An Aerospace and Defense Company

The Marvin Group

A Tradition of Excellence

60 years

www.marvingroup.com

A tradition of excellence for over 60 years

The Marvin Group

February 10, 2023 marked a key milestone for Marvin Engineering Co., Inc. and The Marvin Group. It was over six decades ago that our founder Marvin Gussman and his wife had the inspiration to start a 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 a leading defense company supporting all branches of the Department of Defense, major prime contractors, and numerous countries around the globe.

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

Vision

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

Values

• Integrity • Partnership • Can-Do Attitude • Innovation

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 be the industry standard for service, technical capability and quality. Our future 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 never lose sight of our responsibility to safeguard our environment, contribute to our community and support our veterans.

Total Solution

The Marvin Group is the Strategic Partner for Global Auxiliary Mission Equipment and Sustainment

The Marvin Group is 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 COMPANY

Marvin Engineering is a global leader in the manufacture of Alternate Mission Equipment (AME) and Aircraft Armament Equipment (AAE).

• Bomb & Ejector Racks • Missile Rail Launchers • Multiple Stores Carriage
• Technology Development • Pylons • MRO/Sustainment

MARVIN TEST SOLUTIONS

Marvin Test Solutions is a vertically-integrated aerospace test and measurement company with unrivaled long-term support.

• Armament Test Sets • Organizational Testers • Intermediate Testers
• Depot Level Testers • Engineering Services • Flightline Testers

MLS
MARVIN LAND SYSTEMS

Marvin Land Systems is an original equipment manufacturer (OEM) of Environmental Control Units (ECU) and Auxiliary Power Units (APU) for military applications.

• Fans • Cooling Systems • Power Units

Marvin Engineering Company

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.

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

LAUNCHER EXAMPLES

LAU-12X
MRL Series

F-35 Advanced
Rail Launcher

M299
Longbow

EJECTOR RACK EXAMPLES

BRU-14

TER-9/A
High-Speed
Triple Ejector Rack

BRU-32

Marvin Engineering's products and services are offered both domestically and internationally and are currently being provided through the US 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 COMPANY

Innovation. Quality. Tradition.

PYLON EXAMPLES

F-35 Air-To-Ground

F-22 Fuel and Weapons

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

Systems include:
Internal Bay Adapters
Air-to-Air Pylons
Air-to-Ground Pylons
Advanced Rail Launchers

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.

O-LEVEL

MTS-3060A SmartCan™ Universal Armament Test Set

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 flightline test set that performs functional tests of the MIL-STD-1760 bus by emulating Smart weapons such as JDAM.

MT1888 Series Laser Source Simulator

MT3045 Hellfire Preload Test Set and Missile Simulator

AN/TSM 205B Hellfire System Test Set

MTS-209 O- and I-Level Common Armament Test Set

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

MARVIN TEST SOLUTIONS

Innovation. Quality. Tradition.

I-LEVEL

MTS-235A F-35 Alternate Mission Equipment Test Set

MTS-916 Modular Target Simulator

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 Preconfigured Functional Test Systems

Marvin Land Systems

Marvin Land Systems is an original equipment manufacturer (OEM) of 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 (CFD), 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

CHILLERS

LRCU 35kW

Battery Cooling Unit

Our systems provide mission-critical power and thermal management solutions to the warfighter 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.

MARVIN LAND SYSTEMS

Innovation. Quality. Tradition.

ENVIRONMENTAL CONTROL UNITS

Radar Electronic
Cooling Unit

High
Voltage
Cooling
System

NBC
OPS

Air
Handling
Unit

FANS

Main Cooling Fan
(Dual Centrifugal)

AHU Fan

Main Propulsion
Cooling Fan

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 both at our facilities as well as in-country based on customer requirements.

Sustainment customers Include:

> All branches of the U.S. Armed Forces

> Foreign Military

> Domestic Primes

> Foreign Primes

Ground Vehicular Structures

Ground Vehicular Structures (GVS), an Integrated Products Team within Marvin Engineering, is a global supplier of hard shell Mobile Shelter Systems and ground support equipment. GVS offers products that enhance the end users' ability to mobilize, deploy, maneuver and sustain their missions.

Principal solutions include:

> Build-to-Print and/or COTS Rigid Wall Foam and Beam Shelters and Enclosures

> Rapidly Deployable Technical Shelter Solutions

> Ground Support Equipment

> Ancillary Hardware and Spares

> Automated and Functional Electronic Test Systems

> Environmental Control Systems (ECS) & Thermal Management

> Auxiliary Power Units

Our Sustainment Services

- Performance of Scheduled/Unscheduled Inspection and Repair Alternate Mission Equipment (AME)
- Workforce Training for AME Sustainment including
  - Scheduled / Unscheduled Inspections
  - Repair
- Specialized Tooling
- Technical Manuals along 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)

Our Configurable AME Repair Depot (CARD) is a self-contained, horizontal sustainment solution for 5th generation and legacy aircraft which is forward deployable while optimizing mission readiness, streamlining the repair process, reducing logistics footprints and making spares provisioning more efficient.

The CARD supplies "one-stop" repair capability for all AME used across multiple platforms and aircraft including equipment fault isolation, repair, and repair validation. It can support multiple airbases with fewer dedicated facilities where applicable. It provides mobile repair capability for all AME without the need for a permanent dedicated building.

This results in shorter repair turnaround times for all AME due to reduced transportation and consolidation of repair resources. The CARD philosophy can be utilized in support of all levels of logistics.

A TRADITION OF EXCELLENCE

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