

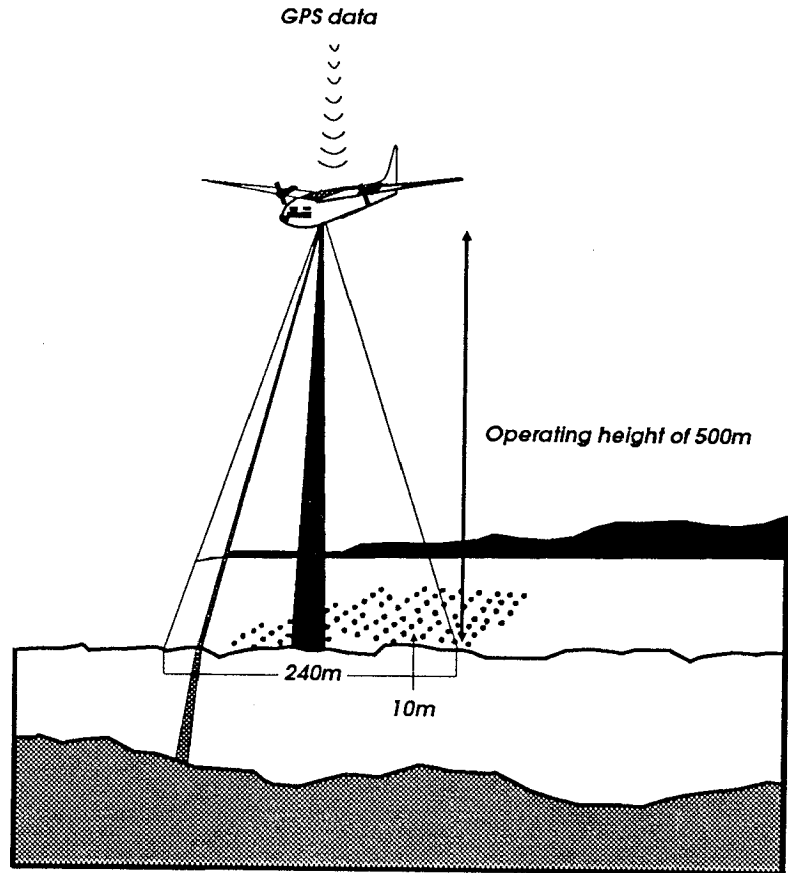


LADS Performance

LADS is a self-contained and mobile hydrographic surveying system for fast, accurate and safe coverage of complex, dangerous and remote areas unsuitable for surface vessels.

Survey Performance

- Depth Sounding Rate: 168 soundings per second
- Swath Width: 240m at 500m height
- Scan Pattern: orthogonal to planned track
- Sounding Density: 24 soundings/transverse scan; nominal 10m x 10m grid
- Soundings per sq km: 10000
- Soundings per hour: 550000
- Survey Speed: 75m/s (145kts)
- Survey Height: 500m (1640ft)
- Depth Range: 2 to 50m
- Area Coverage: 54 sq km/hour
- Survey Track-keeping: ±5m
- Survey Endurance: 7+ hours
- Survey Coverage: 100% area



Aircraft Deployment/Transit

- Transit Cruise Speed: 220kts
- Transit Altitude: to 20000ft
- Ferry Range: 1800km
- Ferry Load: LADS airborne equipment plus 18 passengers

Ground Data Analysis

- Data Processing Time: approx 1:1 with survey time
- Database Size: on-line storage for secondary sounding data for 120 sorties

Depth Accuracy

- Depth Sounding Accuracy: better than 0.3m (one standard deviation) over depth range 2-30m

Positional Accuracy

- Positional Accuracy of Soundings: 15m

General Deployment

- Laser Safety: eye-safe to AS2211-1991 at survey height
- Operational Capability: day/night operation
- Configuration: self-contained with maintenance facilities for remote site operation

The laser beam geometry has been designed to cover the widest swath while maintaining performance and accuracy.

A 240m wide matrix of depth soundings at nominal 10m intervals is recorded on each survey run allowing total area coverage to be built up by overlapping survey runs. This provides significant benefits over conventional shipborne sonar.