



When Results Matter

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CAEW

CONFORMAL AIRBORNE EARLY WARNING & CONTROL SYSTEM ELW-2085

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General

ELW-2085 is IAI/ELTA's third generation of Conformal Airborne Early Warning & Control (CAEW) system. The CAEW is a installed on a modified long-range, high-performance and low operating cost Gulfsteam G550 business jet. The integrated sensor suite, together with a powerful communication system, support a variety of missions such as:

- Long-range Air Surveillance
- Airborne C⁴I for Air & Naval Operations
- Airborne Command & Control Post
- Network Centric Warfare Operations
- Communication Node

Gulfstream G550 Aircraft - this large-cabin, ultra long-range (6,750 nm) business jet can fly higher than any commercial jet modified to carry out AEW missions. Advanced, low drag conformal installation enables higher loitering altitude for long-range detection of low altitude targets. The scheduled maintenance of the G550 CAEW aircraft is mostly accomplished in parallel to its operation, thus supporting high operational availability and low operating cost.

Sensor Data Integration - the CAEW integrates the data of the onboard sensors (Radar, IFF, ESM/ELINT, CSM/COMINT, SPS/RWR) with the theater situation picture via high capacity multiple datalinks.

IAI/ELTA systems have extensive experience in integrating tailor-made CAEW and multi-mission systems on various platforms, adapted to customer requirements.

System Characteristics

Radar - Active Electronic Scanned Array (AESA), confomal, dual-Band (L-Band, S-Band) radar with 360° coverage. The radar provides accurate 3-D tracks, low false alarm rate, flexible and high revisit time, ECCM and programmable search and track regimes.

ESM / ELINT & CSM / COMINT - electronic and communication support measures and signal intelligence capabilities with High Probability of Signal Interception (HPOI) and high bearing accuracy. The ESM/ELINT subsystem supports the aircraft self protection system by also preforming Radar Warning Receiver (RWR) function.

Self-Protection System (SPS) - The SPS is an integrated system with 360° coverage including RWR and Missile Approach Warning System (MAWS) employing radar and IR sensors. The SPS countermeasures include Chaff & Flare Dispensers (CFD) and Directional IR Countermeasures (DIRCM).

IFF - 360° coverage. Integrated interrogation using radar's Rx / Tx modules and antennas.

Operator Stations Onboard - 6 flexible, multi-purpose 24" MS / Windows-based workstations capable of operating each sensor and carrying out the command & control function.

Communications Suite - interoperable with Air-Force, Navy and Ground forces including U/VHF, HF, SATCOM, VOIP, Secure Voice, Integrated Intercom and Secure Datalink. Option: Integration of customer's specific datalinks.

Mission Support Systems

- Mission Planning Station
- Post-mission Debriefing System
- Mission Simulator for Operators (off-line) Training

