

*The*  
**Marvin Group**

**PROUDLY SERVING  
THE AEROSPACE AND  
DEFENSE INDUSTRY**



[www.marvingroup.com](http://www.marvingroup.com)

# COMPANY PROFILE

## A TRADITION OF EXCELLENCE FOR OVER 60 YEARS

Headquartered in Southern California, The Marvin Group is a privately held, vertically integrated small business serving the aerospace and defense industries with innovation, reliability, and precision. Our organization is comprised of three core business units—Marvin Engineering Co. (MEC), Marvin Test Solutions (MTS), and Marvin Land Systems (MLS)—each contributing specialized capabilities to support complex, mission-critical applications worldwide.

MEC and MLS operate from our Inglewood campus, where advanced engineering, manufacturing, and systems integration converge to drive operational excellence. Marvin Test Solutions, based in Irvine, delivers cutting-edge test solutions that ensure performance and dependability across high-stakes platforms. Both locations are strategically positioned near major transportation hubs: the Inglewood site is just minutes from Los Angeles International Airport (LAX), while the Irvine facility is adjacent to John Wayne Airport (SNA), enabling streamlined logistics and global connectivity.



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# COMPANY OVERVIEW

The Marvin Group, since its inception, has been family owned and despite growing to over 1,000 employees across its various business units at present, prides itself on maintaining a strong sense of collaboration and camaraderie. We are committed not only to our customers, and the warfighters that we all serve, but to our employees and our local community. Among the causes that we dedicate resources towards are the following:

- Support for our military veterans
- The fight against cancer
- Donations to the less fortunate via The Salvation Army
- Increasing awareness of environmental impact, including various green initiatives

## OUR PEOPLE AND CULTURE

The Marvin Group understands that we are in the business of serving people, whether it's supporting our warfighters when they are on mission, or ensuring that our employees and their families have access to stable and rewarding career opportunities.

As a family-owned business, we are aware of the unique challenges that accompany this and we continue to look to develop the talent already within our business, as well as recruit promising new talent which will challenge the status quo and assist in the continued growth of The Marvin Group.

## OUR VISION

The best people delivering confidence and security to warfighters all over the world.

## OUR VALUES

■ INTEGRITY ■ PARTNERSHIP ■ CAN-DO-ATTITUDE ■ INNOVATION



# OUR MISSION

Our mission is to give the warfighters we depend on, the critical equipment they depend on. We are built on over 60 years of trust, integrity and innovation in the design and production of integrated weapon systems and equipment for our customers world-wide.

We build lasting relationships with our customers and suppliers and continually strive to set the industry standard for service, technical capability and quality.

Our future and continued success requires highly skilled, empowered, and diverse employees combined with our commitment to their safety, personal growth and well being.

In our mission to support our warfighters, we will never lose sight of our responsibility to safeguard our environment, contribute to our community and support our veterans.

# CEO STATEMENT

## HOWARD GUSSMAN

Chairman & Chief Executive Officer, The Marvin Group



It is extremely meaningful and rewarding to all of us at Marvin Engineering Co., and throughout The Marvin Group, to be in a position to provide our war-fighters with quality products they can rely on. We're proud of the work that we do, and supporting our customers is our way of honoring their service and sacrifices.

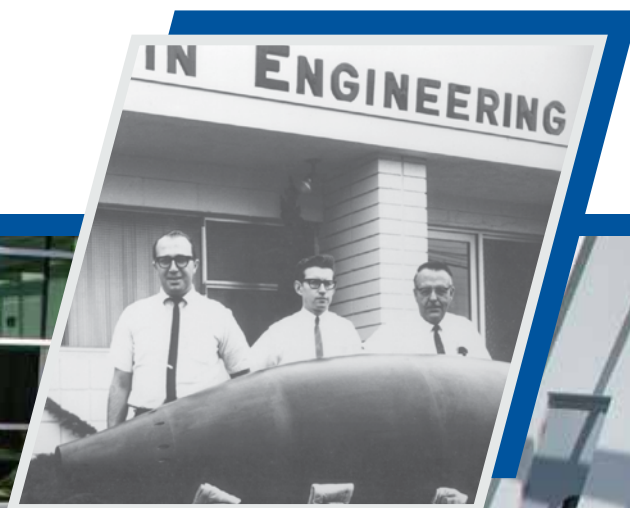


# COMPANY HISTORY

February 10, 2023 marked a key milestone as our 60th anniversary for Marvin Engineering Co., Inc. and The Marvin Group. It was over six decades ago that our founder, Marvin Gussman and his wife Madeline had the inspiration to start a small machine shop.

Since that time, Marvin's legacy in leadership and business philosophies together with his partner Jerry Friedman, built a solid foundation that continues today. With Marvin Engineering as the flagship company, The Marvin Group has evolved into one of the leading defense companies around the globe, supporting all branches of the U.S. Department of Defense and major prime contractors domestic and international.

The Marvin Group is dedicated to continuing our Tradition of Excellence supporting the defense community. With a clearer vision and laser focus on achieving our goals and objectives, we remain committed to consistently provide products and services that meet or exceed all of our customers' expectations.



# TOTAL SOLUTION



The Marvin Group is the Strategic Partner for Global Alternate Mission Equipment and Sustainment. We are committed to expanding our strategic partnership in design and qualification, manufacturing, and test as well as, maintenance and sustainment.

- Expertise in multiple weapon systems in fielded environment
- Complete solution set including airborne electronics development/production, as well as test equipment for qualification, production, and sustainment.
- Global Sustainment Services across multiple platforms.

## MARVIN ENGINEERING

A global leader in the manufacture of Alternate Mission Equipment (AME) and Aircraft Armament Equipment (AAE).

- Bomb & Ejector Racks
- Missile Rail Launchers
- Pylons
- Surface Launch Solutions
- Technology Development
- MRO/Sustainment

## MARVIN TEST SOLUTIONS

Vertically-integrated aerospace test and measurement company with unrivaled long-term support.

- Armament Test Sets
- Organizational Testers
- Intermediate Testers
- Depot Level Testers

## MARVIN LAND SYSTEMS

Original equipment manufacturer of Environmental Control Units and Auxiliary Power Units for military applications.

- Fans
- Cooling Systems
- Power Units

# MARVIN CAPABILITIES

The Marvin Group has delivered cutting-edge solutions that power the world's most advanced defense systems. With a legacy of engineering excellence and a commitment to mission success, we provide a full spectrum of capabilities that support the warfighter—in the air, on the land, and at sea.

## ENGINEERING & DESIGN

- Mechanical, electrical, & systems engineering
- Full product development: concept to deployment
- Rapid prototyping and iterative design processes
- In-house testing & validation capabilities

## MANUFACTURING & ASSEMBLY

- Lean manufacturing and Six Sigma practices
- Precision machining and fabrication
- Automated assembly and inspection systems
- Determinant Manufacturing and Assembly Certified

## TESTING & QUALIFICATION

- Environmental, vibration, and EMI/EMC testing
- MIL-STD compliance and qualification support
- In-house test labs and simulation environments
- Flight test support and data analysis

## SUSTAINMENT & SUPPORT

- Depot-level maintenance and repair services
- Obsolescence management and reverse engineering
- Technical data packages and training support
- Long-term logistics and lifecycle sustainment

## PROGRAM MANAGEMENT & INTEGRATION

- Turnkey program execution and risk management
- Integrated supply chain and vendor coordination
- Agile response to evolving customer requirements
- Proven track record with U.S. DoD and global partners



## OUR CUSTOMERS

### Worldwide Support for U.S. & Allied Warfighters

Products manufactured by The Marvin Group are currently in service in more than 30 countries around the world.

We serve our customer base, consisting of government agencies, military services and leading defense prime contractors, via multiple channels including Foreign Military Sales (FMS), Foreign Military Funding (FMF), and Direct Commercial Sales (DCS).

## TRUSTED BY THE BEST

The Marvin Group proudly supports and we are Prime Contractors for all branches of the U.S. Department of Defense and partners with leading aerospace and defense contractors worldwide. Our solutions are deployed on platforms including the B-1B, B-52, F-15, F-16, F/A-18, F-22, F-35, MQ-9, and many more.



### 2019 NUNN-PERRY AWARD WINNER

Marvin Engineering Co. is greatly honored to be recognized, along with our teammates at Lockheed Martin Aeronautics and the University of Texas at El Paso, with a FY2019 Nunn-Perry Award from the U.S. Department of Defense recognizing our performance in the Mentor-Protégé Program.

## QUALITY ASSURANCE AND COMPLIANCE

Quality assurance and compliance are seamlessly integrated through SAP's Quality Management tools. By embedding quality controls into our production and supply chain processes, we ensure real-time tracking, regulatory compliance, and continuous improvement. SAP supports our commitment to delivering mission-critical systems with precision, reliability, and accountability.

# MARVIN ENGINEERING

Established in 1963, Marvin Engineering is the flagship company of The Marvin Group and a worldwide leader in Alternate Mission, Auxiliary Aircraft and Role Equipment. Supporting both current in-service and emerging fixed wing platforms including the A-10, F-15, F-16, F/A-18, F-22 and F-35 as well as rotary-wing applications such as UH/MH/SH-60, AH-1 and AH-64.

Marvin Engineering also provides stores carriage and release equipment in support of several remotely piloted/unmanned systems such as MQ-1 Predator, MQ-9 Reaper and MQ-1C Gray Eagle. Ground launch missile systems supported include SLAMRAAM and NASAMS. We also are now developing state-of-the-art stores carriage and release solutions for 5th Generation platforms and beyond.

## PYLON EXAMPLES



SUU-96/A F-35 AIR-TO-AIR



SUU-94/A, SUU-95/A, SUU-97/A,  
CTOL/STOVL, F-35 AIR-TO-GROUND



F-22 Fuel Pylon

## LAUNCHER EXAMPLES



LAU-151/152 F-35 ADVANCED RAIL  
LAUNCHER (4) CONFIGURATIONS



LAU-12X MRL SERIES



M299 LONGBOW

## EJECTOR RACK EXAMPLES



MAU-12



BRU-32



TER-9/A MOD TRIPLE EJECTOR RACK

As the original equipment manufacturer, Marvin Engineering provides life of program sustainment and support including training, spare parts, upgrade options and depot services.

Marvin Engineering's products and services are offered both domestically and internationally and are currently being provided through the U.S. Department of Defense (DoD), Foreign Military Sales (FMS), Foreign Military Funding (FMF), via Prime Defense Contractors, and through Direct Commercial Sales (DCS), Marvin Engineering has the experience and resources available to support a contracting strategy that is tailored to each customers' individual needs.

Marvin Engineering proudly serves as the Managing Partner to Lockheed Martin in support of the F-35 Aircraft Armament Equipment requirements. Responsible for developing five international companies to manufacture sub-systems within the package, Marvin Engineering has successfully collaborated with each company, ensuring long-term program success and execution.



MISSILE LAUNCHERS

EJECTOR RACKS



AIRCRAFT PYLONS

WEAPONS BAY ADAPTERS



# MARVIN TEST SOLUTIONS

Marvin Test Solutions has delivered innovative, feature-rich automated test solutions for Military, Aerospace and Manufacturing organizations since 1988. Our proven expertise tackling the demanding requirements of aerospace and military test systems carries through to our work in developing manufacturing applications, quickly creating and delivering test equipment that is modular, high-performance, low power and ultimately reducing maintenance and sustainment costs.

As a vertically integrated test company with a solution-centric focus, our collective expertise in hardware, software, systems and applications offers the flexibility and innovation demanded by today's customers. By leveraging design and test applications capabilities, we are able to translate challenging test requirements and deliver turnkey solutions that are easy to use, simple to maintain, and result in products that enable customers to achieve high levels of mission readiness.

Inspired by the demanding and critical nature of our customer' missions, we strive to be the worlds most innovative, best-value test solutions provider with unrivaled customer support throughout a product's life cycle from requirements definition to lifetime sustainment.

## O-LEVEL



MTS-3060A  
SMARTCAN™ UNIVERSAL  
ARMAMENT TEST SET



MT1888 SERIES  
LASER SOURCE  
SIMULATOR



MT3045 HELLFIRE  
PRE-LOAD TEST SET  
AND MISSILE SIMULATOR



AN/TSM 205B  
HELLFIRE SYSTEM  
TEST SET



MTS-209  
O AND I LEVEL  
COMMON ARMAMENT  
TEST SET

## D-LEVEL



TS-217A  
UNIVERSAL ARMAMENT  
DEPOT LEVEL TEST SET



TS-201B  
HELLFIRE LAUNCHER  
TEST SET



GENASYS  
HIGH PERFORMANCE  
MIXED-SIGNAL TEST SYSTEM



TS-700 SERIES  
PRE-CONFIGURED  
FUNCTIONAL TEST SYSTEMS

## I-LEVEL



MTS-235A  
F-35 AAE TEST SET



MTS-916  
MODULAR TARGET  
SIMULATOR

## HELLFIRE SCALABLE RAIL LAUNCHER (HSRL)

- Lightweight, DC only launcher for smaller platforms
- Supports all Hellfire II (including Romeo) and Longbow Hellfire variants
- Software upgradeable to JAGM
- Fully compliant with the M299 MIL-STD-1760 interface
- Flexible configurations including: Single-rail, Dual-rail, Triple rail, or Quad-rail
- Hellfire System enabler for future vertical lift (FVL) and other distributed solutions



## We make ~~ACE~~ Test Easy™

- Rugged, handheld, powerful, rapid test
- Reduced training and logistics footprint
- Smart and legacy weapons systems support
- Superior active armament test and munitions emulation
- Multiple O-Level armament test sets eliminated from the flightline
- Each SmartCan™ can be loaded with all DOD/Ally/Partner armed aircraft

Developed by Marvin Test Solutions, the MTS-3060A SmartCan™ simplifies logistics, reduces maintenance and sustainment costs and has a compact footprint. The MTS-3060A SmartCan™ is the only flight line test set that performs functional tests of the MIL-STD-1760 bus by emulating Smart weapons such as JDAM.



# MARVIN LAND SYSTEMS

Marvin Land Systems is an original equipment manufacturer (OEM) of Power and Thermal Management Solutions to include Environmental Control Units (ECU) and Auxiliary Power Units (APU) for military applications. We have a rich history of successfully designing, fabricating and deploying lightweight ECUs, APUs, generators, NBC systems and propulsion cooling fans in addition to modification and overhaul kits for tanks and tracked vehicles.

Marvin Land Systems' in-house design and development team provides turnkey solutions in response to customers' complex requirements. Our extensive engineering capabilities include design and development, modeling and simulation, thermal and Computational Fluid Design (CFO), structural analysis and rapid prototyping. Marvin Land Systems has proven capabilities in the areas of First Article and Qualification Testing, and provides technical assistance, training and logistics support.

## AUXILIARY POWER UNITS



5KW @ 28VDC



5KW/12KW @ 28VDC



5KW AC



LOW PROFILE 10KW APU

## ENVIRONMENTAL CONTROL UNITS

RADAR ELECTRONIC  
COOLING UNITHIGH VOLTAGE  
COOLING SYSTEM

NBC OPS



AIR HANDLING UNIT

## CHILLERS



LRCU 35KW

BATTERY  
COOLING UNIT

## FANS

MAIN COOLING FAN  
(DUAL CENTRIFUGAL)HIGH VOLTAGE  
MIXED FLOW FAN

AHU FAN

- AUXILIARY POWER UNITS
- ENVIRONMENTAL CONTROL UNITS
- CHILLERS
- FANS



Our systems provide mission-critical power and thermal management solutions to the war-fighter in the harshest environments worldwide. The products are fielded on many tracked, wheeled and tactical vehicles including the M1 Abrams, M2/M3 Bradley, M992 FAASV, M270 MLRS, ACV, LCAC, Stryker, LAV, Avenger, and MRAP.



# PNEUMATIC SYSTEMS FOR ADVANCED PLATFORMS

## CUTTING EDGE PNEUMATIC SYSTEMS FOR ADVANCED PLATFORMS

Pneumatic Bomb Release Units (BRUs), Ambient-Insensitive Pressurization System, and Pneumatic Missile Eject are designed to meet the demands of 5th generation and beyond aircraft.

### KEY FEATURES

- MIL-STD-1553/1760 Compliant
- Interchangeable Pneumatic Common Core Technology – Minimizes Logistics Support Footprint
- Continuously Variable In-Flight Pitch Control – Ensures Safe Store Separation from Aircraft Across Flight Envelope
- Versatile Scalability – Handles Payloads Ranging from 100 Lbs to 4,850 Lbs
- Tailorable Ejection Velocity – Reduces Aircraft Reaction Forces
- Advanced Safety Features – System of Pneumatic and Mechanical Features Ensure Operator and Platform Safety
- Marvin Group-Designed Electronic Control Units (ECU) – Optimized for BRUs, AIPS, and Missile Eject
- Emergency Jettison Capability – Designed to Meet Naval Air Requirements



### AMBIENT INSENSITIVE PRESSURIZATION SYSTEM (AIPS)

Provides highly efficient, pressurized system that maintains optimal performance across operational conditions.



### BOMB RELEASE UNIT (BRU)

Advanced BRU incorporates key features for game-changing operational advantages



### ADVANCED MISSILE EJECT

MEC eject launcher leverages key features proven in prior BRU designs in missile eject role



# MISSILE LAUNCH SYSTEMS

Marvin Engineering Co. has produced a variety of launcher systems utilized in surface launch applications. The Common Ground Rail (CGR) is a guided missile launcher that can be integrated into canisters to protect the munition during transit and from environmental factors, or as an exposed launcher for “high mobility” applications such as the National Advanced Surface-to-Air Missile System (NASAMS). It is a rugged, versatile, and reliable single rail launcher compatible with various missiles including, all variants of AIM-9, AIM-120, and AMRAAM-ER.

The CGR is an adaptation of the proven MRL air-to-air launcher for SRAAM/BVRAAM missiles to accommodate heavier weight missiles for Surface-to-Surface or Surface-to-Air applications.

CGR can also be integrated with containerized solutions to support expeditionary warfare missions, border security, etc.

### BENEFITS

- Common Ground Rail (CGR) for National Advanced Surface-to-Air Missile System (NASAMS)
- Provides ease of maintenance and low in-service costs
- Rugged, versatile, and reliable single rail launcher compatible with multiple missile types



# KINETIC EFFECTS GROUND & MARITIME PACKAGES

## MISSION PACKAGES

Scalable, configurable, rapidly deployable, and modular solutions tailored to platform and mission requirements. Capable of supporting multiple launcher types and multi-rail/effector configurations with localized launch control electronics and optional combat-proven fire control solution.

Based upon operational requirements and SWaP analysis, multiple rails/launchers can be integrated on a single pedestal, or multiple pedestals, fixed or with options for traverse and elevation, with future iterations capable of integration with Remote Weapons Stations (RWS), or in containerized or palletized form. Localized Launch Control Unit electronics enable communication between the effectors and platform and for applications requiring this, a full-featured Fire Control Solution, customer provided or otherwise, can be integrated.

## BENEFITS

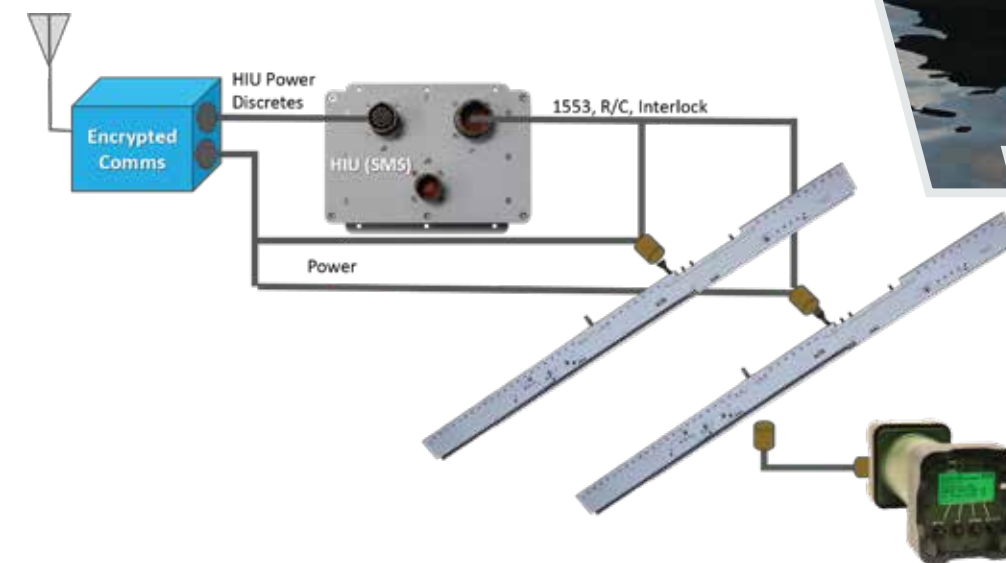
- Scalable
- Configurable
- Rapidly Deployable
- Modular
- AAW, SSW, ASuW Options Available
- Lightweight Footprint
- USV/UGV Integration
- Retrofit Possible on Legacy Vehicles

## CURRENT EFFECTORS SUPPORTED



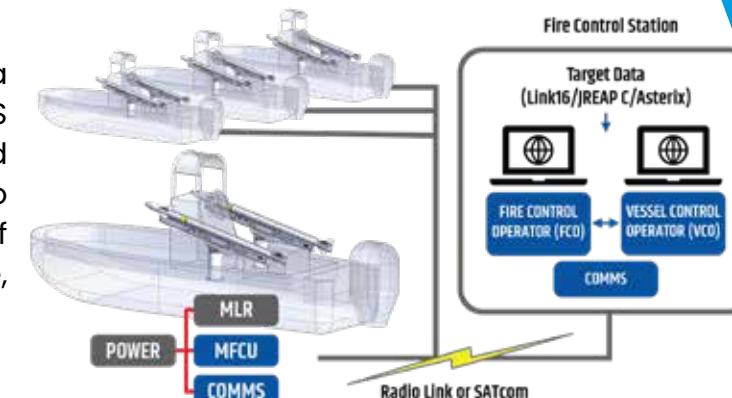
## LAUNCH CONTROL UNIT

Localized and ruggedized electronics are packaged with launcher(s) and mounting interface(s) to enable communications with either an onboard or offboard Fire Control System to power the armament package and enable integrated effectors to receive authorized consent for release.



## FIRE CONTROL SOLUTION

In partnership with a third-party, a full-fledged, combat-proven FCS can be integrated either onboard or offboard the firing platform to enable the full targeting cycle of Find, Fix, Track, Target, Engage, and Assess.



## PEDESTAL MOUNT OPTIONS



# SHELTER SOLUTIONS

Marvin Engineering's Specialized Rigid Wall Shelter Systems are designed to meet the demanding requirements of military and defense applications, offering robust, built-to-print solutions that integrate environmental controls and power generation capabilities. These shelters are engineered for durability and operational efficiency, making them ideal for deployment in harsh environments where reliability is critical. Leveraging Marvin's deep expertise in ground systems and precision manufacturing, the shelters support a range of mission-critical functions, from command and control to equipment housing. Their modular design and integration flexibility allow for customization to specific operational needs, ensuring both protection and performance in the field.

## SOLUTION EXAMPLES

- Built-to-Print Precision Designed to exact specifications, ensuring seamless integration with mission systems and operational requirements.
- Environmental Control & Power Integration Incorporates Environmental Control Units (ECUs) and Auxiliary Power Units (APUs) for climate regulation and energy autonomy in remote or extreme environments.
- Modular & Customizable Design Adaptable to various defense applications including Tactical Operations Centers (TOC), radar mobilizers, and electronic equipment housing.
- Proven Military Compatibility Successfully deployed in support of systems like the MIM-104 Patriot and THAAD, demonstrating reliability in high-stakes defense scenarios.
- Durability & Mobility Engineered for rugged use and transportability by land, air, or sea, with options for expandable or stackable configurations.



# GROUND SYSTEM SOLUTIONS

Marvin Engineering is a global supplier of Rigid Wall Shelters and Structures, which include Mobile Shelter Systems and Ground Support Equipment. These products and capabilities enhance the end user's ability to mobilize, deploy, and sustain critical domestic and international missions.



Marvin Engineering in partnership with Marvin Land Systems (MLS), has supported the build-to-print manufacture of rigid wall military shelter systems in support of the MIM-104 Patriot Surface-to-Air Missile System as well as the Terminal High Altitude Air Defense System (THAAD).

In addition to the Tactical Operations Center (TOC), THAAD related work also includes the mobilizers for the AN/TPY-2 ground based radar.

The Marvin Group has the experience, knowledge and expertise to support existing rigid wall shelter systems or to custom develop mobile solutions to user requirements.



# DEPOT AND SUSTAINMENT



As an original equipment manufacturer of Alternate Mission/Alternate Armament and Aircraft Auxiliary Equipment, The Marvin Group provides life of program sustainment and support including training, spare parts, depot and repair services as well as upgrade/modernization options. In addition, The Marvin Group has successfully planned, designed and constructed multiple in-country repair and overhaul facilities including start-up support to meet the end users' sustainment needs. Sustainment training packages are offered based on customer requirements.

## OUR SUSTAINMENT SERVICES

- Performance of Scheduled/Unscheduled Inspection and Repair Alternate Mission Equipment (AME)
- Workforce Training for AME Sustainment including: Scheduled / Unscheduled Inspections and Repair
- Specialized Tooling
- Technical Manuals with Update Services
- Spare Parts Supply Chain Establishment
- Direct Commercial Sales (DCS) of AME
- Failure Data Collection and Predictive Maintenance Engineering Support Service
- Scheduling and Supply Chain Advisement
- Technical Support with an Experienced Technical Support Response Team
- Test Equipment with Spare Parts Packages
- Depot Level Repair and Time Compliance Technical Orders
- Mobile Sustainment Infrastructure with Configurable AME Repair Depot (CARD)
- Special Purpose Expeditionary Advanced Resource (SPEAR)

## SUSTAINMENT CUSTOMERS INCLUDE:

- U.S. ARMED FORCES
- FOREIGN MILITARY
- DOMESTIC PRIMES
- FOREIGN PRIMES



# CONFIGURABLE AME REPAIR DEPOT (CARD)

## SELF-CONTAINED HORIZONTAL SUSTAINMENT SOLUTION FOR 5TH GENERATION & LEGACY AIRCRAFT

A horizontal sustainment solution and concept, the Configurable Armament/AAE/AME Repair Depot (CARD) has been initially designed to support I-Level "plus" maintenance and sustainment of aircraft armament systems in a mobile, deployable footprint but is adaptable for other uses.



## FEATURES

- Supply "one-stop" repair capability for all AME used across multiple platforms and aircraft including equipment fault isolation, repair, and repair validation.
- Support multiple airbases with fewer dedicated facilities where applicable.
- Provide mobile repair capability for all AME without the need for a permanent dedicated building.
- Shorter repair turn-around times for all AME due to reduced transportation and consolidation of repair resources.
- CARD philosophy can be utilized in support of all levels of logistics.



A photograph of a modern building with a dark grey corrugated metal facade on the left and a white section on the right. The white section features the 'The Marvin Group' logo in blue 3D letters. The sky is blue with some clouds.

**The Marvin Group**

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