualise patrol routes and their terrain coverage
- Construct and maintain a surveillance plan for the target, including optimisation of sensor coverage
- Configure weapon data - Unclassified to Secret
- Create Search items, areas and grids using Vector Data Maps which include type of search and size of areas.
- Display in 2D, 3D, and overlaid on Google™ Maps and aerial imagery
- Laptop/Tablet variant enhances data capture in the field during reconnaissance and patrol
- Enables rapid re-tasking of protection forces as the tactical situation changes

## DESCRIPTION

CTS-PRAS calculates a footprint of potential attack sites surrounding a point (e.g. sports stadium), a route (e.g. VIP transit), or an area (e.g. military base), and also identifies those areas which may be out of scope due to terrain, weapon range, or expected terrorist tactics. This focuses scarce resources on the most likely attack locations.

By using a series of user-defined rules, potential launch sites can be systematically categorised, ranked, and mitigated. Aerial photography and local ground survey refines the selection. A site database provides an updatable record of all sites, rationale for selection or mitigation, and can include notes, photos, videos, maps, sketches, and aerial imagery.

The software calculates a footprint of potential attack points from MANPADS, rockets, mortars and snipers surrounding a target, while considering those areas which may be out of scope due to terrain or weapon range.

Potential attack points can then be systematically categorised, ranked, and mitigated using aerial photography or earmarked for further survey. A database provides an updatable record of all potential attack points identified, and allows teams to record evidence of mitigation using notes, photos, videos, maps and sketches.

CTS-PRAS assists force and incident commanders to deploy search teams to the areas of most risk first. It also facilitates pragmatic dialog between Incident Commanders and security forces protecting facilities within the threat area.

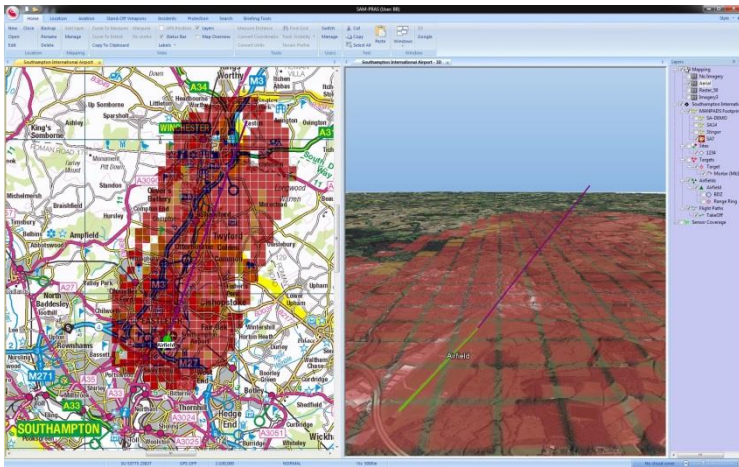
Most military and civilian mapping standards and formats can be imported into CTS-PRAS, e.g. ASRP, DTED, ADRG, CADRG, CIB, VMap, OS, NTF, Shapefile, Intergraph, Esri, TIF, SID, ECW, JPEG. Mapping conversion and management can also be supplied as a service by us if required.

## SUMMARY

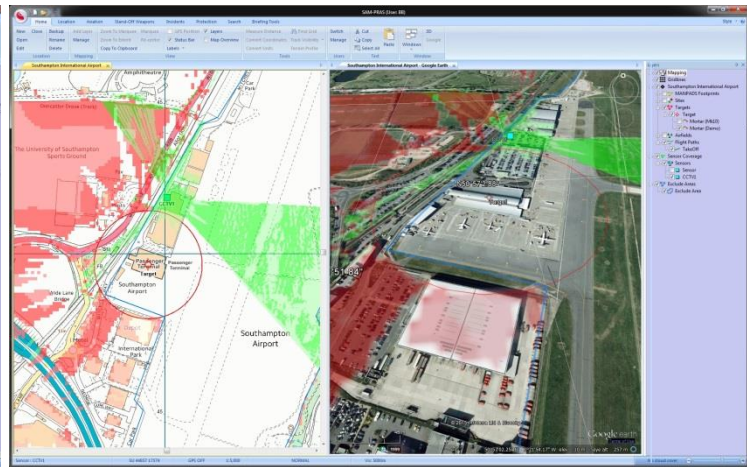
- Threat assessment of MANPADS, lasers, rockets, mortars, RPGs and snipers
- High resolution maps and aerial photography
- Survey tools with audit trail to justify mitigation decisions
- Calculation and maintenance of surveillance, search and patrol plans
- Generation of reports for law-enforcement, security and Force Protection communities
- Improved situational awareness, and information sharing, across networks
- Display of patrol 'truth traces' derived from GPS data logger input
- Display of flight paths derived from AIP, Real or Virtual Radar Systems, and DAFIF
- Views in 2D, 3D, and overlaid on Google™ mapping and aerial imagery
- Plan and task UAVs, store and retrieve their output

## TECHNICAL SPECIFICATIONS

- Microsoft Windows Win 7 and 10 (32-bit and 64-bit)
- Link to Google Maps™ (if permitted by Security Policies)
- Proprietary 3D terrain generation, graphics and rendering engine when Google not available
- Network deployable or stand-alone as required
- Uses Microsoft SQL Server, Esri ArcGIS and Safe FME Technology



MANPADS threat footprint in 2- and 3-D



Mortar and CCTV coverage in 2D and Google

For further details of CTS-PRAS or to arrange a demonstration, please contact us at:  
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Threat Visualisation for the Real World