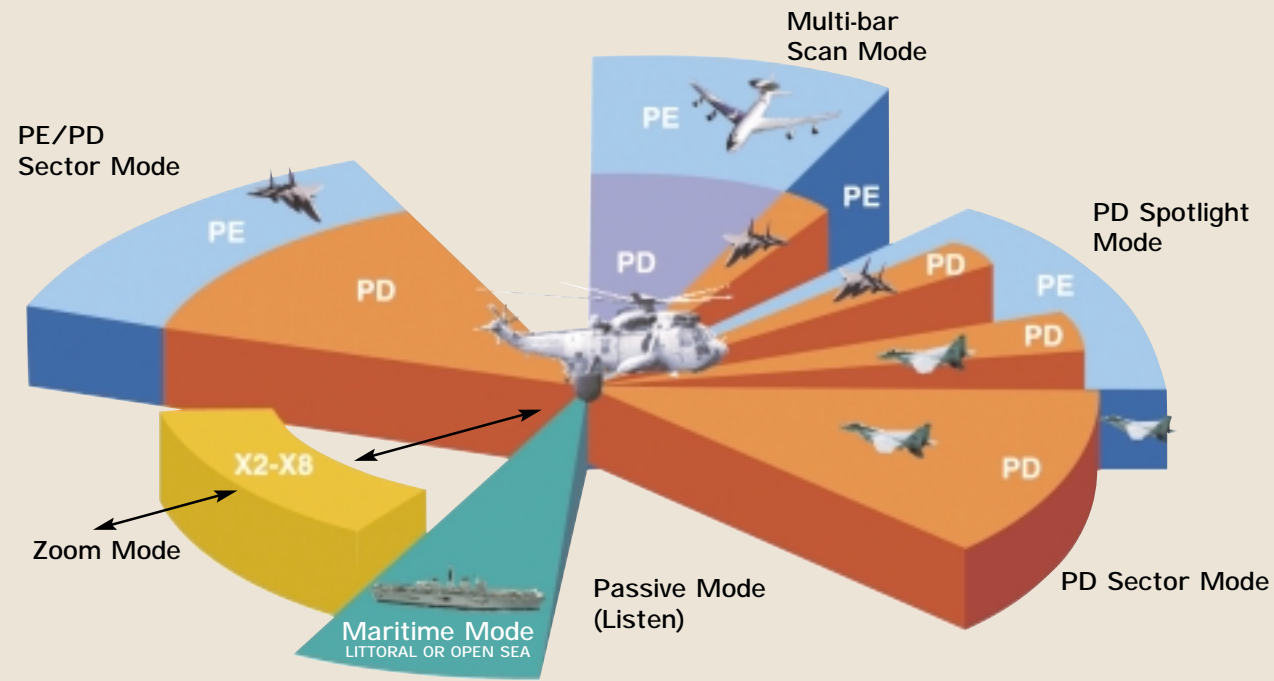


# SEARCHWATER 2000A EW

HIGH PERFORMANCE AIRBORNE EARLY WARNING RADAR



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# SEARCHWATER 2000A EW



The Searchwater 2000 AEW radar forms the heart of a low-cost yet high performance Airborne Early Warning mission system.

The system comprises a high-power Pulse Doppler radar integrated with Mk XII IFF, ESM and an INS/GPS navigation system. An advanced Human Computer Interface, specifically designed for AEW operations, using twin operating consoles ensures effective Operator interaction. Data communications between interceptor aircraft and other C<sup>2</sup> assets can be via a range of data links such as JTIDS, Link 16, Link 11 and the future Link 22. The system is light enough to be installed in a wide range of fixed wing aircraft or helicopters operating from on-shore or afloat.

Searchwater 2000AEW has been selected by the Royal Navy to provide organic fleet protection on the Sea King AEW Mk7. As Prime Contractor, Thales is responsible for the complete mission system upgrade.

From its unique vantage point, the Searchwater 2000 AEW system provides:

- Long range warning against high and low level attack
- Intercept direction of fighter aircraft using a high resolution INS/GPS Navigation System
- An autonomous secure air defence C<sup>2</sup> unit
- A sophisticated maritime surveillance system providing detection of very small, fleeting targets, even periscopes, against high background clutter
- An extension of surface-based systems to provide Over The Horizon Targeting, Search and Rescue and Coastal Surveillance
- Special Enforcement Operations

## Operator Facilities

A comprehensive Human Computer Interface includes large, high-resolution, flat-panel colour displays and interactive control panels (ICPs).

Each display provides a clutter-free radar picture with pop-up data plaque windows.

The ICPs provide system control, mini display areas for target profiles, raid assessment information, zoom-in radar coverage displays, rapid multi-mode system setup and text messages.



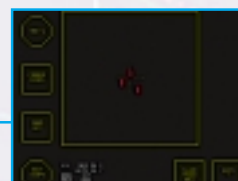
Long Range Target Detection



Range Profile with Library Aid (Option)



Zoomed area



Raid Assessment



Multi-bar Set-up



## Radar

Searchwater 2000 AEW is an advanced, high-powered, Pulse Doppler radar with long range air to air look up/look down capability. The radar is specifically designed for AEW applications over land and sea.

The radar incorporates multi-bar scanning for multiple level raid detection. Pulse Doppler/Pulse Envelope interlacing allows targets to be detected at maximum range and tracked through background clutter.

Operator facilities are provided for manual and automatic, multiple target tracking. Intercept information can then be continuously relayed to the interceptor aircraft or surface based assets via data link or voice.

Whilst specifically designed for AEW, the radar still retains Searchwater's outstanding maritime surveillance and maritime reconnaissance capabilities including surface target classification facilities.

## Radar Modes

- Air-to-Air (Look Up & Look Down)
- Moving Target Indicator (MTI)
- Maritime Surveillance (ASW/ASuW)
  - Littoral
  - Open Water
- Navigation/Ground Mapping
- Target Classification
- Weather
- Beacon

## Pulse Doppler Overland Detection and Tracking

The high performance doppler radar, together with a littoral surveillance mode, allows targets to be tracked over land and through coastal waters.

The radar is specifically designed to:

- Detect small targets in sub-land and sea clutter.
- Discriminate between high velocity airborne targets and a multitude of lower velocity land and sea targets.

