

Joint Land Attack Cruise Missile Defense (LACMD) Elevated Netted Sensor System (JLENS)

Provides over-the horizon detection, tracking, and classification of cruise missiles and other air targets so they can be engaged by air-directed, surface-to-air missiles or air-directed, air-to-air missile defense systems.

INVESTMENT COMPONENT

Modernization

Recapitalization

Maintenance

Description & Specifications

The Joint Land Attack Cruise Missile Defense (LACMD) Elevated Netted Sensor System (JLENS) is a joint interest program that protects U.S., allied, and coalition forces, civilian population centers, and critical military and geopolitical assets from air and missile attacks. JLENS is a crucial part of the Integrated Air and Missile Defense (IAMD) architecture that will counter Land Attack Cruise Missiles (LACMs) and low flying aerial threats. JLENS targets not only LACMs but also unmanned aerial vehicles, unmanned combat aerial vehicles, rotary-wing and fixed-wing aircraft, theater ballistic missiles, large caliber rockets, and surface moving targets.

A JLENS Orbit consists of two systems: a fire control radar system and a wide-area surveillance radar system. Each radar system employs a separate 74-meter tethered aerostat, mobile mooring station, radar and communications payload, mobile processing station, and associated ground support equipment. A JLENS system

consists of either the fire control radar or the wide-area surveillance radar with associated platform and ground equipment.

The fire control and wide-area surveillance radars have the capability of operating autonomously and/or operating jointly as a JLENS orbit. JLENS uses advanced sensor and networking technologies to provide 360-degree, wide-area surveillance and precision tracking of land-attack cruise missiles. JLENS surveillance provides a long-range air picture enhanced by identification of friend or foe. This information contributes to the single integrated air picture.

JLENS can detect and track surface moving targets, detect tactical ballistic missiles at boost phase, and large caliber rockets during ascent phase. As a multi-role platform, JLENS enables extended range command and control linkages, communications relay, and battlefield situational awareness. JLENS is the only elevated persistent long-range surveillance and integrated fire control sensor in the IADM architecture.

Program Status

- **4QFY05:** Milestone B approval to enter system development and demonstration (SDD) phase
- **1QFY06:** Change order modification to JLENS contract to begin SDD
- **2QFY06:** JLENS weapon system review
- **4QFY06:** SDD definitization proposal received
- **4QFY06:** JLENS Orbit system requirements review
- **4QFY06–1QFY07:** SDD proposal evaluation
- **1QFY07:** Complete SDD contract definitization
- **1QFY07:** Conduct JLENS Orbit system functional review

Projected Activities

- **2QFY07:** Conduct JLENS Spiral 2 SDD Integrated Baseline Review
- **4QFY07:** Conduct JLENS Orbit preliminary design review
- **4QFY08:** Conduct JLENS Orbit critical design review



ACQUISITION PHASE

Concept & Technology Development

System Development & Demonstration

Production & Deployment

Operations & Support

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FOREIGN MILITARY SALES

None

CONTRACTORS

System development and demonstration:

Raytheon (Andover, MA; El Segundo, CA)

TCOM (Columbia, MD)

System Engineering Technical Analysis (SETA) support:

CAS Inc. (Huntsville, AL)

