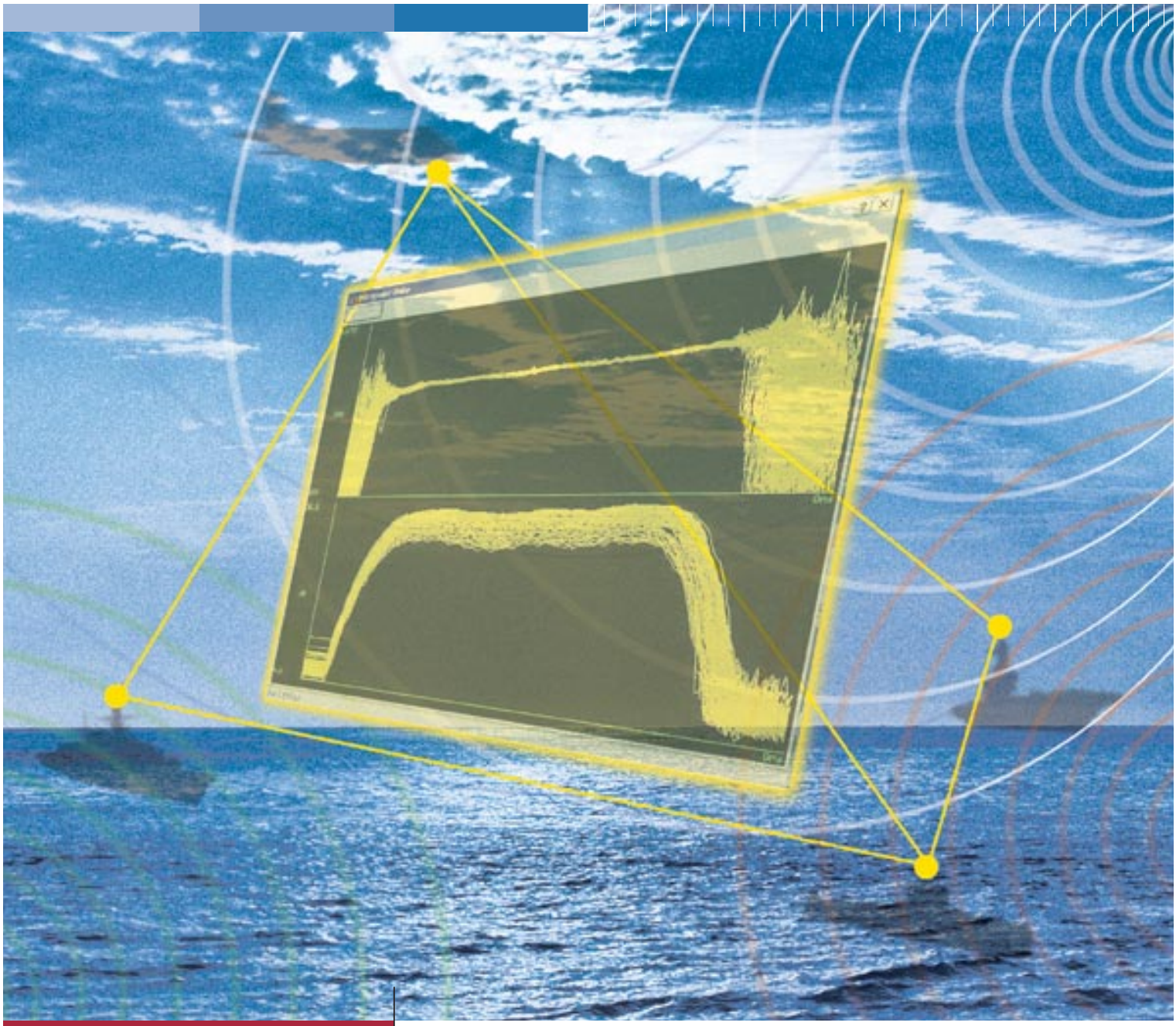
THALES AIRBORNE SYSTEMS | ELECTRONIC WARFARE SYSTEMS



LPI DETECTION & FINE GRAIN ANALYSIS

VIGILE ESM SYSTEM

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LPI DETECTION & FINE GRAIN ANALYSIS

Broad band, 4th generation Digital Receiver and Pulse Analysis Technology

OPERATIONAL REQUIREMENT

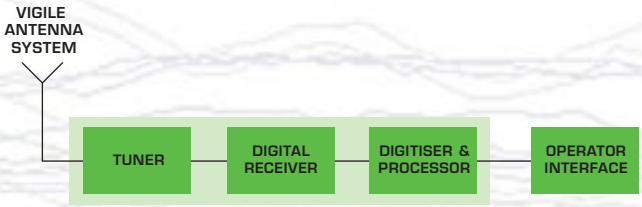
- Detection of Low Probability of Intercept radar
- Advanced signal analysis to support:
  - Electronic Intelligence (Data Base update)
  - Precise deinterleaving
  - Specific Emitter Identification/Platform Identification

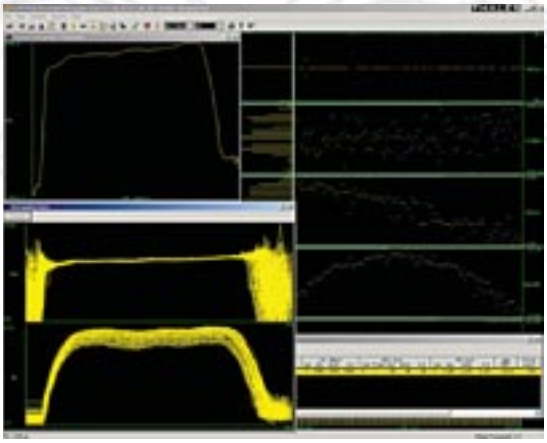
2 OPERATING MODES

- Ultra Sensitive Search mode, to detect FMCW and PMCW LPI radar
- ESM Tasked mode, for precise parameter measurement (frequency, phase and amplitude)

VIGILE SOLUTION

- High performance, low spurii down-converter, covering C to J bands
- Broad Band 4th generation Digital Receiver Technology
- Frequency & Time Domain digital processing
- User-friendly Operator Interface including, Comprehensive Enhanced Analysis tool box





Typical FGA operators display

KEY FEATURES:

- In excess of 20 dB increased sensitivity compared to traditional wide band systems, enabling detection of radar claimed as invisible
- Intrapulse Analysis
  - Amplitude Modulation on Pulse
  - Phase Modulation on Pulse
  - Frequency Modulation on Pulse
- Interpulse Analysis
  - PRI profiles, statistical measurements
  - Frequency agility and hop phase
  - Antenna Scan period characteristics
  - Precise PRI analysis
- Specific Emitter template and Library Matching

THALES

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