

P600 AEW&C



***PROTECTING WHAT
MATTERS
MOST***



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P600 AEW&C

FOR COUNTRIES THAT NEED TO SEE INTO AND CONTROL THE 3-DIMENSIONAL ENVIRONMENT,

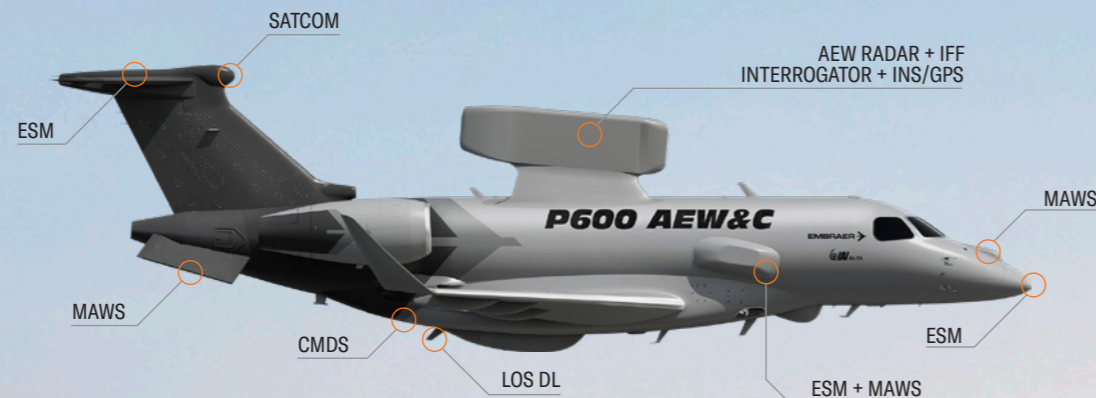
and communicate with and control assets across the domains of air, land and sea, the P600 AEW&C delivers the most affordable true sovereign controlled airborne surveillance capability. Its extended air surveillance, air defense, and homeland security capabilities delivers network-centric, fully integrated situational awareness of aerial activities, beyond ground radar detection coverage.

THE P600 AEW&C SOLUTION

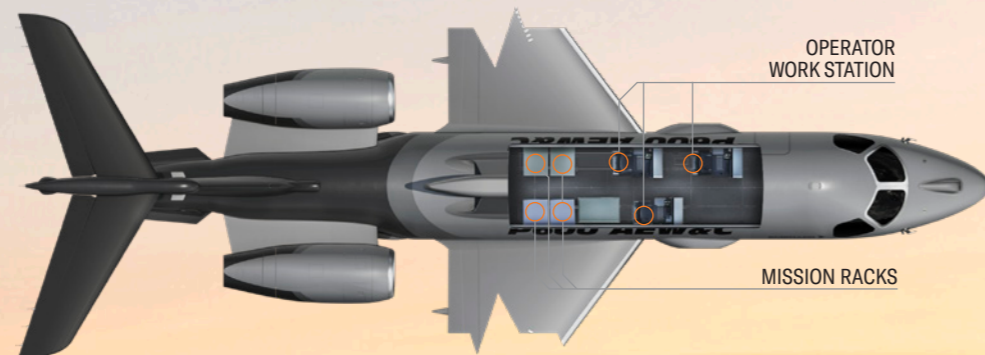
THE P600 AEW&C is equipped with a dorsal mounted, low weight and high efficient latest-generation RADAR using digital GaN AESA technology integrated with an advanced AEW&C Mission System for multiple defense and security missions.

With superior aircraft performance and an advanced mission system, the P600 AEW&C provides accurate and reliable surveillance in the aerial and maritime environments at a fraction of the cost of modern AEW&C systems. A complete communication suite ensures interoperability and joint operations with existing assets.

ESM	Electronic Support Measures
MAWS	Missile Approach Warning System
CMDS	Counter-Measures Dispenser System
LOS DL	Line of Sight Data link
IFF	Identification Friend or Foe
INS/GPS	Inertial Navigation System/Global Positioning System
SATCOM	Satellite Communication



ACCURATE AND RELIABLE SURVEILLANCE



MISSIONS AND CAPABILITIES

THE P600 AEW&C IS A STRATEGIC ASSET AND FORCE MULTIPLIER. It is equipped with a unique and comprehensive set of systems and capabilities specifically designed to maintain the sovereign integrity of a nation. It provides deterrence against internal and external threats, reinforced by the effective coordination and rapid response of air, maritime and ground-based assets

ADVANCED SOLUTION FOR MODERN OPERATIONAL SCENARIOS

/ HOMELAND SECURITY

/ EARLY WARNING

/ LAW ENFORCEMENT

/ COMMAND AND CONTROL

/ MARITIME SURVEILLANCE

/ AIR DEFENSE

/ AIR SURVEILLANCE

/ ELECTRONIC INTELIGENCE



HOMELAND SECURITY & LAW ENFORCEMENT

FIGHTING INTERNATIONAL CRIME

The P600 AEW&C participates in Counter-Drug, Counter-Insurgency, Counter-Terrorism and Air Interdiction operations by denying smugglers access to safe, direct and economical routes. The P600 AEW&C also provides national and international agencies with real-time information required to interdict, apprehend and degrade the capabilities of criminal organizations.

MARITIME SURVEILLANCE

ENHANCED COORDINATION OVER SEA

In support of national efforts to preserve and defend national waters, biodiversity and natural resources, the P600 AEW&C exerts national strategic effect through active patrolling of the maritime domain. As it generates and disseminates the Maritime Situational Picture among different assets in joint operations, the P600 AEW&C enables expeditious and accurate decisions and responses to a selected spectrum of maritime targets, strengthening the nation's compliance with international agreements to protect maritime rights.

AIR SURVEILLANCE



HIGH AND LOW FAST MANEUVERING TARGETS



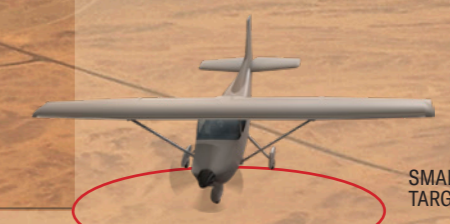
SECURE AND SUSTAIN CIVILIAN AIR TRAFFIC AIR TERROR MONITORING



ROTARY WING DETECTION



SUPPORT TO RESCUE MISSIONS AND DISASTER RELIEF



SMALL LOW AND SLOW TARGET DETECTION

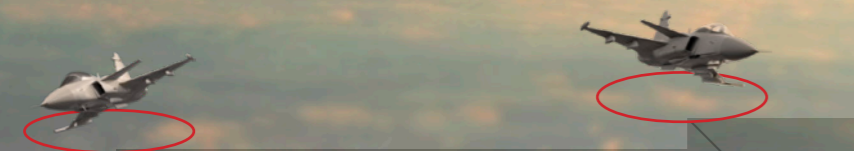
EARLY WARNING

Whether flying along a nation's land and maritime borders or around a designated area of interest within sovereign airspace or abroad, the P600 AEW&C detects, identifies, tracks and monitors all air activity at long ranges, providing an accurate and timely Air Situational Picture for decision-makers.

COMPLETE SITUATIONAL AWARENESS

The P600 AEW&C collects information from a variety of sources, correlates and analyses it, and broadcasts any threats to other assets. It provides direction and coordination of friendly assets during the entire mission.

AIR DEFENSE



TRUE SOVEREIGNTY

The P600 AEW&C is poised to provide a fast response to national air defence challenges, by generating persistent situational awareness in the air domain. Whether looking down into valleys or overcoming blind spots over mountain ranges, the P600 AEW&C provides extended early warning especially of low-flying incoming threats, where ground based air defence radars are limited by line of sight. The P600 AEW&C is capable of controlling friendly fighters for fast, efficient and safe interception, while disseminating the Air Situational Picture (ASP) to its own fighters and Command & Control centres via Datalinks.

FORCE PROTECTION

The P600 AEW&C electronic warfare capabilities provide protection of the platform in addition to the rapid correlation of data gathered from passive sensors. This data is shared with other assets to support the Electronic Intelligence battle, or to assist with undetected surveillance of enemy electromagnetic activity.

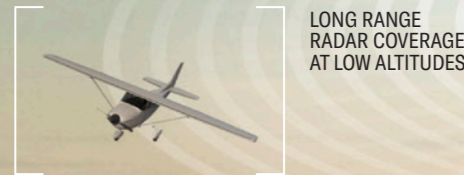
CREATION OF AN ELECTRONIC ORDER OF BATTLE (EOB)

UPDATED DATABASE OF ENEMY CAPABILITIES



AEW&C SYSTEMS

P600 AEW&C SENSORS CAPABILITIES



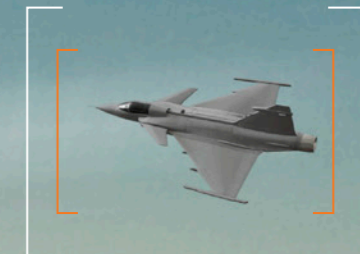
LONG RANGE RADAR COVERAGE AT LOW ALTITUDES



TRACK WHILE SCAN



ADS-B/IFF



DEDICATED BEAMS FOR PRIORITY TARGETS



MISSILE APPROACH WARNING SYSTEM (MAWS)



SEA SURFACE SEARCH & AUTOMATIC IDENTIFICATION SYSTEM (AIS)

ESM/ELINT GROUND FIXED OR SLOW-MOVING EMITTERS



THE NEW 4th GENERATION AESA AEW RADAR

THE P600 AEW&C RADAR & IFF SYSTEM is a state-of-the-art S-Band digital GaN AESA RADAR, designed for long range detection, identification and tracking of airborne and sea surface targets. The RADAR provides 240° coverage with two back-to-back antenna arrays in a dorsal mount, while the integrated IFF systems interrogate in both civil and military modes, and support ADS-B replies using a 360° antenna. The high performance RADAR & IFF system operates with high efficiency, low false alarm rate and high target capacity within the surveillance volume throughout the different selectable search regimes.

AUTOMATIC IDENTIFICATION SYSTEM (AIS)

THE MARITIME SITUATIONAL PICTURE is generated by integrating the Radar maritime detections and the Automatic Identification System (AIS) information.

ELECTRONIC SUPPORT MEASURES

THE ELECTRONIC SUPPORT MEASURES (ESM) system performs 360° coverage to provide the bearing and the location for airborne and ground (fixed or slow-moving) emitters. Through signal analysis capabilities the ESM system is automatically integrated with the RADAR & IFF system for complete situational awareness.

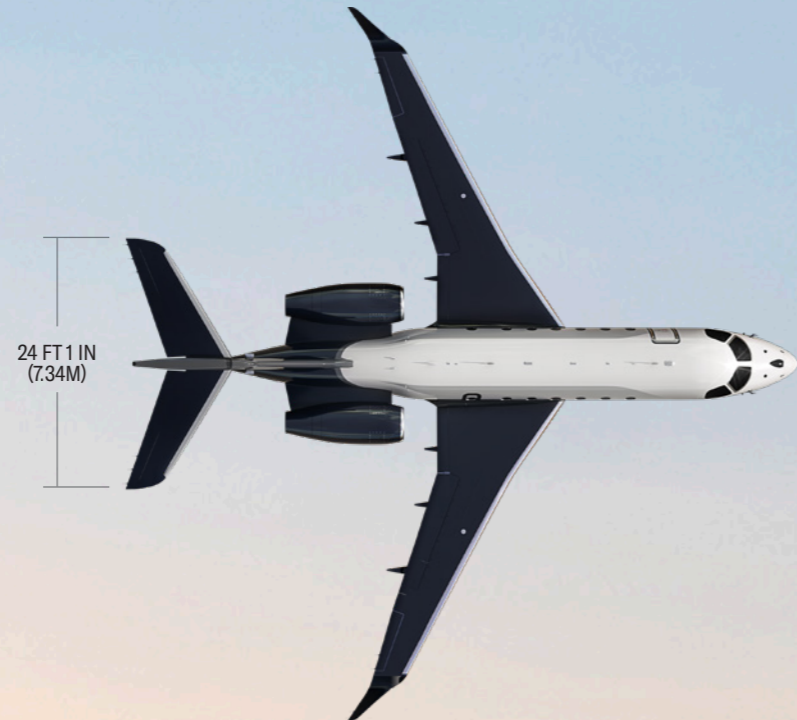
SELF-PROTECTION SUITE

THE SELF-PROTECTION SUITE (SPS) is comprised of an active radar-based Missile Approach Warning System (MAWS) and a passive Radar Warning Receiver (RWR) mode provided by the ESM system. The P600 AEW&C can also be equipped with a Counter Measure Dispenser System (CMDS) (Chaff & Flare) integrated with both warning systems and a control panel for the air crew.

PRAETOR 600 PLATFORM

**THE WORLD'S MOST DISRUPTIVE
AND TECHNOLOGICALLY ADVANCED
SUPER-MIDSIZE BUSINESS JET.**

- / HIGH ALTITUDE FLYING, ABOVE HIGH-DENSITY CIVILIAN AIR TRAFFIC
- / EXTENDED ENDURANCE AND MISSION TIME
- / HIGH SPEED & CLIMB RATE
- / QUIET 'WHISPER SILENT' WORKING ENVIRONMENT
- / LOW CABIN ALTITUDE LEADING TO REDUCED OPERATOR AND CREW FATIGUE
- / FULL FLY-BY-WIRE AND ACTIVE TURBULENCE CONTROL LEADING TO IMPROVED & CONSISTENT SENSOR PERFORMANCE
- / SHORT RUNWAY OPERATIONS
- / HIGH RELIABILITY AND AVAILABILITY



**COCKPIT
STATE-OF-THE-ART ROCKWELL COLLINS PRO LINE FUSION®**



NETWORK CENTRIC OPERATION

INTEROPERABILITY IS A FORCE MULTIPLIER. Network Centric Operation enables interoperability between all types of assets. Interoperability in the P600 AEW&C is achieved through Command & Control, voice communication and datalink capabilities. This ensures accurate information can be rapidly exchanged through secure means between all

participants and decision-makers in the operational environment. The P600 AEW&C is an advanced Command & Control unit receiving and fusing the Air Situational Picture (ASP) from collaborating units as well as transmitting and disseminating its own ASP for efficient asset coordination and better decision-making at multiple networks simultaneously.



DATA-LINK CONFIGURATIONS SUCCESSFULLY IMPLEMENTED FOR DIFFERENT CUSTOMERS

TACTICAL DATA LINK CAPABILITIES INCLUDE

- Air Situational Picture
- Command and Control over the network

WIDE BAND DATA COMMUNICATION

- SATCOM for Beyond LOS (BLOS) operation
- LOS Data link

VOICE & DATA COMMUNICATION

- HF
- V/UHF
- Internal Communication System (ICS) among operators and flight crew

INTEROPERABILITY

- Configured for national and international joint and coalition operations

MISSION SYSTEM

SYSTEM SEGMENTS

The Mission System is the command and control platform responsible for providing situational awareness, battlespace management, and intelligence in all mission phases.

GROUND SEGMENT

MISSION SUPPORT SYSTEM (MSS)

Planning, debriefing and training in fixed or deployable centers.

AIRBORNE SEGMENT

MISSION MANAGEMENT SYSTEM (MMS)

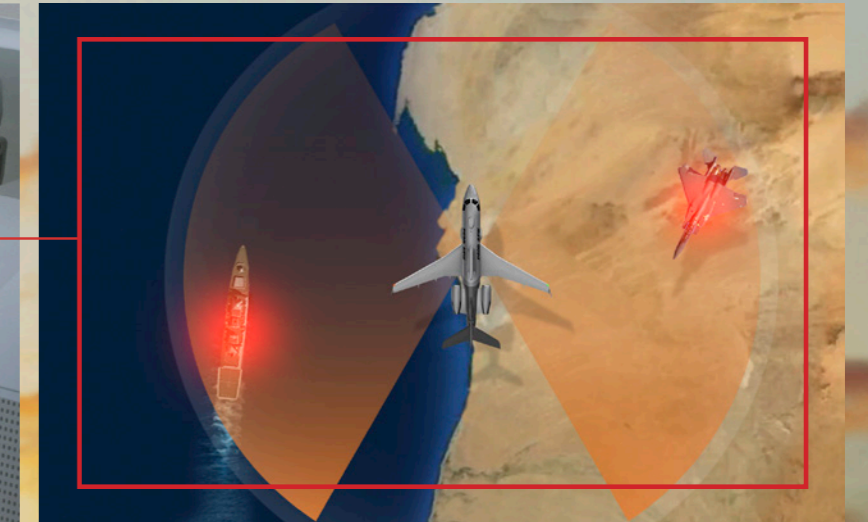
The Mission & Combat System automatically generates and maintains the Recognized Air and Surface Situational Picture from the inputs of all onboard sensors, operator inputs and external data sources.

TOTAL SUPPORT FOR THE EXECUTION OF TACTICAL MISSIONS IN AIR, LAND AND SEA.

MODULARITY / FULL INTEGRATION / EXPANDABLE / COMMON DISPLAY SYSTEMS

The three P600 AEW&C operator workstations share a common display system; tasks and functionalities are designated based on the profile of each operator, allowing efficient crew resource management. Advanced

technologies of data fusion and automation reduces task complexity and crew workload allowing for optimal and efficient operation with a smaller crew.



ANYTIME, ANYWHERE

SHORT TAKEOFF & LANDING

From sea level to high-altitude airfields and within a wide-ranging temperature envelope, the P600 AEW&C can sustain mission effectiveness all year round in several countries across the world. The robust platform is flexible and suitable for operations from multiple military bases and civil airfields.



LOW OPERATIONAL COST

The P600 AEW&C offers the lowest Life Cycle Cost in its category. Quick and easy maintenance regimes coupled with on-board maintenance systems and ergonomic access to components, make the Praetor 600 the first choice of many commercial operators. Different support packages can be tailored to the needs of individual customers to deliver maximum availability in line with the operational environment.

FLIGHT PERFORMANCE

SERVICE CEILING
UPTO **40,000 FT**

MAX CRUISE SPEED
M 0.80

TIME TO REACH
40,000 FT
~ 40 MIN.



FERRY RANGE
2,680 NM

TURNAROUND TIME

The P600 AEW&C inherits all the attributes of the stand-out Praetor 600 Executive Jet. These include short turnaround times that support continuous operations, and optimal crew management for mission effectiveness. The in-flight system monitoring and fault detection system, combined with the low failure rates of the latest technologies and modern equipment, result in almost no mission aborts.

TAXI AND TAKEOFF

MIN TAKEOFF DISTANCE (MTOW, SL, ISA) **6,200 FT**



TOTAL MISSION TIME OF **7,5 HRS** (MAX ENDURANCE AT 38,000 FT)

TURNAROUND TIME **< 1 HR**

JOINT PARTNERSHIP

EMBRAER | TAILOR-MADE INTEGRATED SOLUTIONS. THROUGHOUT THE WORLD.

EMBRAER DEFENSE & SECURITY is the leading aerospace and defense industry in Latin America. In addition to military aircraft such as the A-29 Super Tucano light attack and the C-390 MILLENNIUM military airlift it provides a full range of integrated solutions that includes technologies and systems for several applications. With a growing presence on the global market, Embraer Defense & Security products and integrated solutions are present in more than 60 countries.

C-390 MILLENNIUM MILITARY TRANSPORT
 SUPER TUCANO CLOSE AIR SUPPORT
 SPECIAL TRANSPORTATION
 SPECIAL MISSION AIR PLATFORMS
 BORDER CONTROL
 CYBER SECURITY
 COMMAND AND CONTROL CENTER

NAVAL SYSTEMS
 STRATEGICAL COMMUNICATIONS
 SMART CONNECTIONS
 TACTICAL COMMUNICATIONS
 ASSET MANAGEMENT AND LOGISTICS
 SENSORS
 AIR TRAFFIC MANAGEMENT AND CONTROL
 SATELLITES



ATECH | AN EMBRAER GROUP COMPANY. SOLUTIONS FOR CRITICAL SYSTEMS.

ATECH is the Embraer Group company specialized in the development of solutions for critical systems and technologies to support decision-making. Being part of different strategic defense and security projects, its capabilities are focused on Command & Control, Simulation, Air Traffic Management, Instrumentation & Control and Intelligence, with experience in providing integration and situational awareness for ground and onboard systems.

IAI ELTA | WORLD LEADING AEROSPACE COMPANY.

ISRAEL AEROSPACE INDUSTRIES (IAI) is the largest defense and aerospace company in Israel with over 60 year of experience providing cutting-edge technologies and solutions for space, air, land, sea and cyber. ELTA Systems Ltd. is a subsidiary of IAI and a world class radar house, specialized

in developing and manufacturing advanced systems for the Israel Defense Forces and foreign customers worldwide, such as special mission aircraft, ISR (Intelligence, Surveillance & Reconnaissance) solutions, air and missile defense and cyber solutions. Active in both the defense and commercial markets, IAI solutions are combat proven and active in over 90 countries.



THIRTY YEARS OF CUTTING-EDGE AEW/ISR/ MULTI-MISSION AIRBORNE EXPERIENCE.

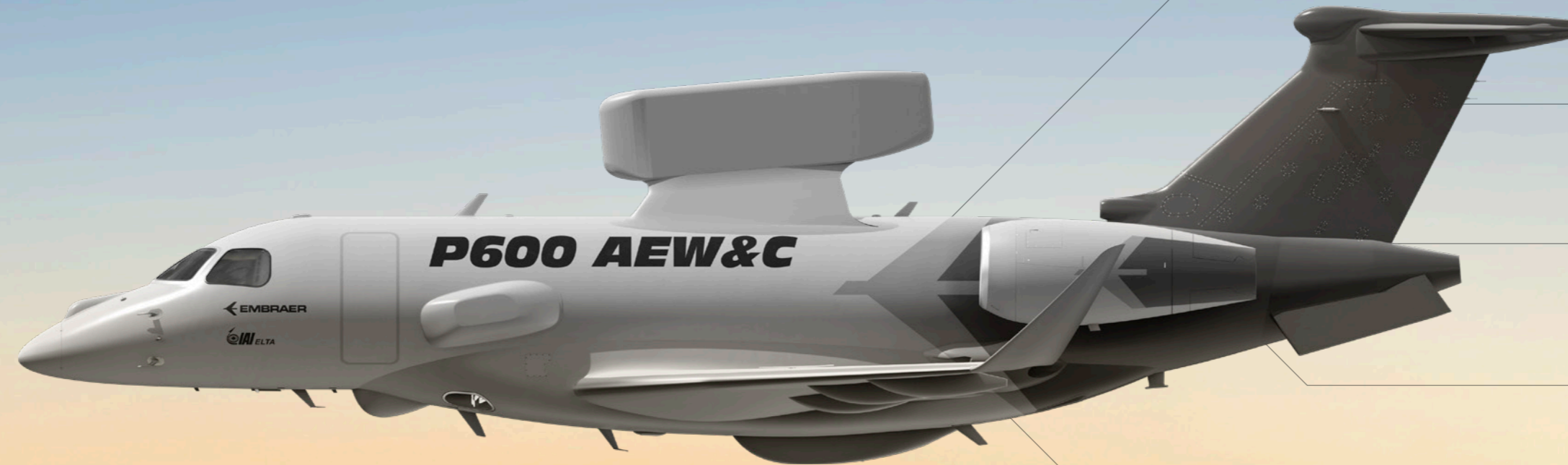
ELTA SYSTEMS LTD., an international leader in developing state-of-the-art solutions for Governments, Defense, Law Enforcement agencies and Civilian Customers. ELTA develops, manufactures, integrates and supplies a wide-range of products including Intelligence Surveillance Target Acquisition and Reconnaissance (ISTAR), Airborne Early Warning and Control, EW Systems, Homeland Security (HLS), Maritime Patrol, C4I and Cyber Solutions.

VALUE PROPOSITION

THE P600 AEW&C COMBINES THE BEST IN AIRCRAFT TECHNOLOGY, best-in-class operational costs, with state-of-the-art sensor technology to create a modular and adaptable solution to meet individual customer requirements. From those customers with previous experience in AEW&C operations that want to transit to advanced cutting-edge technologies, to those who face new and emerging threats and challenges, the P600 AEW&C offers a complete and affordable solution.

THE NEXT GENERATION SUPER MID-SIZE AEW AIRCRAFT

The P600 AEW&C was designed to optimize technology and automation to reduce crew size, whilst providing excellent performance in all functions and capabilities. The robust design of the overall system provides higher operational flexibility and availability. Whether in peace or conflict, the P600 AEW&C is always available, responsive and able to identify threats to maintain sovereign integrity and the safety of the country.



P600 AEW&C: PROTECTING WHAT MATTERS MOST

AUTOMATION CONCEPT & DESIGN

Flight & Mission crew - resource optimization.

THE BEST IN ITS CLASS

Addressing multiple operational needs.

HIGH OVERALL MISSION SYSTEM PERFORMANCE

World-leading aircraft and sensor performance to generate true and enduring mission effectiveness and flexibility.

STATE-OF-THE ART PLATFORM

Efficient & High performance. High Availability & Reliability. Low Life Cycle Cost.

BEST VALUE FOR THE MONEY

Lowest procurement cost and lowest ownership costs in-class.

A MODERN & COMPREHENSIVE AEW&C SOLUTION

A true sovereign airborne surveillance capability.

OPERATIONAL ROBUSTNESS AND FLEXIBILITY FOR DIFFERENT SCENARIOS

Short Turnaround Time. Short runway operation in the class.



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CHALLENGE.
CREATE.
OUTPERFORM.