

F-35 ELECTRONIC WARFARE MODERNIZATION

Publicly Known Supplier Intelligence | BD Targeting Brief

Program Snapshot

Prime Contractor	Lockheed Martin Aeronautics, Fort Worth, TX
Contract Value	\$991.1 Million — Firm-Fixed-Price
Award Date	May 15, 2026 (issued by NAVAIR, Patuxent River, MD — against pre-established BOA)
Period of Performance	Through March 2032
Scope	432 material modification kits — EW modernization & capability upgrades; retrofit of existing F-35 fleet to Block 4 configuration
Kit Distribution	USAF: 97 USMC: 54 USN: 42 FMS: 106 International Partners: 133
EW System	AN/ASQ-239 Barracuda — Block 4 upgrade via Technology Refresh-3 (TR-3)

Why This Matters: This long-duration retrofit contract creates repeatable, multi-year demand across the F-35 supply chain — specifically for mod kit components, electronics assemblies, cable assemblies, RF/microwave components, tooling, test equipment, and depot-level logistics support. The work flows from Lockheed Martin Aeronautics through a multi-tier supply base anchored by BAE Systems as the AN/ASQ-239 sole-source integrator.

F-35 EW Supplier Intelligence Matrix

The following suppliers are publicly confirmed or industry-recognized participants in the F-35 electronic warfare ecosystem. Tier 1 entities hold direct contracts with Lockheed Martin Aeronautics. Tier 2 entities hold flow-down contracts with Tier 1 partners or verified MRA/PBL agreements.

Company	Tier	Known EW Scope	Performance Location	BD / Supply Chain Relevance
BAE Systems Electronic Systems	Tier 1 / Principal Partner	Sole EW system integrator for F-35; designs, produces, and sustains the AN/ASQ-239 Barracuda EW/countermeasure suite. Delivers radar warning, RF/IR countermeasures, threat geolocation, targeting support, and jamming. Under contract for Block 4 (Lot 17) AN/ASQ-239 upgrades. Also produces Vehicle Management Computer (VMC) and EW retrofit kits.	Nashua, NH (primary EW production); Endicott, NY (Vehicle Management Computer); Rochester, UK (Active Interceptor Systems)	Prime EW mod kit integrator. The \$991M order flows directly through BAE as AN/ASQ-239 OEM. Demand for retrofit hardware, obsolescence replacements, electronics sub-assemblies, and sustainment support.
Northrop Grumman Mission Systems	Tier 1 / Principal Partner	Produces AN/APG-81 AESA radar (primary sensor fused with EW suite), F-35 center fuselage, and upper wing skins. Previously delivered Distributed Aperture System (DAS). Performance-Based Logistics (PBL) contract for	Linthicum Heights, MD (radar / mission systems); Palmdale, CA (center fuselage IAL); Rolling Meadows, IL	AESA radar is a key data feed to the EW suite; radar hardware upgrades are co-developed with EW modernization timelines. Sustainment sub-supplier opportunity for radar spares and testing.

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		sustainment. EW and radar sensor data feeds are deeply integrated.	(mission systems)	
L3Harris Technologies	Tier 1 / Avionics	Produces the Integrated Core Processor (ICP) — the central computing backbone that processes inputs from the EW suite, cockpit displays, sensors, and comms. The new ICP delivers 25x more compute power at 75% lower unit cost vs. legacy system. Critical to Block 4 / TR-3 EW data processing.	Palm Bay, FL (primary); Rochester, NY (avionics)	ICP is the processing engine for EW sensor fusion. Mod kit retrofit work requires ICP compatibility upgrades. Open architecture backbone creates follow-on integration sub-contracting.
Collins Aerospace (RTX)	Tier 1 / Avionics & Sensor Systems	Supplies Gen III Helmet Mounted Display System (HMDS) integrated with EW threat data via CEVS JV with Elbit. Provides landing systems, GPS/air data sensing, and CNi (Communications, Navigation, Identification) avionics. Also part of MRO performance-based logistics program.	Cedar Rapids, IA (avionics systems); Windsor Locks, CT (Pratt & Whitney engine systems, RTX)	Helmet/display integration is tightly coupled to EW situational awareness feeds. CNi avionics upgraded alongside EW suite. MRA repair agreement partner — depot spares and overhaul demand.
Elbit Systems of America (CEVS JV / Standalone)	Tier 1–2 / Electronics & Displays	Co-produces Gen III HMDS through CEVS joint venture with Collins. Separately, Elbit Systems of America produces FMVDL (Full Motion Video Data Link) power amplifier modules for the F-35 communications suite — designed and manufactured in Fort Worth, TX. Elbit-Cyclone (Israel subsidiary) delivers composite structural assemblies.	Fort Worth, TX (FMVDL amplifiers); Fort Worth is co-located near LM Aero prime facility	Amplifier modules and display electronics are candidates for mod kit upgrades as Block 4 EW demands higher power throughput. FMVDL power amplifiers tie directly to EW-enabled datalinks.
Smiths Interconnect	Tier 2 / RF & Microwave Components	Supplies RF/microwave interconnect components including high-power circulators for CNi systems and integrated microwave assemblies used in the F-35 EW systems. Has supplied hundreds of unique interconnect devices across the F-35 program for over 20 years. Products include high-reliability RF connectors, high-speed/power/filtered connectors, and integrated microwave assemblies.	Milpitas, CA (US operations); Fareham, UK (microwave assemblies)	Integrated microwave assemblies are a direct mod kit component category. Circulators and RF connectors are high-turnover retrofit items. Long-standing qualified supplier status is a key differentiator.

Company	Tier	Known EW Scope	Performance Location	BD / Supply Chain Relevance
Mercury Systems	Tier 2 / EW Signal Processing	Provides ruggedized signal processing modules and OpenVPX RF/microwave transceiver solutions for EW applications. Mercury's RFM-series transceivers (6–18 GHz) are used in demanding EW signal processing applications requiring low-latency digital RF conversion. Not publicly confirmed as F-35 EW-specific, but is a recognized supplier to the broader F-35 and 5th-gen EW processing supply chain.	Andover, MA (HQ); multiple US production sites	Signal processing and DRFM (digital RF memory) technology is critical to EW threat response speed. Mod kit retrofits may require signal processing board replacements or upgrades.
Honeywell Aerospace	Tier 2 / Systems & MRO	Holds Master Repair Agreement (MRA) with Lockheed Martin for F-35 sustainment and repair services. Supplies power systems, inertial navigation units, and related avionics. MRA structure makes Honeywell a designated depot repair entity across multiple F-35 subsystems.	Phoenix, AZ (primary aerospace); Clearwater, FL; Albuquerque, NM	MRA partner. Retrofit and mod kit installation requires MRO participation — Honeywell is a contracted depot repair node. Supply chain opportunity for repair tooling and test equipment.
GE Aerospace	Tier 2 / MRO / Power Systems	Holds Master Repair Agreement (MRA) with Lockheed Martin for F-35 subsystem sustainment and repair. Provides power generation, thermal management systems, and generator components that are part of the F-35's electrical architecture supporting EW power demands.	Cincinnati, OH (GE Aerospace HQ); multiple MRO depot sites	EW modernization increases power demands; GE's power systems are co-upgraded alongside EW kits. MRA makes GE a formal repair depot partner — opportunity for testing and logistics sub-support.
Eaton Aerospace	Tier 2 / Hydraulics & Electrical / MRO	Holds Master Repair Agreement (MRA) with Lockheed Martin. Supplies hydraulic systems, fuel/inerting systems, and electrical power distribution components for the F-35 airframe. Part of the PBL/MRA sustainment ecosystem.	Jackson, MI; Irvine, CA; Euclid, OH (aerospace operations)	MRA partner with sustainment obligations. Electrical distribution systems affect EW power rail specifications. Cable assemblies and power conditioning components are potential mod kit sub-categories.

Key Contract Context by Supplier

Company	Notable Contracts / Agreements (Publicly Disclosed)
BAE Systems Electronic Systems	\$491M (Block 4 Lot 17, 2023); \$493M (EW upgrade/modernization); \$93M UCA sustainment

Company	Notable Contracts / Agreements (Publicly Disclosed)
Northrop Grumman Mission Systems	Ongoing Lots + PBL sustainment
L3Harris Technologies	Selected by LM ~2018 for ICP; ongoing Lot production
Collins Aerospace (RTX)	PBL contract via CEVS JV; ongoing Lot production
Elbit Systems of America (CEVS JV / Standalone)	FMVDL contract via Cubic Mission Solutions for F-35 comms suite; CEVS HMDS ongoing
Smiths Interconnect	Ongoing production Lots; program partner since program inception
Mercury Systems	Public F-35 program supply chain participant; specific contract values not publicly disclosed
Honeywell Aerospace	MRA with Lockheed Martin (active); ongoing sustainment
GE Aerospace	MRA with Lockheed Martin; ongoing sustainment role
Eaton Aerospace	MRA with Lockheed Martin; ongoing sustainment

Action to Take Now — CoExcel / SourceBoard® BD Targeting

The following actions are recommended to capture subcontracting and supplier qualification opportunities within the F-35 EW modernization supply chain:

- Target BAE Systems Electronic Systems (Nashua, NH) as the primary EW subcontract flow-down node — all AN/ASQ-239 mod kit work flows through BAE.
- Position SourceBoard® to index F-35 Block 4 / TR-3 EW supply chain openings against known MRA/PBL holders including Honeywell, GE, and Eaton.
- Develop a focused 'Mod Kit / Retrofit Support' capability statement targeting: cable assemblies, electronic test equipment, RF/microwave components, tooling, and logistics support.
- Map CAGE codes and NAICS codes for EW-specific procurement: 3812 (Defense Electronics), 3679 (Electronic Components), 7629 (MRO / Repair Services).
- Monitor NAVAIR (Patuxent River) BOA vehicle for follow-on mod kit delivery orders — the \$991M award was issued against a pre-established Basic Ordering Agreement.
- Identify CMMC Level 2+ certified suppliers within this chain as teaming partners — Block 4 EW retrofit work carries CUI handling requirements.
- Engage L3Harris Technologies (Rochester, NY) and Smiths Interconnect as potential teaming partners for ICP-adjacent and RF connector sub-supply opportunities.

Mod Kit Component Categories — Supply Chain Targets

Category	Description / Opportunity
RF / Microwave Assemblies	Integrated microwave modules, circulators, power dividers, and signal conditioning components for the AN/ASQ-239 EW suite. High-reliability mil-spec qualified parts. Smiths Interconnect is a known supplier; open to additional QPL-qualified sources.
Cable Assemblies & Harnesses	High-density, shielded cable assemblies for avionics and EW signal routing within mod kits. Requires MIL-SPEC cable, connector, and harness qualification.
Electronic Sub-Assemblies	PCBs, power amplifier modules, signal processing boards, and memory/compute modules for ICP and EW suite retrofits. GaN-based RF power components are a growth sub-category.

Category	Description / Opportunity
Test Equipment & Tooling	Automated Test Equipment (ATE), special test fixtures, and installation tooling required for mod kit depot installation. Contracts flow through Lockheed and MRO partners.
Logistics & Supply Chain Management	Spare parts kitting, demand forecasting, warehousing, and distribution support for 432+ mod kits across domestic and FMS customers through 2032.
Depot MRO Support	Line Replaceable Unit (LRU) overhaul, repair, and test services at MRO nodes. MRA holders (Honeywell, GE, Eaton) are anchor customers for Tier 3 MRO support firms.
Software / Firmware Integration Support	Technical documentation, software integration testing support, and configuration management services for Block 4 / TR-3 firmware loaded during retrofit.

Disclaimer: This brief is compiled from publicly available government contract announcements, official contractor disclosures, and industry reporting. Contract values and supplier relationships are as publicly disclosed and may not reflect current classified or proprietary arrangements. This document is intended for internal business development targeting by CoExcel Solutions and SourceBoard® users.

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