
IAI – ISRAEL AEROSPACE INDUSTRIES LTD.

ELW-2090 - Airborne Early Warning and Control (AEW&C)



The ELW-2090, IAI's third generation of AEW&C systems installed on an IL-76 heavy military transport aircraft, excels in wide area persistent air and ground surveillance. The ELW-2090 employs a powerful command, control & communication system to integrate the data of the onboard sensors; radar, IFF, ESM/ELINT, CSM/COMINT with

multiple broadband datalinks. The ELW-2090 features an airborne command & control and network centric warfare operations post.

ELI-3150 - Multi-Mission Airborne Reconnaissance & Surveillance System MARS²



MARS2 is a Multi-Mission Airborne Reconnaissance & Surveillance System, designed to provide persistent stand-off ISR in all weather and visibility conditions. MARS2 consists of a high performance business jet platform, equipped with a state-of-the-art multi-sensor ISR suite and an advanced mission system for command, control and communications. The system provides actionable intelligence to commanders in real-time at strategic, operative and tactical levels. The system is also suited for civil defense support and disaster relief operations.

ELI-3360 – Global 5000 Maritime Patrol Aircraft (MPA)



Designed to fit the high-end class of business jets, such as the Bombardier Global 5000, ELI-3360 G5000 is a cost effective, high-performance MPA for Exclusive Economic Zone (EEZ) and long-range maritime security, Anti-surface Warfare (ASuW), environmental control,

and search & rescue.

The ELI-3360 G5000 MPA cutting-edge mission suite produces intelligence and situational awareness for maritime arena management, battle management, and weapon fire control. The system incorporates an advanced radar, an electro-optical sensor, an ELINT system, a comprehensive communications suite, and an electronic warfare (EW) and self-protection suite. The processed information is disseminated to onboard operators and to C² centers over network centric datalinks.

The ELI-3360 G5000 MPA provides outstanding operational performance with operability at altitudes of 42,000 ft, fast climb performance, quick reaction time, fast deployment, long range/long endurance at ranges over 6000 nautical miles, and a spacious mission cabin.

ELI-3001 – Airborne Integrated SIGINT System – ASIS



The ELI-3001 Airborne Integrated Signal Intelligence System (AISIS) is a multi-mission platform designed to cope with modern theater challenges of electronic signal warfare. Based on IAI's decades of airborne field proven SIGINT experience, the system performs long-range, high-endurance Signal Intelligence (SIGINT) missions

and provides vital tactical and strategic intelligence for on board and ground real-time and off-line analysis.

AISIS's airborne segment features a high-performance business jet comprising of ELINT and COMINT sensors and airborne multiple operator posts. The ground segment comprises a Ground Communication Center and ELINT and COMINT operator centers. The system searches, intercepts, measures, locates, analyzes, classifies and monitors communications and radar transmissions. A real-time Situation Awareness (EOB) picture is created and real-time reports are provided to field commanders and intelligence agencies.

B767 MMTT – Multi Mission Tanker Transport – Air-to-Air Refueling System



Drawing on decades of experience in Air-to-Air Refueling solutions and cargo conversions, IAI develops and converts Multi Mission Tanker Transport configurations based on the B767 aircraft. The aircraft is configured simultaneously for air refueling, cargo, VIP, passengers and ISR systems as desired by the operator.

The aircraft includes a special cargo door and built-in cargo pallet capabilities. Passenger seats and consoles can be rapidly installed or removed.

NRUAV – Navy Rotary UAV



IAI's NRUAV system is a solution for maritime multi-layered ISR missions operated by unmanned helicopters from a ship deck. It is based on IAI's Helicopter Modification Suite (HeMoS) for existing, proven, manned

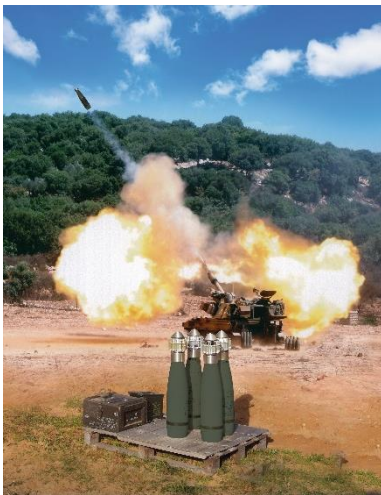
naval VTOL platforms.

System Features and Capabilities:

- Automatic Vertical Take-off and Landing (AVTOL) from dynamic (naval) platforms
- Real-time intelligence battle and damage assessment
- Day, night adverse weather Over The Horizon Targeting (OTHT)

Flexible multi-sensor suite with extended carrying capabilities

TopGun – Course Correction Fuze for 155mm Artillery



TopGun converts standard artillery ammunition into a precision guided weapon, by replacing the regular fuze with a guidance integrated one, without significantly altering firing routines. TopGun performs 2D correction of the ballistic trajectory, reducing dispersion in both range and deflection for improved accuracy – 20 m CEP at any range and minimal collateral damage. Target data is uploaded to a computer inside the fuze via wireless communication.

The relatively small size of the fuze and extreme conditions of artillery fire entailed cutting-edge miniaturization and ruggedizing technologies, challenges that IAI was able to meet due to their extensive experience developing missile systems.

Electro Optical M-19HD



M-19 HD is a True High Definition, compactly designed multi-sensor (with up to 7 sensors simultaneously), multi spectral payload, implemented as a single line-replacement unit (LRU). The M-19 HD enables continuous day/night monitoring in all weather conditions.

It provides outstanding acquisition ranges due to its powerful sensors, high stabilization and unique image processing capabilities.

M-19 HD reduces the operator's workload and improves situational awareness due to its multimode automatic video tracker (AVT). It also provides accurate geo-location using its embedded IMU/GPS (inertial measurement unit/ global positioning system).

MOSP 3000HD – Multi-mission Optronic Stabilized Payload



MOSP 3000-HD design is based on one LRU, fully digital stabilized platform. Sensors package can be equipped with a variety of EO, IR and Laser sensors, optimized to customer missions. MOSP3000-HD has unique sensors in-flight alignment and video image enhancement that significantly improves observation and targeting ranges. Payload's Line OF Sight can be controlled manually or by auto-track, slaving and scanning modes.

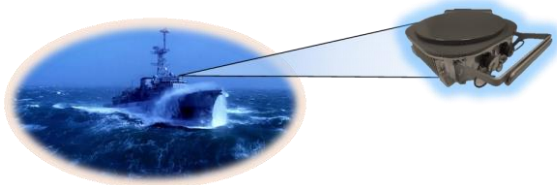
MiniPOP – Miniature Plug-in Optronic Payload



Mini-POP is an 8" lightweight payload for day/night, all weather observation systems designed for military, para-military and civilian applications. The payload provides real-time images, automatic video tracker capabilities and precise target geo-location for small platforms including small unmanned aerial vehicles (UAVs), armored vehicles, unmanned ground vehicles (UGVs) and naval vessels.

Mini-POP is a dual axis, gyro-stabilized payload. The payload is a single Line Replaceable Unit (LRU), open architecture design that carries up to four sensors. The basic configuration includes a continuous zoom color day camera and a thermal imaging camera. A laser pointer, eye-safe laser range finder and automatic television tracker can be incorporated for greater capabilities and functionality. Mini-POP is remotely controlled through RS422 serial communication or by a HAND Control UNIT (HCU) (option).

ADA (Adaptive Antenna) – GNSS Anti Jamming System



Modern navigation, communication, and EW systems are critically dependent on the continuous availability of a global navigation satellite system (GNSS) or equivalent system for position, navigation and timing (PNT). Since

nominal GNSS signal power is very weak, even a low-cost GNSS jammer can disrupt the operation of these systems and jeopardize the successful completion of their mission. IAI's robust ADA GNSS Anti-Jamming Solution provides Assured PNT that enables continuous operation of these systems in a jammed environment.

The ADA approach to Assured PNT involves the use of advanced digital processing techniques that provide a high-level of immunity in severe and dynamic multi-jammer scenarios. ADA's 3rd generation of products provides high accuracy and simultaneous multi-band jamming immunity. Rigorously tested and validated in the laboratory and in field tests, the ADA[®] system is in use in a range of operational systems.

The ADA system is composed of a passive CRPA antenna array & a single Line Replaceable Unit (LRU) Processing Unit. The ADA[®] system supports a flexible interface and packaging options for both new installations and upgrades of existing GNSS receivers. ADA[®] implements leading edge technology in the field of GNSS-AJ systems & incorporates the most advanced Digital Signal Processing (DSP) CRPA GNSS-AJ algorithms.

Heron TP-XP

Medium Altitude Long Endurance (Male) UAV system sets the next standard in mission envelope payload capability and system reliability.

System Features and Capabilities:

- Multisession/Multi Payload configuration
 - Large internal volume for a variety of payloads
 - Simultaneous and flexible operation of payloads
 - All weather capability
 - Satellite Communication (SATCOM) for extended range (Beyond Line of Sight – BLOS)
 - Operation above commercial traffic (45,000 ft)
 - Mission endurance up to 35 hours
 - Highest safety and reliability
 - Triple redundant avionics
 - Fully certified to stanag-4671
 - Compatible with NATO standards
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Super Heron – Latest Technology Multi Role MALE UAS

The Super Heron is the latest Medium Altitude Long Endurance Unmanned Aircraft System (MALE UAS) made by IAI. It offers multiple operational configurations for intelligence, maritime patrol, persistent surveillance. The Super Heron features a new advanced propulsion system specifically developed for the Super Heron with a 200 Hp heavy fuel (diesel) engine and fuel injection.



System Features and Capabilities:

- Provision for large and heavy payloads
- Provision for a large SATCOM antenna.
- Payload weight - up to 450 kg.
- Multi sensor capability - up to six simultaneously
- Proven safe, dual automatic takeoff and landing system (ATOL).
- Retractable landing gear

Heron – Multi Role Medium Altitude Long Endurance (MALE) UAV System

The Heron is a medium altitude long endurance unmanned aerial vehicle. It is capable of operations for up to 45 hours at a ceiling > 30,000 ft.

Heron's main features and capabilities include:

- Multiple operational configurations
- Adverse weather capability
- Safe, reliable and easy operation SAR & GMATI Radars AESA technology
- Multi sensor capability
- Simultaneous: EO/IR/FLR, SAR/MPR, ELINT, and COMINT Available Satellite communication for extended range (SATCOM)
- Two proven simultaneous Automatic Takeoff and Landing (ATOL) systems for maximal safety
- Fully redundant, state-of-the-art avionics
- Retractable landing gear



Panther – Fixed Wing VTOL UAS



The Panther is a uniquely designed Fixed Wing AVTOL UAV System with a tilt rotor capability that provides a remarkable solution to a wide variety of tasks when pin-point automatic take-off and landing is a requirement.

The system can be utilized in military, civilian and homeland security (HLS) operations providing high level of operational flexibility and a small logistical footprint.

System Features and Capabilities:

- Automatic Vertical Take Off & Landing Capability
 - Ship deck operation
 - Mission versatility
 - Quick & easy assembly
 - Simple to operate & deploy
 - Small logistical footprint
 - Silent electrical propulsion
 - High quality EO/IR/LP imagery
 - Fuel cell technology
 - Low acoustic signature
 - Unique tilt rotor technology
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Bird-Eye 400 – Third Generation Mini UAS



The Bird-Eye 400 system is a miniature UAS that provides low echelon forces with an optimal solution for obtaining real time intelligence, independently of higher echelon sources. It is designed to take-off and land automatically even under adverse weather conditions, using an automatic flight control system. The Bird Eye 400 can be assembled within minutes by a team of two. The light-weight system carried in two backpacks includes: 3 UAV platforms, EO & IR payloads, a portable ground control system, data link and power source.

System Features and Capabilities:

- Underbelly real-time video camera for obstacle-free maximal coverage of high resolution day or night imagery
 - Unique patented turn-over landing maneuver to secure payload during landing phase
 - Bungee or hand launch
 - Electrical propulsion for minimal noise signature and audio detection probability
 - Fully automated flight including takeoff and landing
 - Safe, reliable and easy operation
 - Low lifecycle cost
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Bird-Eye 650D Mini UAS – Small Tactical UAS (STUAS)



The BirdEye 650D is an advanced, affordable, long endurance mini UAS. An enhanced version of the BirdEye 650, the BirdEye 650D provides real time stabilized day/night imagery data for urban operation and over-the-hill intelligence. The BirdEye650D is launched from a lightweight launcher and transported on a single vehicle.

System Features:

- Over 20 hours endurance
 - Up to 150 km range
 - Maximum takeoff weight: Up to 30 kg
 - Payload: Up to 10 kg
 - Speed: 40 - 60 ktas
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Searcher MK III – Multi Mission Tactical UAS

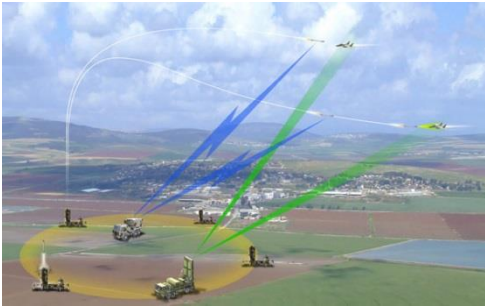


The Searcher Mk III is a multi-mission tactical UAS used for surveillance, reconnaissance, target acquisition, artillery adjustment and damage assessment. The Searcher Mk III offers multiple operational configurations: SAR/GMTI, SIGINT, and EO/IR.

System Features and Capabilities:

- Low-noise integrated 4 stroke engine for low audio detection
 - Built from composite materials to reduce radar detection
 - Adverse weather capability
 - Safe, reliable and easy operation
 - Two proven simultaneous Automatic Takeoff and Landing (ATOL) systems for maximal safety
 - Fully redundant, state-of-the-art avionics
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MRSAM - Land Based Barak-8



The MRSAM is an all-weather, 360°, land based, short to long range, point & area defense system. It operates against a variety of threats including fighter aircrafts, UAV's, helicopters, missiles and other munitions. The system is capable of intercepting multiple targets at long and short ranges, in severe saturation scenarios.

The MRSAM features an advanced vertically-launched missile, a dual-pulse rocket motor, advanced active radar seeker, and a two-way data link for fire-and-update intercepts.

The missile has a basic and an extended-range version, using a rocket booster to increase the maximal interception range.

System Capabilities:

- Short to long range air and missile defense system – from sea-skimmers to high altitude targets
 - Multiple simultaneous engagements in severe saturation scenarios
 - All-weather, vertical-launch active missile
 - Robust target kill
 - Small deck space
 - Advanced standalone two-way data link for missile update and task force coordination
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LRSAM - Naval Barak-8 – Air & Missile Defense System



The LRSAM is an all-weather, 360°, naval, short to long range, point & area defense system. It operates against a variety of threats including fighter aircrafts, UAV's, helicopters, missiles and other munitions. The system is capable of intercepting multiple targets at long and short ranges, in severe saturation scenarios.

The LRSAM features an advanced vertically-launched missile, a dual-pulse rocket motor, advanced active radar seeker, and a two-way data link for fire-and-update intercepts. The missile has a basic and an extended-range version, using a rocket booster to increase the maximal interception range.

System Capabilities:

- Short to long range Air and Missile Defense System – from sea-skimmers to high altitude targets
 - Multiple simultaneous engagements in severe saturation scenarios
 - All-weather, vertical-launch active missile
 - Robust target kill
 - Small deck space
 - Advanced standalone two-way data link for missile update and task force coordination
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LAHAT – Laser Homing Attack Missile

LAHAT is an advanced Laser Homing Attack laser-guided missile for precision attack. A multi-mission missile, LAHAT can be fired from a wide variety of land vehicles, helicopters, tanks and naval platforms.

With a length of just one meter and weight of less than 13 kg, LAHAT is particularly suited for use on light-weight helicopters. A LAHAT launcher fully loaded with four missiles weighs less than 80 kg.

Despite its small size and light weight, LAHAT is highly effective against a variety of target types, including tanks, at ranges of up to 8 km. LAHAT can accurately hit moving targets, including enemy helicopters.

System Features and Capabilities:

- Pinpoint accuracy for day and night operations
- Effective against both static and moving targets
- Low collateral damage
- LOS (Line of sight) and Non LOS firing capability
- Simple to operate, easily integrated
- Launchable from various platforms:
 - Canister launch: vehicles, helicopters, ships, remote installations for border or base protection
 - Tanks gun launch (105 mm and 120 mm)
- Cost-effective
- Long range enables helicopters to engage and destroy enemy forces while avoiding the enemy's air defenses.



HAROP – Loitering Weapon System with Day/Night EO Seeker



Combining capabilities of a UAV and a lethal missile,

HAROP searches, finds, identifies, attacks and destroys targets, and performs battle damage assessment.

Independent of real-time intelligence, HAROP is uniquely capable against time-critical, high-value, relocatable targets.

System Features and Capabilities:

- Extended loitering at long range
 - Autonomous platform operation
 - Man-in-the-loop attack, avoiding collateral damage
 - EO seeker: FLIR/color CCD, hemispherical coverage
 - Attack from any angle – from horizontal to vertical
 - Abort attack capability
 - Continuous, persistent threat to enemy targets
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Harpy NG – Anti Radiation Loitering Weapon System



A highly cost effective solution to the hostile radar threat, Harpy is a "Fire and Forget" autonomous weapon launched from a ground vehicle behind the battle zone. The Harpy detects, attacks, and destroys enemy radar emitters, hitting them with high hit accuracy. Harpy is an all-weather day/night system with long range and extended loitering capabilities.

Rotem – Multi-Rotor Loitering Munitions



Rotem is a tactical loitering munition, based on a light Multi-Rotor Platform, capable of acquiring and engaging targets with Man In The Loop (MITL). The Rotem is capable of lethal precision strike on stationary and mobile targets.

Green Dragon – Tactical Loitering Missile



The Green Dragon is tactical, low-cost loitering missile/munitions (LM) designed to provide small ground units and special operations units with significant situational awareness and firepower in a compact envelope. Green Dragon provides up to two hours of loitering time, during which its operator can collect visual intelligence of surrounding areas up to a range of 50 km. Green Dragon can locate, acquire and dive on operator designated targets with a warhead of nearly 3 kg and

extremely high accuracy (better than 1 m CEP). The Green Dragon is launched from a sealed canister: as many as 12-16 units can be carried on a small vehicle and launched upon request. The operator has a small tablet-sized control panel and a tactical low-power data link to the LM. The Green Dragon operator also has a built-in "abort and go around" capability to prevent unnecessary collateral damage or mistaken targeting.

ELM-2083 – Aerostat Early Warning Radar



The ELM-2083 is an operationally proven aerostat-borne solid state L-Band Active Electronically Scanning Array (AESA) radar system that provides long range early warning and airspace control. Incorporating IAI's vast experience in surveillance radars and utilizing the company's state-of-the-art phased array technology, the system detects hostile approaching aircraft from long ranges, especially when they approach at low altitudes. Once deployed at an altitude of up to 13,000ft (3,960m), the EL/M-2083 is capable of providing 3D coverage

over a radius of 500-600km.

Data gathered by the radar is transmitted to a central air defense command & control center where it is used to maintain an extended comprehensive air situation picture. The system alerts responders of potential threats, with a low false alarm rate.

ELW-2090U Ultra C1 Air Defence & Early Warning UHF Digital Radar



The ELM-2090U ULTRA-C1 is a tactical mobile air defense and early warning radar, designed to autonomously detect and simultaneously track multiple Air Breathing Targets (ABT) and Unmanned Aerial Vehicles (UAV) at long ranges. This Active Electronically Scanned Array (AESA) radar supports azimuth coverage of 360° at rotating mode or 120° in sector mode. The ULTRA-C1 provides extended Air Situation Picture (ASP) and

early warning alert for low Radar Cross Section (RCS) targets, even under extreme weather conditions and in the presence of a dense electromagnetic environment.

ELM-2052 – Active Electronic Scan Array Airborne Fire Control Radar



The ELM-2052 advanced Fire Control Radar (FCR) is designed for air-to-air superiority and strike missions. The system is based on fully solid-state Active Electronically Scanning Array (AESA) technology, enabling the radar to achieve long detection ranges, high mission reliability and multi-target tracking capabilities.

The ELM-2052 radar provides simultaneous modes of operation supporting multi-mission capabilities for air-to-air, air-to-ground and air-to-sea operation modes, and weapon deployment. In the air-to-air mode, the radar delivers very long-range multi target detection and enables several simultaneous weapon deliveries in combat engagements. In air-to-ground missions, the radar provides very high resolution SAR mapping, surface moving target detection and tracking over RBM and SAR maps in addition to A/G ranging. In air-to-sea missions the radar provides long-range target detection and tracking, including target classification capabilities (RS, ISAR).

ELM-2090U Ultra Early Warning UHF Digital Radar



IAI's ELM-2090U UHF ULTRA Early Warning and long range search and track radars are a family of transportable land-based radar systems designed to autonomously detect and simultaneously track dozens of Ballistic Missiles (BMs), satellites and airborne targets at very long ranges. The radar operates under all weather conditions and in the presence of dense electromagnetic environments.

The modular digital Active Electronic Steering Array (AESA) includes thousands of transmit/receive modules and digital units which provide high redundancy, graceful degradation, high reliability and high availability.

ELM-2090U's modular design enables the construction of scalable radar configurations using multiple antenna building blocks (clusters) according to customer requirements.

ELI-4030 - Drone Guard – Lightweight Drone Detection Radar & Tactical Communication Jammer



The use of small drones has increased dramatically over the years, making them a potential threat to critical infrastructures, other aircraft and homeland security (HLS), due to their small size, low speed and low flight altitude. IAI offers specially adapted 3-Dimensional (3D) radars and Electro-Optical (EO) sensors for detection and identification, as well as dedicated Electronic Attack (EA) jamming systems for disrupting drone flight.

IAI has adapted its 3D radars (including the ELM-2026D, ELM-2026B and ELM-2026BF for short (10km), medium (15km) and long (20 km) ranges, respectively) to detect low signature, low-level and low-speed airborne targets, equipping them with special drone detection and tracking algorithms as well as with EO sensors for visual identification of the target.

In order to disrupt the hostile UAV, IAI has developed advanced adaptive jamming systems which can be used in concert with its detection and identification sensors, or as a continuously operated stand-alone system. The jamming disrupts the drone's flight, causing it either to return to its point-of-origin ('Return Home' function) or to shut down and make a crash landing.

ELK-1891 – SATCOM – Satellite Communication Network



The EL/K-1891 is a full duplex Ku band SATCOM "On the Move" network ideally suited for uninterrupted wideband Over-The-Horizon communications. Each subscriber port of the SATCOM network whether static or mobile (ground-based, airborne or shipborne), has to be within the satellites footprint area with its antenna tracking the satellite. The communication between any two subscribers is bi-directional and routed via standard links of a geo-stationary commercial satellite. The high digital data rate on the carrier link can include voice, data, and compressed video.
