HLSPRAS

cunning running software ltd

specialised mapping for mission-critical planning

HLS-PRAS

FIND SAFE HELICOPTER LANDING SITES. FAST. ANYTIME.

A 2D and 3D mapping and planning software tool that rapidly identifies safe helicopter landing sites in all environments.

Emergency responders often need to land helicopters near a casualty or critical scene, but predetermined sites don't always meet the needs of the moment. At night or in unfamiliar terrain, the risk to crew, patients and equipment increases dramatically.

HLS-PRAS is a 2D and 3D mapping and planning tool that rapidly identifies safe helicopter landing sites.

Developed in close collaboration with UK air ambulance services, it helps flight planners and pilots scan unfamiliar terrain and quickly spot viable options, and helps minimise response times, especially for night time operations.

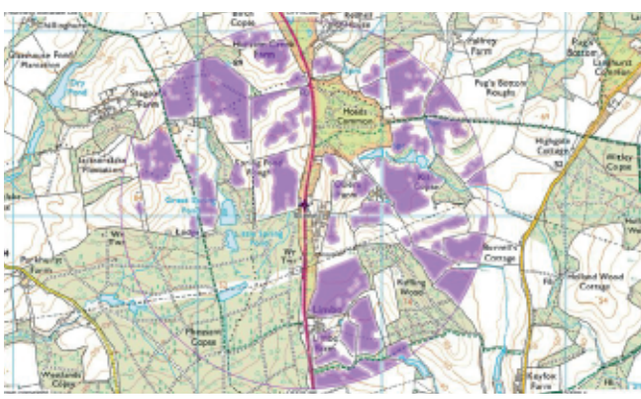
By applying aircraft-specific criteria, including D-value, gradient, surface type and overhead obstructions, the software automatically filters out unsuitable zones. Accurate terrain data and exclusion logic highlight the safest, most accessible options within limited walking or driving distance of a scene.

HLS-PRAS provides the clarity needed when visual checks aren't possible. Rather than relying on previously recorded daylight landing sites, emergency responders gain real-time, data-driven insight to assess potential sites in both 2D and 3D. This reduces the risk of rotor strike, sloped landings or structural interference.

Our software exports data directly into ACANS, the in-aircraft tool for flight planning, so it's available quickly where it's operationally useful.

HLS-PRAS helps aircrews make informed decisions faster, helping them land safely, confidently and closer to the people who need them most.

Landing with confidence in the dark.



Potential landing areas shown in 2D topographic view allowing surrounding features such as roads and buildings to be assessed.

Aircraft Model	D-Value (m)	Max Slope (°)
Augusta Westland AW109	13.05	10
Augusta Westland AW169	14.65	8
Bell 427	13.0	10
Dauphin AS365 N2	13.73	10
EC135	12.2	10
H145	13.03	10
H145D3	13.63	10
MD902 Explorer	12.37	10

A library of in-service aircraft with relevant operating parameters.

Core Capabilities

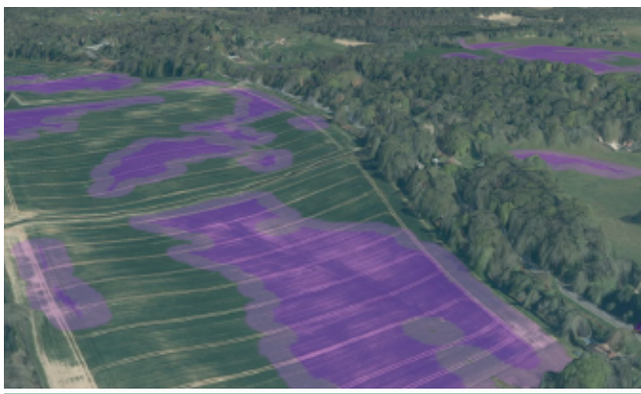
Rapid Ad Hoc Landing Site Identification

- Identifies landing sites based on aircraft type, D-value (day/night), surface gradient, obstructions, and proximity to structures.
- Uses accurate height data and terrain profiling to analyse surface suitability
- Applies exclusion criteria (woodland, water, buildings, overhead lines) to screen unsuitable areas
- Assesses proximity to incident scene and calculates walkable and drivable travel times

2D safe landing areas visualisation.

Night Operations and Emergency Readiness

- Specifically developed for safe landing site selection in low-light and night-time conditions
- Replaces the need for daylight reconnaissance or reliance on prior knowledge
- Enables rapid, confident decisions when time and visibility are limited



3D safe landing areas visualisation.

High-Quality Mapping and Visualisation

- Supports aerial, street-level, height and vector maps for enhanced situational awareness
- Includes community and hospital landing zones to widen planning options
- Displays results in both 2D and 3D for increased situational awareness
- Integrates with existing systems
- Automatically forwards results to on-aircraft systems such as ACANS

Future-Ready: BVLOS Drone Support

- Prepares responders for Beyond Visual Line of Sight (BVLOS) drone deployment of emergency lifesaving equipment
- Calculates range, terrain and safe landing or drop-off zones for drone-assisted response
- Working with early adopters to give them the planning tools needed for this emerging application area

Operational Value and Use in the Field

Improve Safety and Reduce Risk

- Helps aircrew and ground teams avoid hazardous or unsuitable landing sites
- Minimises risk of rotor strike, sloped landings, or structural interference
- Enhances coordination with emergency service teams on the ground

Save Time and Resources

- Speeds up the decision-making process by automating complex analysis
- Removes the need for multiple site visits or in-person surveys
- Frees up personnel to focus on operational tasks, not manual planning

Seamless Data Integration

- Exports HLS reports and site footprints directly to Airbox ACANS
- Compatible with standard GIS formats for onward sharing with partner systems
- Enables consistent, accurate information to flow across teams and agencies

Developed with active user involvement

Cunning Running are working closely with Devon Air Ambulance to ensure that **HLS-PRAS** delivers exactly what operators need and fits seamlessly into their operating procedures and systems. Trial use of the system is providing valuable feedback which highlight the subtle changes that make all the difference to front line users.

Devon Air Ambulance

Airbox ACANS Export. Low friction transfer to the main on-aircraft information system.

Travel Time assessment of time taken to get from landing site to scene via vehicle (1-3min).

Travel time assessment of time taken to from landing site to scene on foot (1-10min)

Overview

HLS-PRAS is a mapping and planning tool that solves a clear operational problem: landing helicopters safely near the point of need, without relying on pre-surveyed sites.

Using high-resolution terrain data, it automates the process of identifying viable landing zones based on aircraft-specific criteria, removing unsuitable areas from consideration in just seconds — while keeping final decision-making firmly in human hands.

The software then applies a consistent exclusion logic to prioritise safe, accessible options, even in unfamiliar, low-light or cluttered environments. This reduces planning time, and helps manage risk by enabling decisions to be informed by the best available data on real-world conditions.

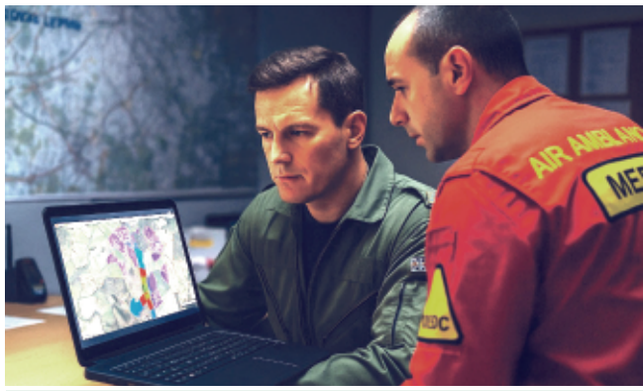
By standardising the process, **HLS-PRAS** helps teams brief quickly, operate consistently and avoid costly delays or last-minute changes.

As one part of our range of emergency service planning solutions, it fits naturally into multi-agency workflows.

Whether used for training, live tasking or post-mission review, **HLS-PRAS** gives emergency responders a reliable, repeatable way to plan safe landings closer to the people who need help.

HLS-PRAS is available as part of a licensed software package, including:

- Mapping
- Annual updates and all feature upgrades
- Remote support, training and integration assistance.



Planning is critical for flight safety.

Summary

Specialised mapping for mission-critical planning

Cunning Running provides a specialist 2D and 3D mapping, visualisation and planning solution that accelerates decision-making in mission-critical operations.

Our software enhances tactical decision-making to strengthen Force Protection (FP) strategies for the military, streamline Counter Terrorism (CT) tasks, expedite search operations for law enforcement and identify safe landing sites for air ambulances.

Our users gain the ability to rapidly analyse, visualise and communicate vulnerabilities to attack, countermeasure options, search area priorities, and landing site options.

Cunning Running software doesn't just map and visualise – it gives you the tools to plan key elements of your response. Results are available faster, to a consistent high standard, and in a form that is familiar to users.

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NATIONAL COUNTER TERRORISM SECURITY OFFICE

Transportation Security Administration

NCA National Crime Agency

Ministry of Defence Police

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Note: All imagery is unclassified and users generic weapon data. Mapping provided by Ordnance Survey and Skyline Software Inc.