F-35 LIGHTNING II

TRAINING, SUPPORT EQUIPMENT AND SUSTAINMENT FOR FIFTH GENERATION AIRCRAFT

LOCKHEED MARTIN

We never forget who we're working for™

F-35 LIGHTNING II

It takes more than advanced electronics and engine thrust to make the F-35 Lightning II take flight. As the next generation fighter to support the U.S. Air Force, U.S. Marine Corps, U.S. Navy, international and defense partners around the world, the F-35 Lightning II captures the cutting-edge technology of tomorrow. In order to see that the right pilots, the right planes and the right equipment are in use, the F-35 Lightning II employs the Autonomic Logistics Information System and Lockheed Martin Training Systems to make sure every flight runs smoothly.

Maintaining the F-35 Lightning II

When it comes to logistics for the F-35 Lightning II, the Autonomic Logistics Information System (ALIS) is the only answer. ALIS gives F-35 Lightning II operators and maintainers the ability to plan, maintain and sustain its systems over the life of the air vehicle. ALIS provides the IT capabilities to support current and future Warfighters across the U.S. services and the world.

ALIS integrates a broad range of capabilities including operations, maintenance, prognostics, supply chain, customer support services, training and technical data. A single, secure information environment provides users with up-to-date information on any of these areas using webenabled applications on a distributed network.

ALIS serves as the information infrastructure for the F-35 Lightning II, transmitting aircraft health and maintenance action information to the appropriate users on a globally distributed network. ALIS receives Health Reporting Codes while the F-35 Lightning II is still in flight via an RF downlink, thus enabling the pre-positioning of parts and qualified maintainers on the ground to minimize downtime and increase efficiency

F-35 Lightning II Logistics—ALIS Features:

- Single, Secure Information Environment
- Distributed Network Based on Web Technologies
  - Capabilities Integrate Broad Range of Domains
  - Operations
  - Maintenance
  - Supply Chain
  - Customer Support Services
  - Training
  - Tech Data
- Integrated suite of COTS and developed applications
- Supports both flight test and training operations
- Service oriented architecture allows for reach back to legacy systems and future IT initiatives
- Key enabler supporting Performance Based Logistics for the F-35

Training F-35 Lightning II Pilots and Maintainers

The F-35 Lightning II Pilot and Maintenance Training systems are the total training solution for the state-of-the-art F-35 Lightning II weapon system. The fully Integrated Training Center (ITC) at Eglin AFB, Florida, is the home to a full spectrum of the latest courseware, electronic classrooms, simulators, flight events and event-based maintenance training.

In all simulators, actual F-35 Lightning II software is used to give students the most realistic experience. The training system also uses many legacy and commercial off-the-shelf software tools to increase the affordability of the total solution.

Training does not stop after ITC graduation; both pilots and maintainers will have the ability to remain in a continuous learning environment with access to all training courseware, Training Management System/Learning Management System applications and deployable training devices.

Throughout the F-35 Lightning II Training System structure, the Training System Support Center (TSSC) will be used to manage and distribute training device baselines, update courseware and diagnose both student and system performance.

F-35 Lightning II Pilot Training System Features:
- Tracks and coordinates every aspect of a student's training
- Interactive courseware in and out of the classroom
- High-fidelity Full Mission Simulators with a 360-degree field of view
- Mission Rehearsal Trainers that use self-contained, deployable, high-fidelity simulators

- Desktop Pilot Training Aids for students to interface with the F-35 Lightning II touch panel display, flight representative stick and throttle

F-35 Lightning II Support Equipment:
- Reduces logistics footprint
- Smart, reliable and maintainable design
- Easily deployable, affordable and supportable equipment
- Global Support Team provides 24/7 support

Support Equipment

The F-35 Lightning II Global Support Team provides reliable ground support equipment that supports the aircraft's flight operations on land and sea using innovative and proven structures designed to enhance aircraft access and ease of maintenance. F-35 Lightning II Support Equipment (SE) is packaged to ensure ease of use and is optimized for a reduced logistics footprint that helps the customer lower their overall operational cost.

Lockheed Martin provides the right tools, parts and procedures to ensure its customers' aircraft are always mission capable.

WE'RE ENGINEERING A
BETTER
TOMORROW